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California Mathematics

Concepts, Skills, and Problem Solving

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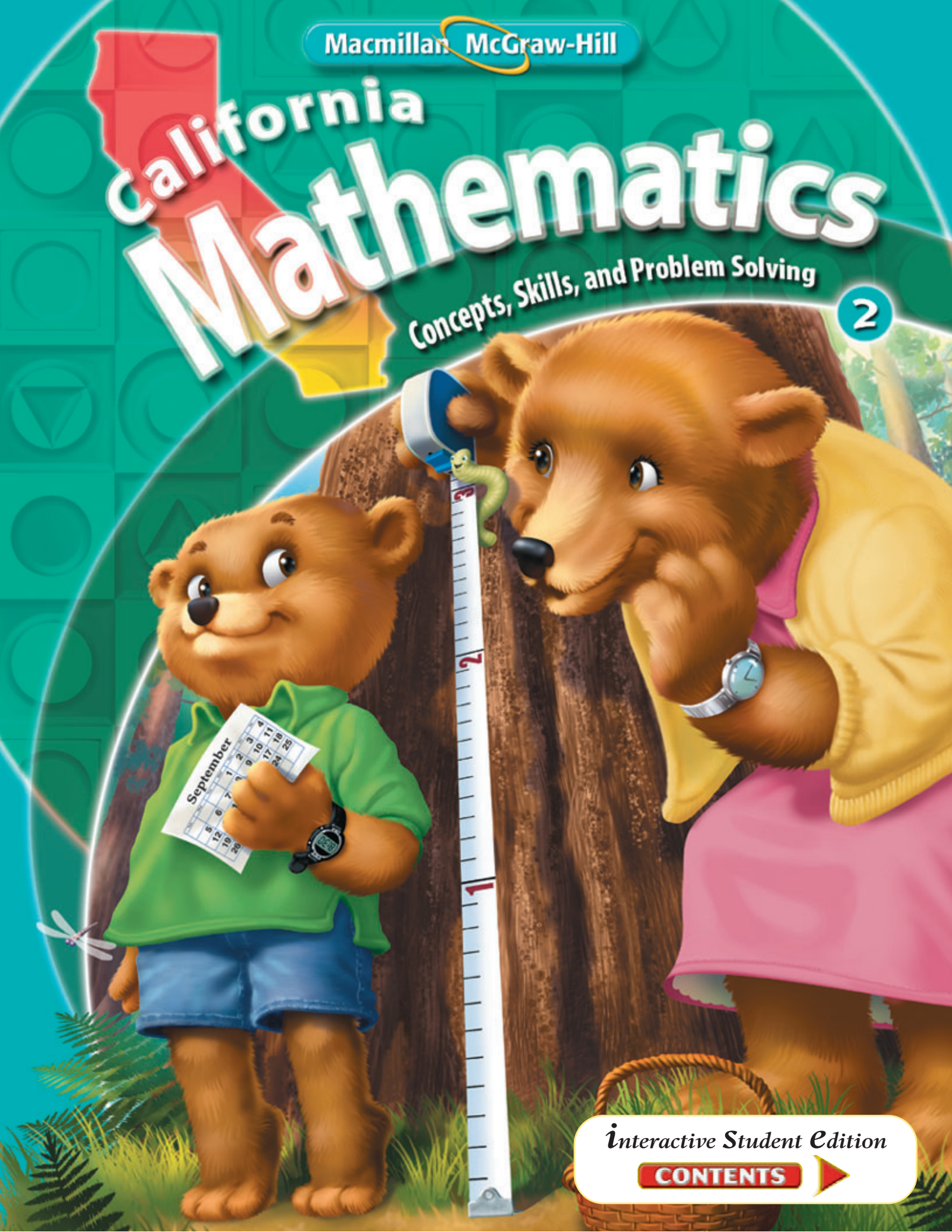

Interactive Student Edition

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About the Cover

Located in the Piney Woods region of Texas, Tyler is known as the Rose Capital of America. It is also home to a popular 85-foot, 6-lane, wooden slot car track. The track is designed for 1:32 and 1:24 scale cars. You will learn more about ratios in Chapter 6.

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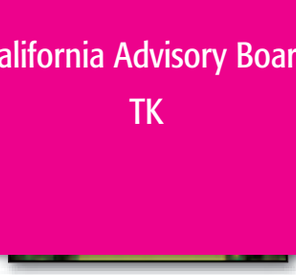

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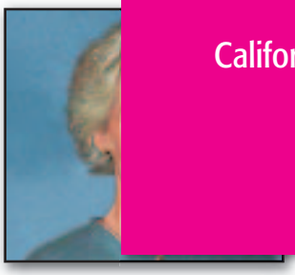

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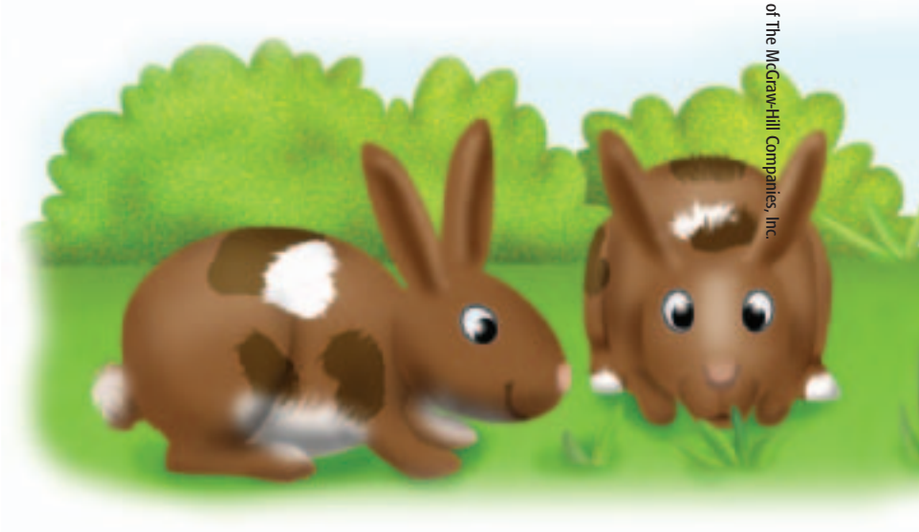

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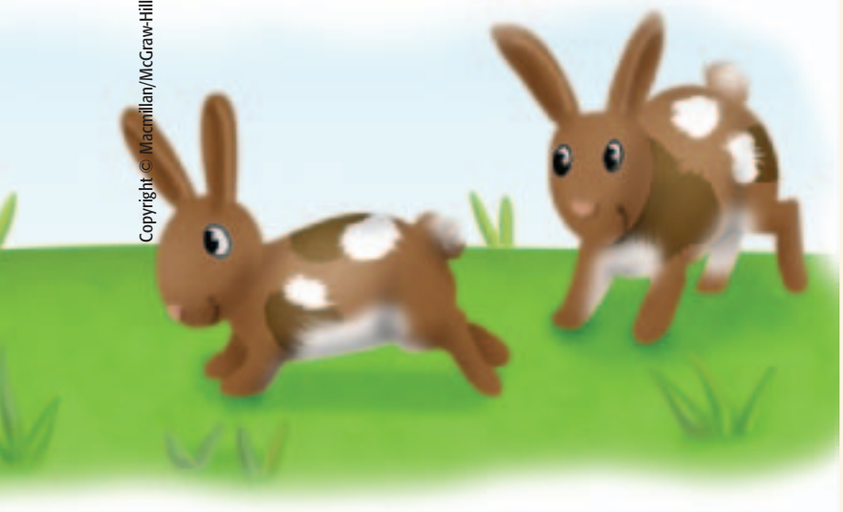

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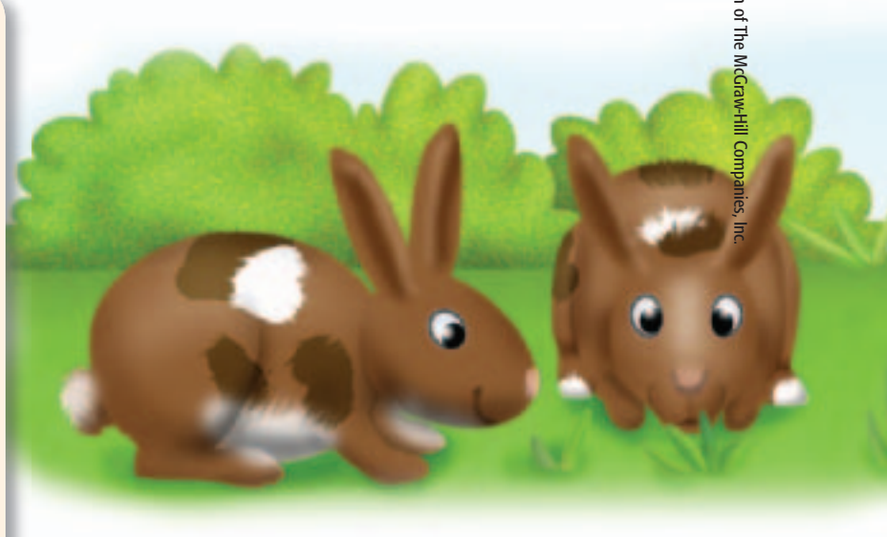

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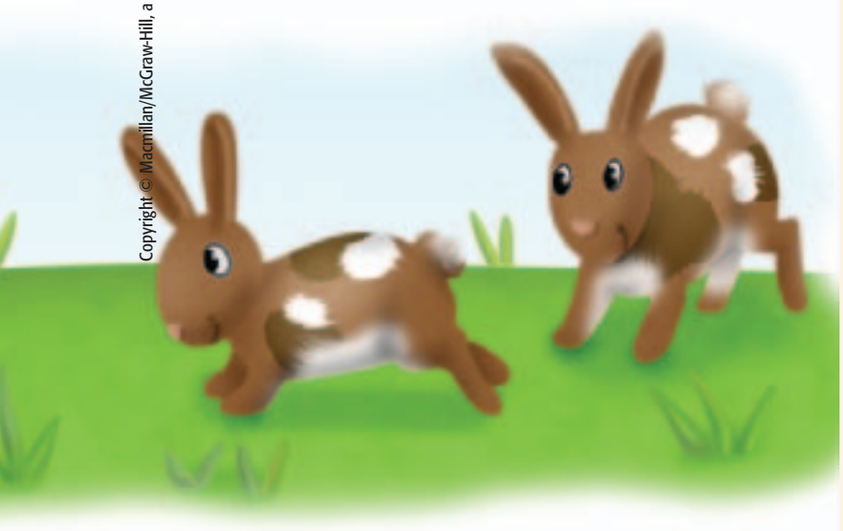

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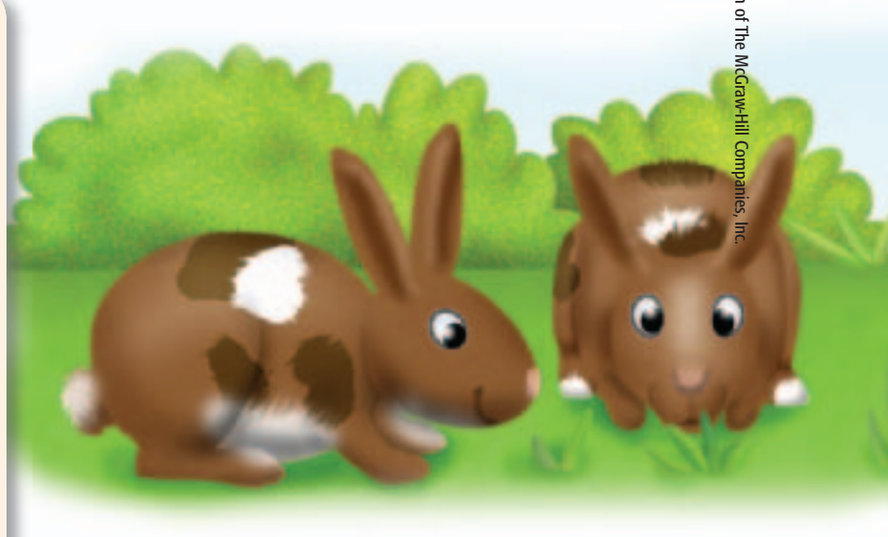

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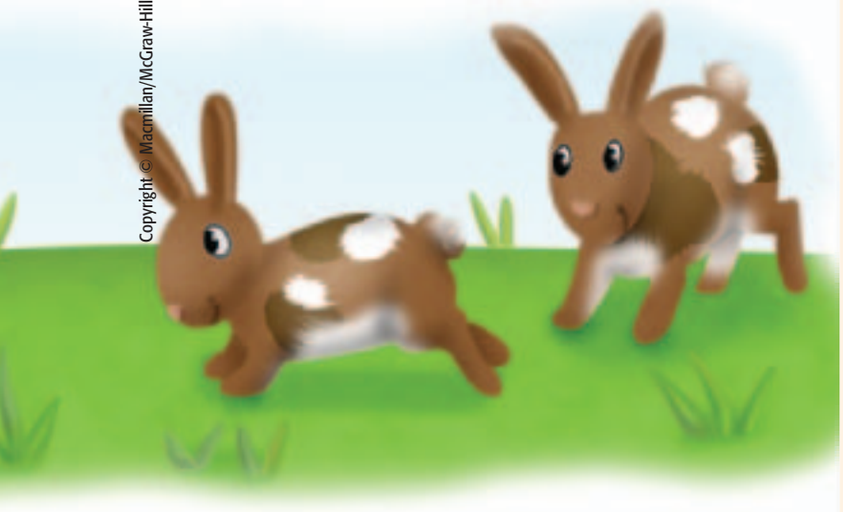

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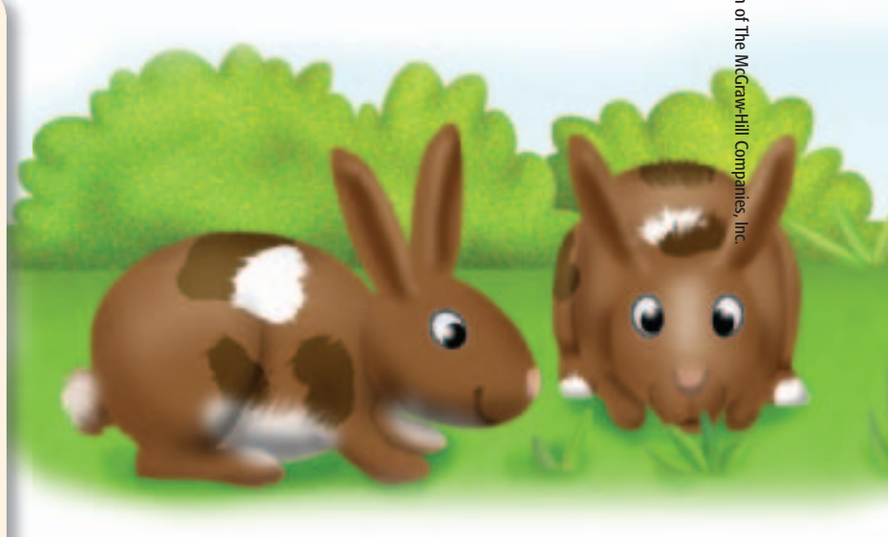

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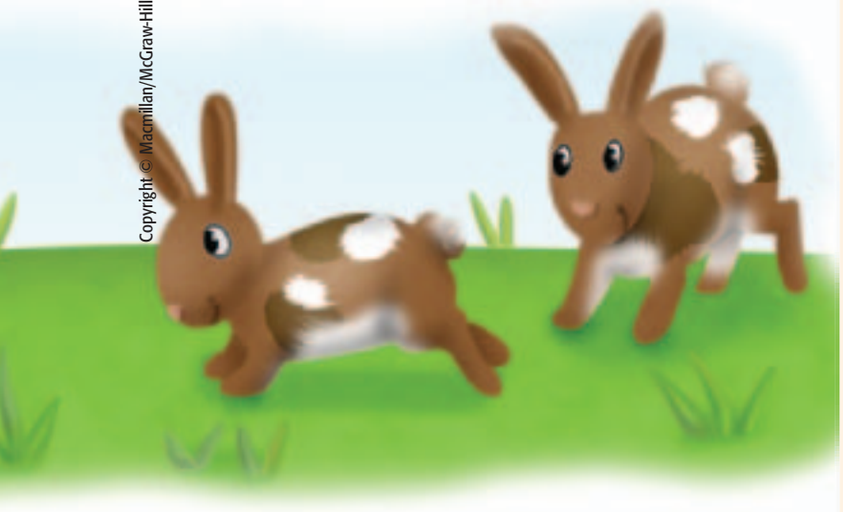

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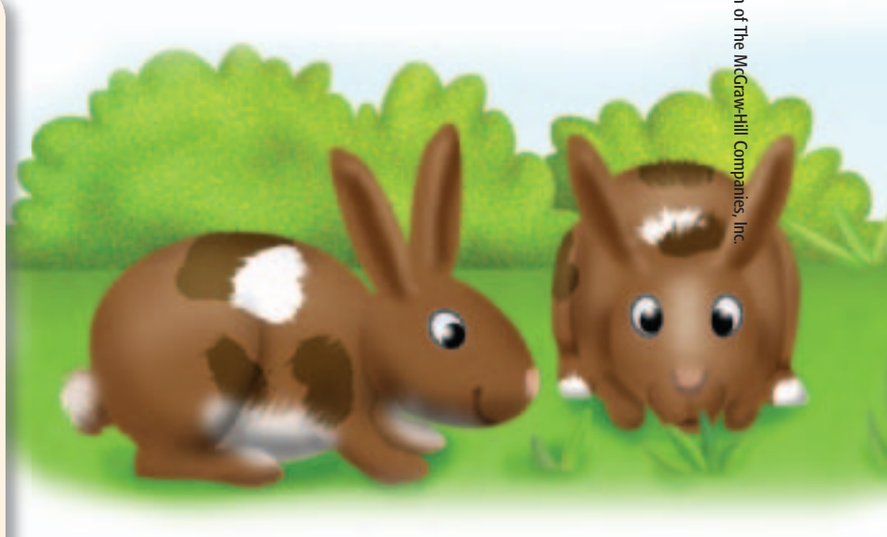

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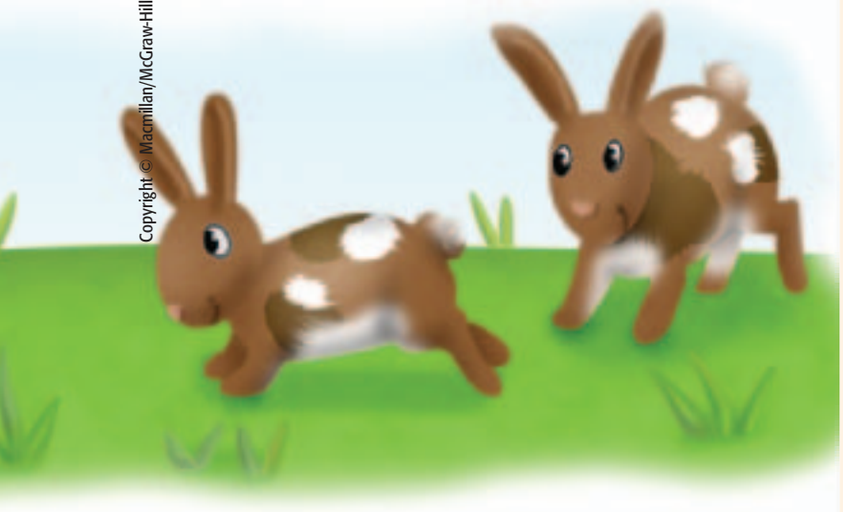

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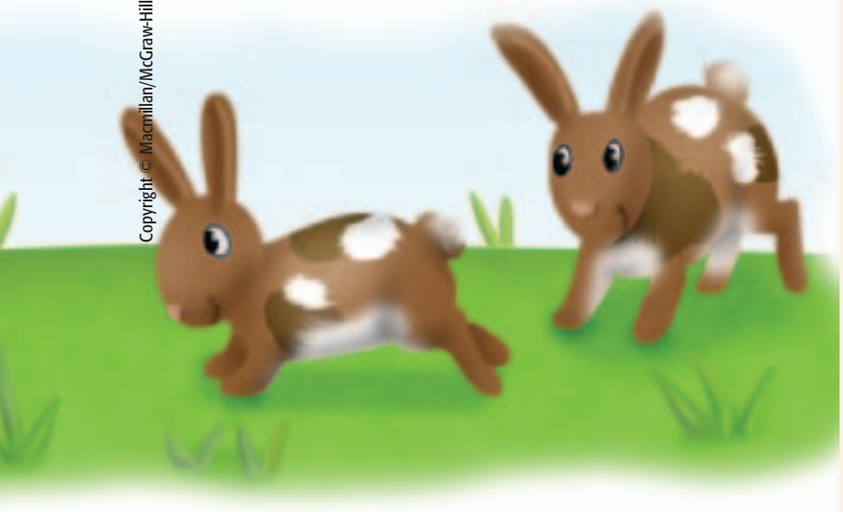

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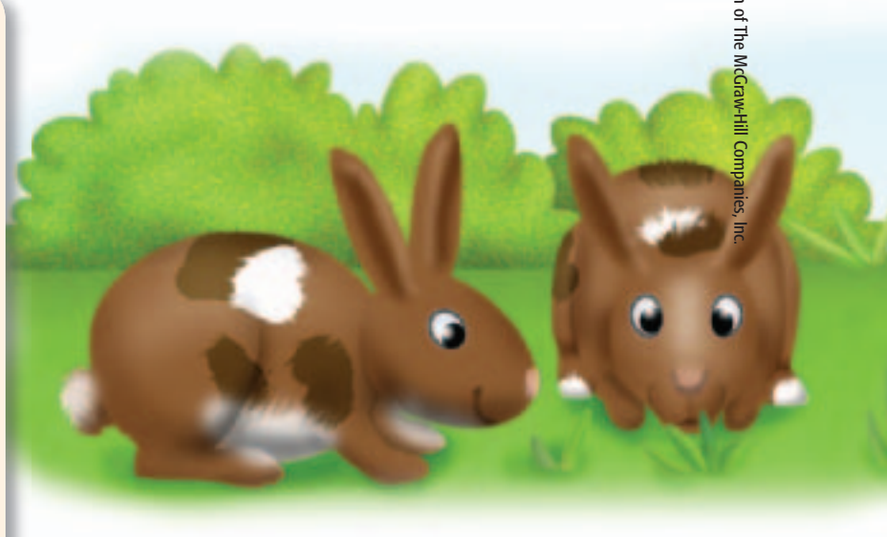

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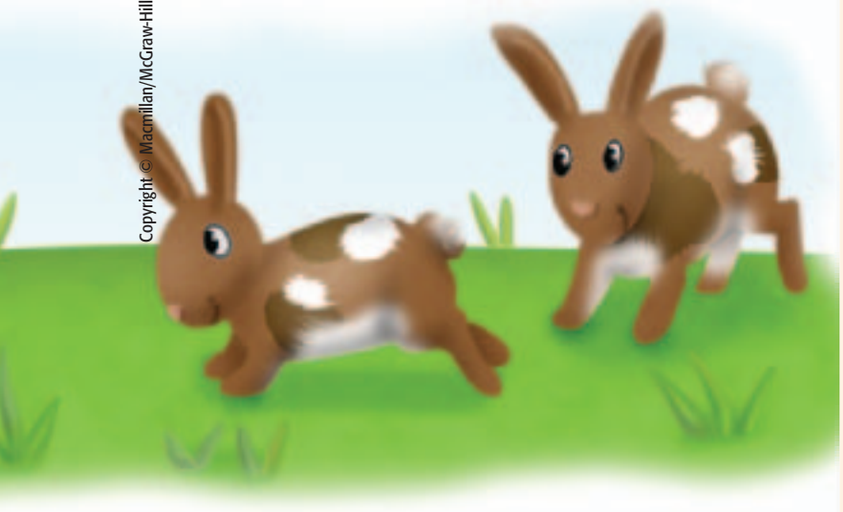

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Practice by Standard: Number Sense **CA3**
Practice by Standard: Algebra and Functions **CA15**
Practice by Standard: Measurement and Geometry **CA17**
Practice by Standard: Statistics, Data Analysis, and Probability . . . **CA21**
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WorkMat 2 Double Ten-Frame
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WorkMat 4 Number Lines
WorkMat 5 Number Lines
WorkMat 6 Place Value Tens and Ones
WorkMat 7 Place Value Hundreds, Tens, and Ones
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California

Start Smart

Start Smart

Let's Review!

Problem Solving 2

Number Sense 3

Algebra and Functions 5

Measurement 7

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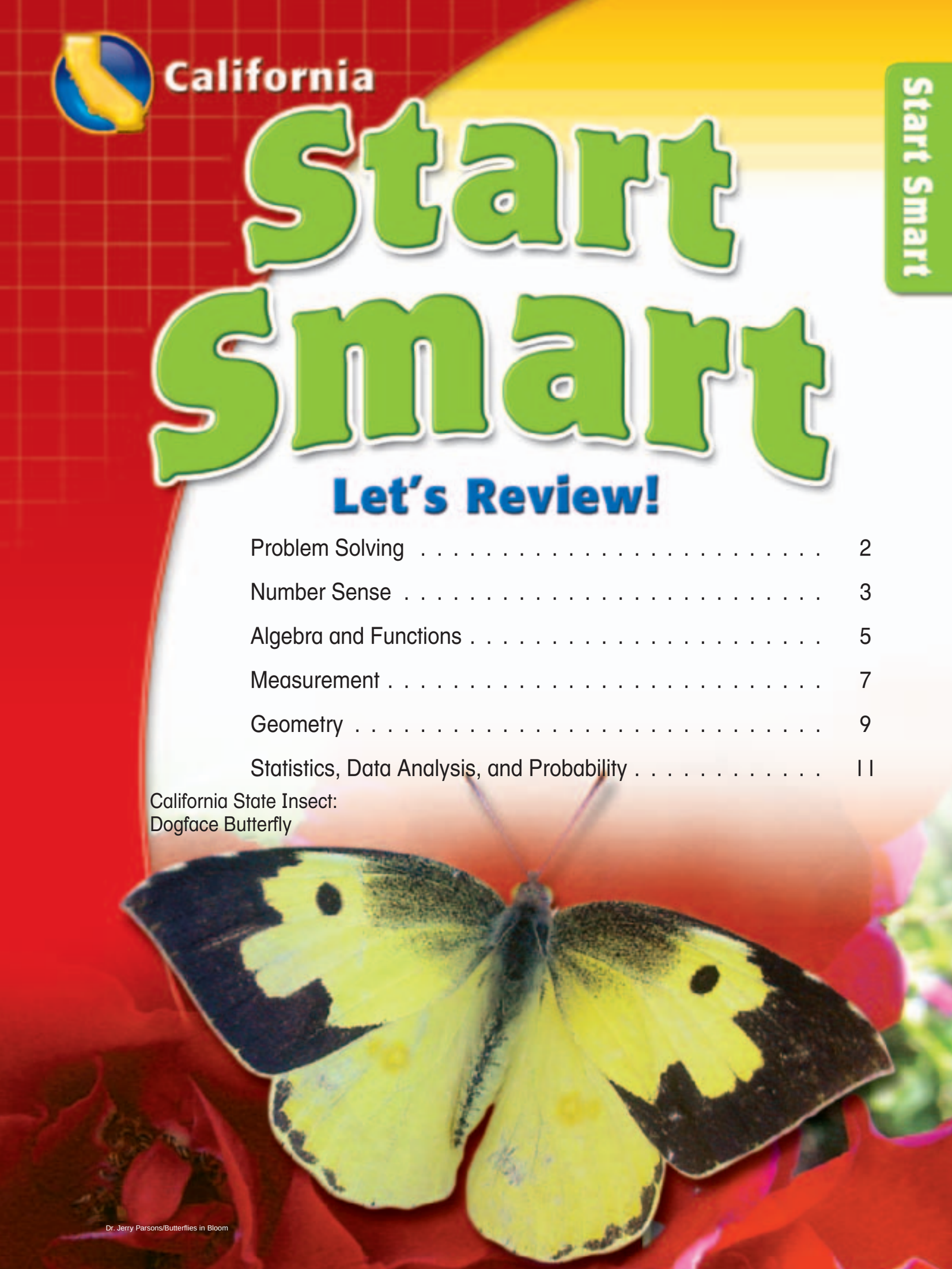
California State Insect:
Dogface Butterfly



Dr. Jerry Parsons/Butterflies in Bloom

Name: _____

Problem Solving

California Gold Rush

Many people traveled to California in the Gold Rush.

Solve

Porter bought 5 glasses of water. Mary bought 3.

How many glasses of water did Porter and Mary buy?

Understand

What do I know? Underline what you know.

What do I need to find out? Circle the question.

Plan

How will I solve the problem?

Solve

Write a number sentence.

_____ + _____ = _____ glasses of water

Check

Look Back Does my answer make sense?

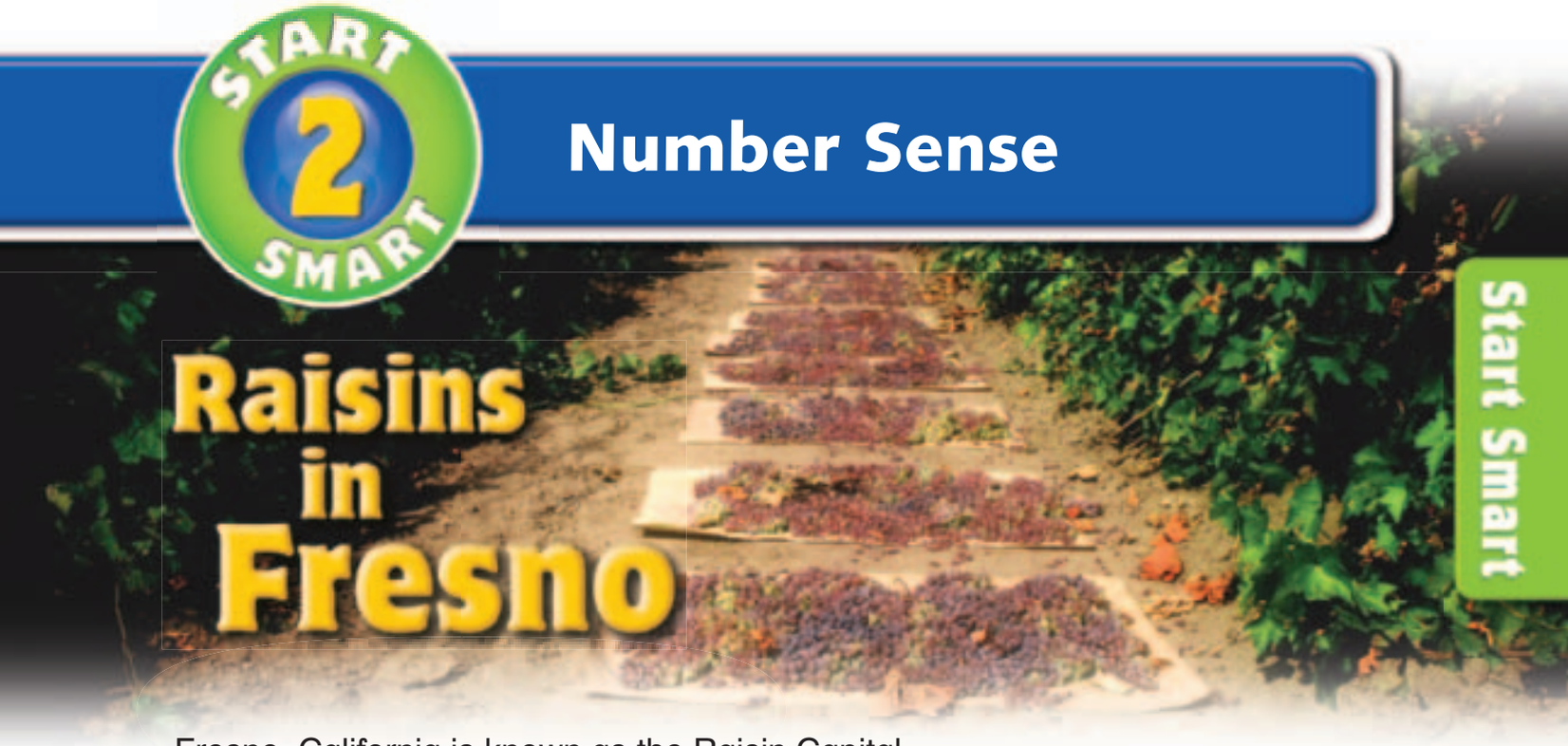
Did you Know?

In the hot sun, Gold Rush travelers would pay $1, $5, and even $100 for a glass of water.

The Granger Collection, New York

Name: _____

Number Sense



Raisins in Fresno

Fresno, California is known as the Raisin Capital.

Add

Write the sum as a number and a word.

1.

5 + 4 = _____ _____

2.

2 + 3 = _____ _____

3.

6 + 1 = _____ _____

(c r)C Squared Studios/Getty Images, Noella Ballenger/Alamy Images

Subtract

Write the difference as a number and a word.

4.

8 − 2 = _____ _____

5.

9 − 6 = _____ _____

6.

7 − 5 = _____ _____

7. WRITING IN MATH Look at the picture. Write a number problem. Ask a friend to solve the problem.

_____

_____

_____

_____

Name: _____

Algebra and Functions

California Black Bears

Start Smart

California is home to many black bears.

Solve

Answer the questions.

1. How many black bears are in the picture above?

   _____

2. Two more bears join them. How many bears are there now? _____

3. Write a number sentence to show how many bears.

   _____ + _____ = _____

Did you Know?

Black bears have 5 toes on their front and back paws and walk just like you.

Stephen Krasemann/NHPA

Write a number sentence to solve.

4. The bear ate 9 berries. There are 5 more berries on the bush that the bear will eat. How many berries will the bear eat in all?

_____ + _____ = _____

5. The bear had 12 nuts. He ate all but 4 of the nuts. How many nuts did the bear eat?

_____ − _____ = _____

6. The bear is still hungry. He sees 17 ants. He eats 10 ants. How many ants are left?

_____ − _____ = _____

7. WRITING IN MATH Use the picture. Write a number problem. Ask a friend to solve the problem.

_____

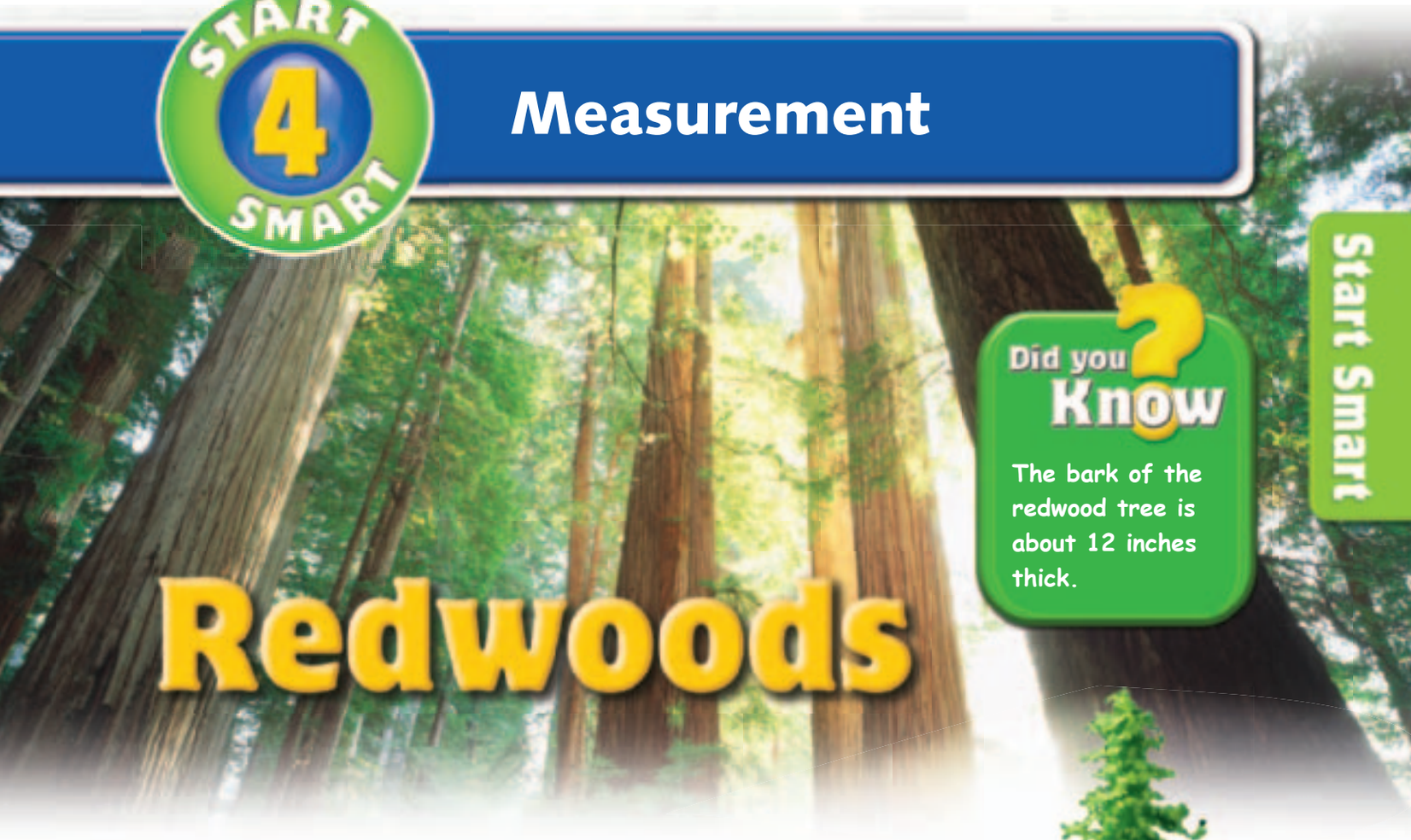
_____

_____

_____

Name: _____

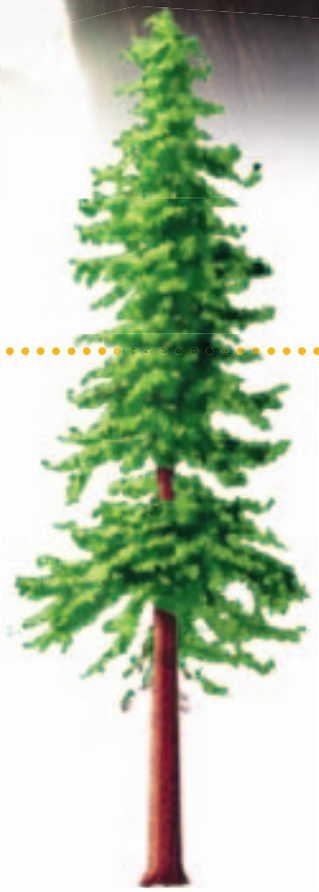
Measurement



The state tree of California is the California redwood.

Measure Height

Look at the drawing of the redwood tree.



1. About how many tall is the tree?

   about _____ tall

2. Find something in your classroom that is 3 long. Draw a picture of the object.

Royalty-Free/CORBIS

Compare

Another tall tree in California is the sequoia.
Look at the two trees.

3. Use a to measure the height of each tree.
The sequoia is about

_____ tall.

The redwood is about

_____ tall.

Sequoia Redwood

Look at the pine cones.

4. Use a to measure each pine cone.
The sequoia pine cone is

about _____ long.

The redwood pine cone is

about _____ long.

5. WRITING IN MATH Use a straw to measure an object in the classroom.
Write a riddle about the object.
Ask a friend to measure objects and make guesses.

_____

_____

_____

_____

Name: _____

START 5 SMART

Geometry

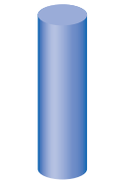
Start Smart

Capitol Records

The Capitol Records Building was the world's first round office building.

Solid Shapes

1. Draw a line to match the shapes.



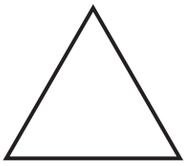
Did you Know

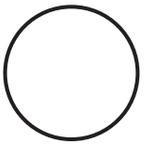
The Capital Records building is 13 floors tall. It is home to several recording studios.

Richard Cummins/CORBIS

Solid and Plane Shapes

2. Put an X on the shape you would make if you traced the .





3. How many?

Shape	Sides	Corners

4. WRITING IN MATH Think of different shapes. Draw a picture of one building using as many shapes as you can.

Which shapes did you use?

Name: _____

START SMART 6

Statistics, Data Analysis, and Probability

Start Smart

Junior Lifeguard Try Outs in California

Graphs

Look at the graph. It shows how many boys and girls are trying out to be junior lifeguards.

Try Outs

Boys	6
Girls	8

1. How many boys tried out? _____

2. How many girls tried out? _____

3. Did more boys or girls try out? _____

Did you Know

In California, you can become a junior lifeguard when you are 8 years old.

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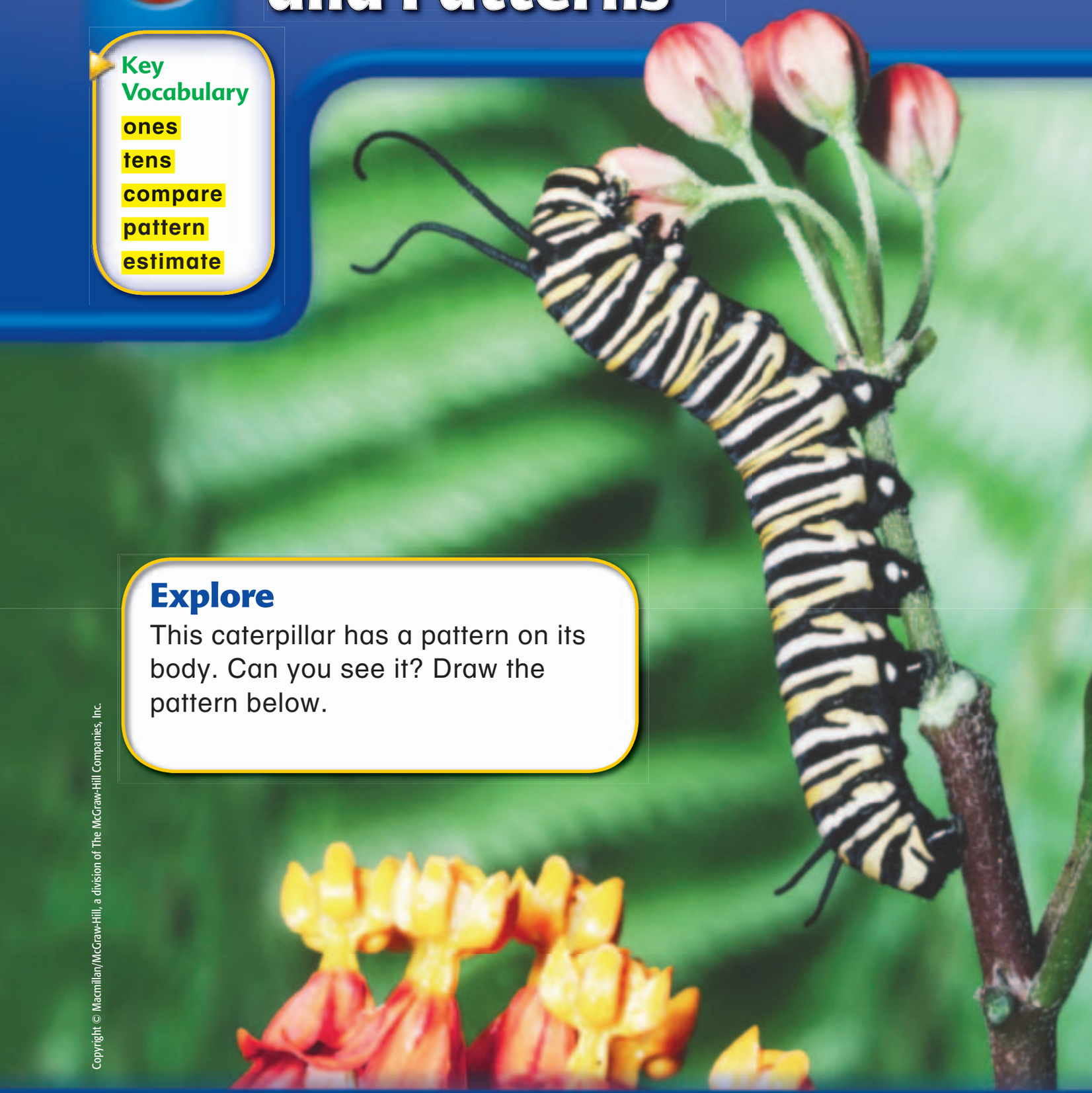
CHAPTER 1

Number Sense and Patterns

Key Vocabulary

- ones
- tens
- compare
- pattern
- estimate



Explore

This caterpillar has a pattern on its body. Can you see it? Draw the pattern below.

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Michael & Patricia Fogden/CORBIS

Name _____

Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 1?

Write the number of each. Circle the group that has more.

1.

_____ trucks

_____ cars

Match the number word and the number.

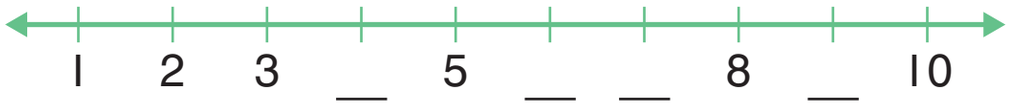
2. ten 8

3. three 10

4. eight 3

Write the missing numbers.

5.



Write the numbers in order from least to greatest.

6. 2, 9, 4, 3 _____, _____, _____, _____

7. Ben found these 5 note cards on the sidewalk.

five 5	six 6	one 1	seven 7

Help Ben put the note cards in order.

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This page checks skills needed for Chapter 1.

MATH at HOME

Dear Family,

Today my class started Chapter 1, **Number Sense and Patterns**. In this chapter, I will learn to estimate, compare, and order numbers through 100. Here is an activity we can do and a list of books we can read together.

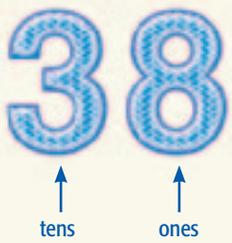
Love, _____

Activity

Pour some raisins onto a plate. Have your child estimate the number of raisins, then count to find how close the estimate is. Continue to change the amount and estimate. See if your child's estimates get closer to the actual number.

Key Vocabulary

The number 38 has 3 tens and 8 ones.

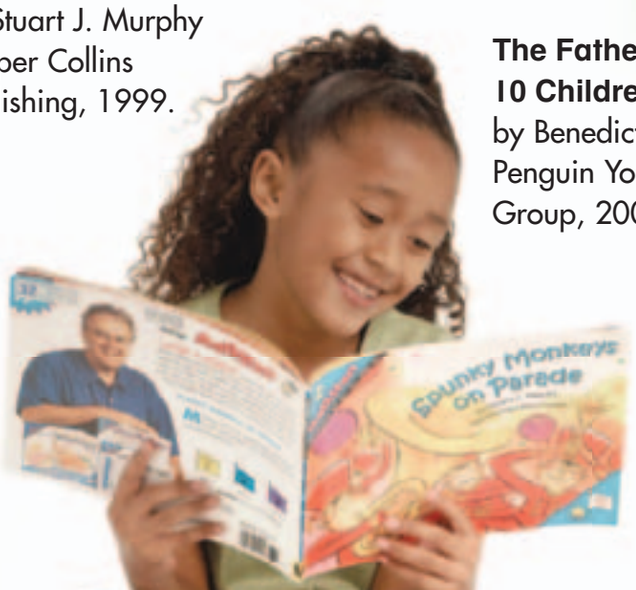


estimate to find a number close to an exact amount

MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Spunky Monkeys on Parade
by Stuart J. Murphy
Harper Collins Publishing, 1999.



Earth Day—Hooray!
by Stuart J. Murphy
Harper Collins Publishing, 2004.

The Father Who Had 10 Children
by Benedicte Guettier
Penguin Young Readers Group, 2001.

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Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 1, **El sentido numérico y los patrones**. En este capítulo, aprenderé a estimar, a comparar y a ordenar los números hasta 100. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Viertan sobre un plato diez pasitas. Pídanle a su hijo(a) que estime el número de pasitas y que luego los cuente para averiguar la certeza de la conjetura. Cambien varias veces la cantidad y estimen. Verifiquen si la conjetura de su hijo(a) se acerca más al número real.

Vocabulario clave

El número 38 tiene 3 decenas y 8 unidades.

estimar hallar un número que se acerca a una cantidad exacta

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Monos animados en un desfile
de Stuart J. Murphy
Harper Collins Publishing, 1999.

El Día de la Tierra — ¡Hurra!
de Stuart J. Murphy
Harper Collins Publishing, 2004.

El padre que tenía 10 hijos de Benedicte Guettier
Penguin Young Readers Group, 2001.

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Name _____

Tens and Ones

Get Ready

Main Idea

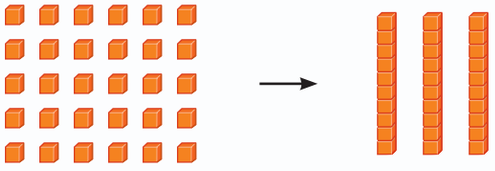
I will group ones to make ten.

Vocabulary

ones

tens

You can group 10 ones as 1 ten.

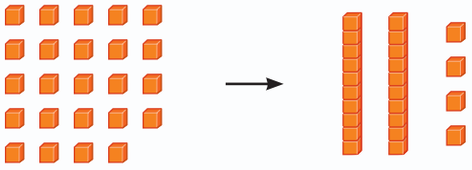


30 ones = 3 tens

70 ones = 7 tens

90 ones = 9 tens

You can also group tens and ones.



24 ones = 2 tens 4 ones

24 is two tens and four ones.

20 + 4 = 24

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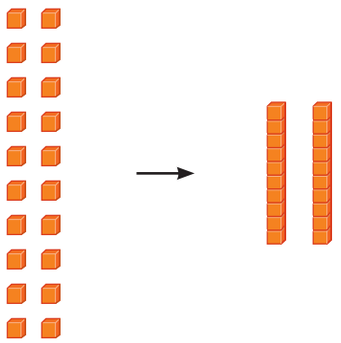
Richard Hutchings

Check

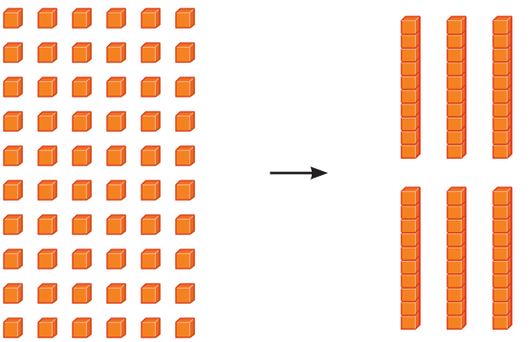
Write how many.

1.



20 ones = 2 tens

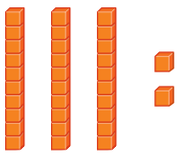
2.



____ ones = ____ tens

Write how many tens and ones. Then write the number.

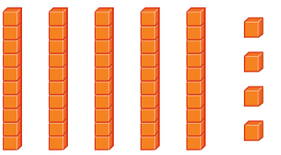
3.



3 tens 2 ones

30 + 2 = 32

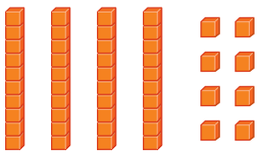
4.



____ tens ____ ones

____ + ____ = ____

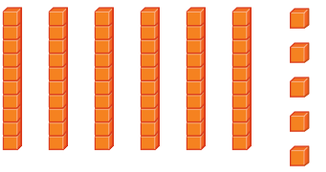
5.



____ tens ____ ones

____ + ____ = ____

6.



____ tens ____ ones

____ + ____ = ____

7. Talk About It Explain how 26 is different from 62.

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GO on

Name _____

Practice

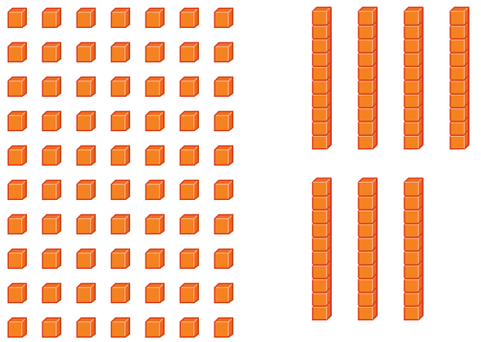
Write how many.

8.

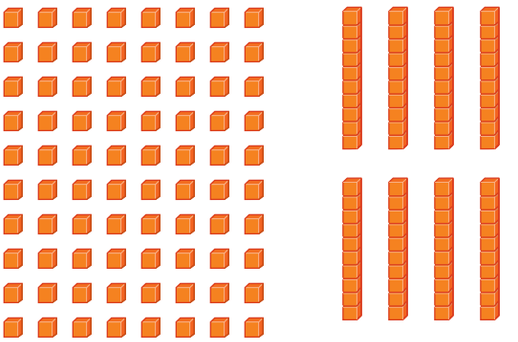
_____ ones = _____ ten

9.

_____ tens = _____ ones

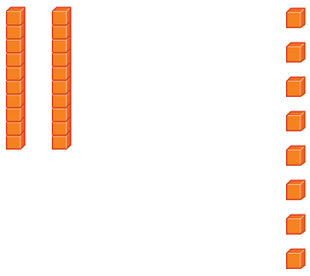
10. 

_____ ones = _____ tens

11. 

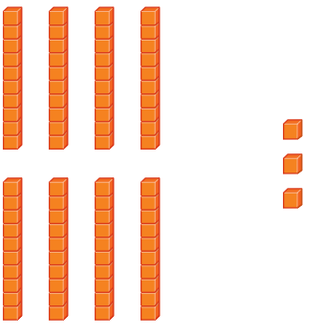
_____ ones = _____ tens

Write how many tens and ones.
Then write the number.

12. 

_____ tens _____ ones

_____ + _____ = _____

13. 

_____ tens _____ ones

_____ + _____ = _____

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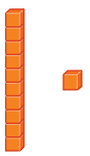
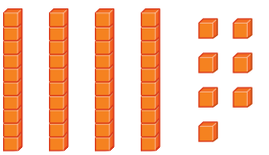
Write how many tens and ones. Then write the number.

14. 

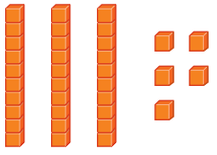
_____ tens _____ one

_____ + _____ = _____

15. 

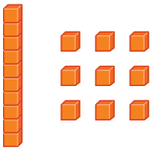
_____ tens _____ ones

_____ + _____ = _____

16. 

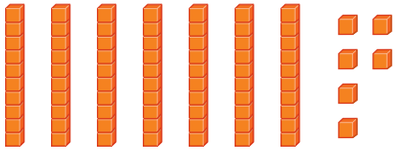
_____ tens _____ ones

_____ + _____ = _____

17. 

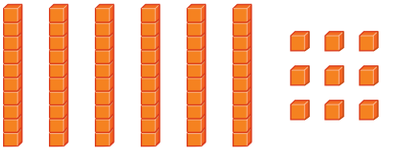
_____ ten _____ ones

_____ + _____ = _____

18. 

_____ tens _____ ones

_____ + _____ = _____

19. 

_____ tens _____ ones

_____ + _____ = _____

Problem Solving

Draw a picture to solve.

20. **Number Sense** Juan has 4 packs of baseball cards. Each pack has ten cards. He has 3 more cards in his pocket. How many baseball cards does Juan have?

_____ baseball cards

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Math at Home Activity: Write some 2-digit numbers, such as 67, and have your child tell you how many tens and how many ones (6 tens and 7 ones).

Name _____

Hands-On Activity

Place Value to 100

Get Ready

Main Idea

I will find the place value in numbers to 100.

Vocabulary

digit

place value

The place of a **digit** in a number tells its value. The digits in 29 are 2 and 9. What is the **place value** of each digit in 29?

29

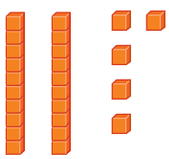
2 tens 9 ones

2 tens = 20 9 ones = 9

Check

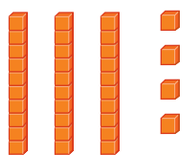
Circle the value of the red digit.

1. 2**5**



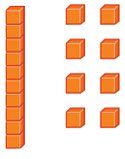
5 or 50

2. **3**4



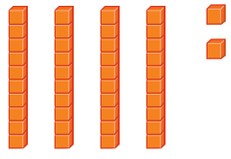
3 or 30

3. 1**8**



8 or 80

4. 4**2**



2 or 20

5. Talk About It

Is 3 tens and 9 ones greater than 9 tens and 3 ones? Explain.

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Practice

Circle the value of the red digit.

6. 78

8 or 80

7. 12

1 or 10

8. 59

5 or 50

9. 94

4 or 40

10. 65

6 or 60

11. 90

9 or 90

12. 21

1 or 10

13. 47

7 or 70

14. 81

8 or 80

15. 26

6 or 60

16. 39

9 or 90

17. 73

7 or 70

18. 25

2 or 20

19. 53

3 or 30

20. 75

5 or 50

21. 50

5 or 50

22. 47

7 or 70

23. 96

9 or 90

24. 38

8 or 80

25. 12

2 or 20

26. WRITING IN MATH

Cindy has 87 pennies. She needs 78 pennies to buy a pen. Does she have enough money to buy this pen? How do you know?

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Math at Home Activity: Look at a newspaper. Find two-digit numbers. Name the tens and ones.

Name _____

Problem-Solving Strategy

Use Logical Reasoning

Main Idea

I will use logical reasoning to solve problems.

A hamster, a snake, and a frog are kept in 3 cages. The hamster is in the cage that is the same color as a stop sign. The snake is not in the cage that is the same color as the sun.

Which animal is in each cage?

Understand

What do I need to find out?

Circle the question.

Plan

How will I solve the problem?

Solve

Use logical reasoning.

Check

Look Back

Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Use logical reasoning to solve.

1. Yolanda's chain is the shortest. Jasmine's chain is between the length of Barry's chain and Yolanda's chain. Who has the longest chain?

_____ has the longest chain.

2. Antonio is more than 7 years old. He is less than 10 years old. He is not 8 years old. How old is Antonio?

7 ? 10

Antonio is _____ years old.

Your Turn

Use logical reasoning to solve.

3. Each dinosaur is a difficult color. Looking from left to right the green dinosaur is between the red and brown one. The purple dinosaur is first. The red dinosaur is last. What is the order of the dinosaurs from left to right?

_____, _____, _____, _____

4. Maria picked a number. In her number, the digit in the tens place is greater than the digit in the ones place. What number did Maria pick?

Maria picked _____.

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Read and Write Numbers

Get Ready

Main Idea

I will read and write numbers.

You can write numbers as words. Each number has a name. Sixteen is 16.

Numbers to 20			
1	one	11	eleven
2	two	12	twelve
3	three	13	thirteen
4	four	14	fourteen
5	five	15	fifteen
6	six	16	sixteen
7	seven	17	seventeen
8	eight	18	eighteen
9	nine	19	nineteen
10	ten	20	twenty

Tens	
10	ten
20	twenty
30	thirty
40	forty
50	fifty
60	sixty
70	seventy
80	eighty
90	ninety
100	one hundred

Check

Write the number.

1. thirty-five _____
2. seventy _____
3. sixty-three _____
4. forty-one _____

Write the number names.

5. 14 _____
6. 80 _____

7. Talk About It — How do you know what digits to use to write twenty-three?

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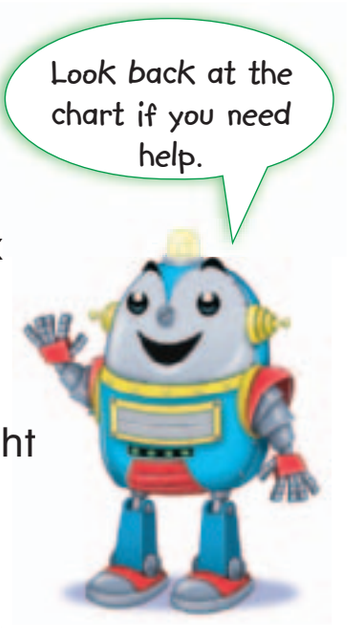
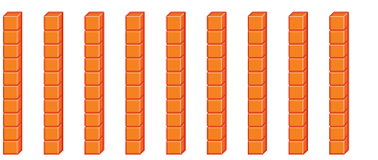
Practice



Write the number or number name.

8. eleven _____
9. seventy-two _____
10. thirty-six _____
11. eighty _____
12. seven _____
13. sixty-eight _____
14. twenty-seven _____
15. fourteen _____
16. eighty-six _____
17. one hundred _____
18. thirteen _____
19. forty-three _____
20. ninety _____
21. twenty-two _____
22. fifty-eight _____
23. seventy-seven _____
24. ninety-four _____
25. sixty-one _____
26. 15 _____
27. 70 _____
28. 40 _____

H.O.T. Problem

29. **Thinking Math** What are two ways to write  ?

_____

_____

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Math at Home Activity: Write a 2-digit number, such as 17. Ask your child to write and read the number name.

Name _____

Estimate Numbers

Get Ready

Main Idea

I will estimate to find about how many.

Vocabulary

estimate

Sometimes you do not need an exact number. You need an estimate. An **estimate** tells *about* how many.

?

10

First Think what you know about ten.

Next Use the group of ten to help you.

Last Write your estimate.

about 20 marbles

Check

Estimate about how many. Circle the answer.

1.

?

about 30 | about 60

10 buttons

about 60 | about 90

2.

?

about 20 | about 40

10 olives

about 40 | about 80

3. Talk About It Explain how you estimated.

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(tl tc bl bcl)Mike Houghton/StudiOhio, (cr)Richard Hutchings, (bcr br) StudiOhio

Practice

Estimate about how many. Circle the answer.

4.

?

about 20

10 pencils

about 40

about 90

5.

?

about 20

10 balls

about 40

about 70

6.

?

about 10

10 flowers

about 30

about 100

7.

?

about 20

10 pennies

about 50

about 80

H.O.T. Problem

8. **Critical Thinking** Emily estimates that she needs 50 paper plates for her class picnic. There are 22 students in her class. Is Emily's estimate reasonable? Explain.

_____

_____

_____

_____

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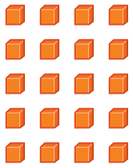
(tl tcl tcr tr bcr br)Mike Houghton/StudiOhio, (bl bcl)StudiOhio

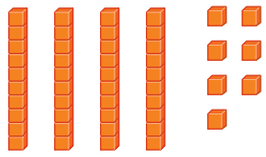
Math at Home Activity: Look in the cupboard. Have your child estimate about how many cups there are.

Name _____

Count. Write how many.

1. 

_____ ones = _____ tens

2. 

_____ tens _____ ones

_____ + _____ = _____

Circle the value of the red digit.

3. 72

7 or 70

4. 24

4 or 40

5. 39

3 or 30

Write the number or number names.

6. eighty-nine

_____

7. 15

_____

Estimate about how many. Circle the answer.

8.

?

10 peppers

about 20 about 40 about 80

9. Mrs. Andrews picked a number.
The number in the tens place is a 7.
The number in the ones place is more than 3 but less than 5.
What is the number?

_____

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(cl cr)StudiOhio

Circle the value of the red digit.

10. 2**9**

9 or 90

11. **3**2

3 or 30

12. 6**4**

4 or 40

Write the number or number names.

13. ninety-three

_____

14. fifty-two

_____

15. 10

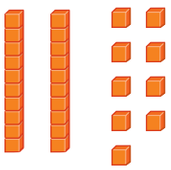
_____

Count. Write how many.

16.

_____ ones = _____ ten

17.



_____ tens _____ ones

_____ + _____ = _____

Estimate about how many. Circle the answer.

18.

?

10 pickles

about 30 about 50 about 80

19.

?

10 grapes

about 60 about 30 about 20

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(bl bcl)Mike Houghton/StudiOhio

Name _____

Order Numbers

Get Ready

Main Idea

I will put numbers in order using a number line.

Vocabulary

number line
before
after
between

You can use a **number line** to order numbers.

5 is between 4 and 6.

4 comes **before** 5.

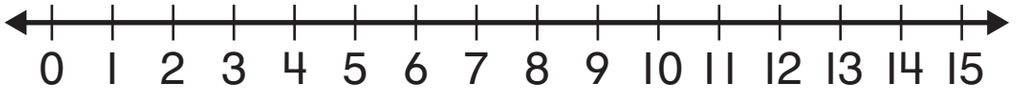
6 comes **after** 5.

5 is **between** 4 and 6.

4, 5, 6

Check

Use the number line to fill in the blanks.



1. 10, _____, 12

2. 13, _____, 15

3. 7, _____, 9, _____

4. _____, 4, 5

5. 7, _____, 5

6. 15, _____, 13

7. Talk About It — Choose four different numbers. Tell what you would do to put them in order.

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Practice

Use the number line to fill in the blanks.

8. 21, _____, 23

9. _____, 12, 13

10. _____, 28, 29

11. _____, 12, 11

12. _____, 19, 20

13. _____, 20, 21, _____

14. _____, 13, 14

15. 25, _____, 27

16. 17, 18, _____, _____

17. 29, _____, 27

18. 28, 29, _____

19. 15, _____, 17

20. 13, 14, _____

21. 19, _____, 17

22. 10, _____, _____, 13

Data File

Silicon Valley is a large area around Palo Alto, California. Many of the people who work there know a lot about computers. Computers can sort information very, very quickly.

23. Put this information in order; 1,5,9,4. Write the numbers from least to greatest.

_____

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Math at Home Activity: Ask your child to name the number that comes between 24 and 26. Try other numbers and ask what comes before and after the number.

David Chasey/Getty Images

Name _____

Hands-On Activity

Compare Numbers

Get Ready

Main Idea

I will compare numbers using <, >, or =.

Vocabulary

- compare
- is greater than >
- is less than <
- is equal to =

You can use >, <, or = to **compare** numbers.

37 **is greater than** 24

Compare the tens. If the tens are equal, compare the ones.

37 > 24

32 **is less than** 35

32 < 35

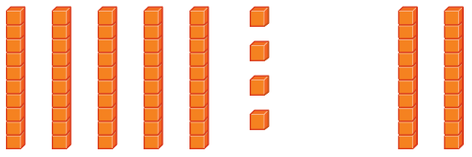
16 **is equal to** 16

16 = 16

Check

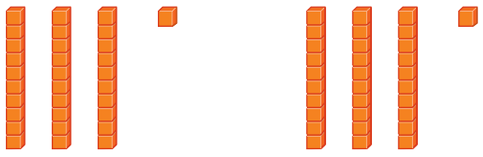
Compare. Write >, <, or =. Use and .

1.



54 ◯ 20

2.



31 ◯ 31

3. 42 ◯ 24

4. 63 ◯ 64

5. Talk About It — How can you tell that 28 is greater than 26?

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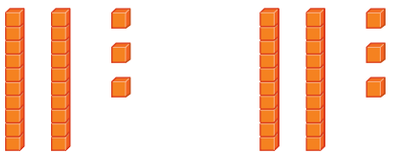
Practice

Remember
Compare the tens first.

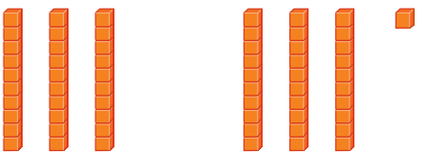
Compare. Use and .

6.



23 ◯ 23

7.



30 ◯ 31

8. 81 ◯ 50

9. 92 ◯ 92

10. 25 ◯ 26

11. 77 ◯ 76

12. 89 ◯ 98

13. 55 ◯ 55

14. 21 ◯ 60

15. 64 ◯ 67

16. 49 ◯ 39

17. 0 ◯ 47

18. 80 ◯ 80

19. 42 ◯ 24

20. 70 ◯ 69

21. 15 ◯ 15

22. 38 ◯ 53

23. 20 ◯ 2

24. 30 ◯ 40

25. 29 ◯ 28

Problem Solving

26. Number Sense Manuel is scooping marbles into a bag at the toy store. Manuel's mother says he must take less than 25 marbles. Show a number that fits his mother's rule.

_____ < 25

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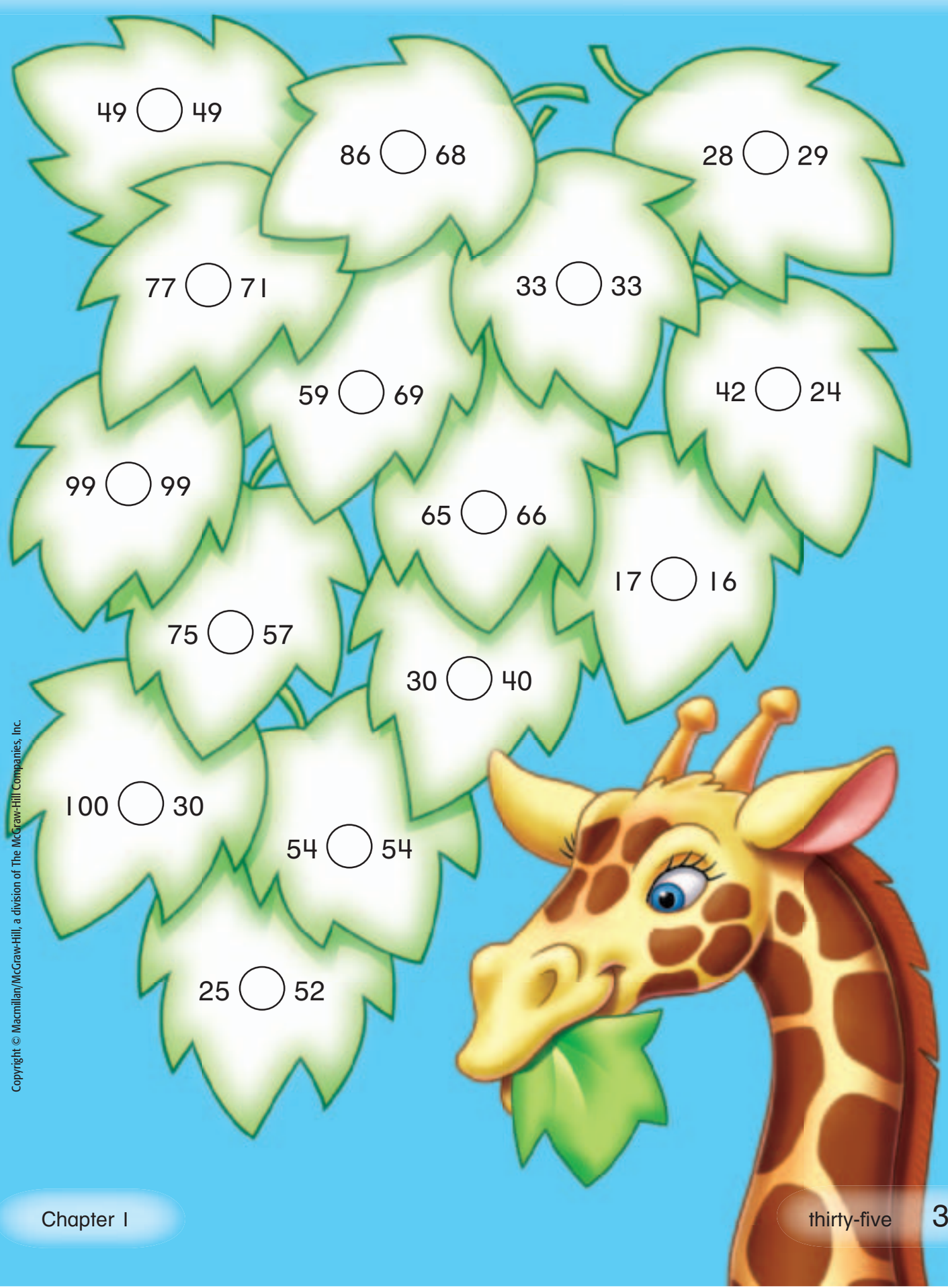
Math at Home Activity: Ask your child to name two numbers greater than 52 and two numbers less than 52.

Name _____

Compare. Use <, >, or =.



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Game Time

Name the Price

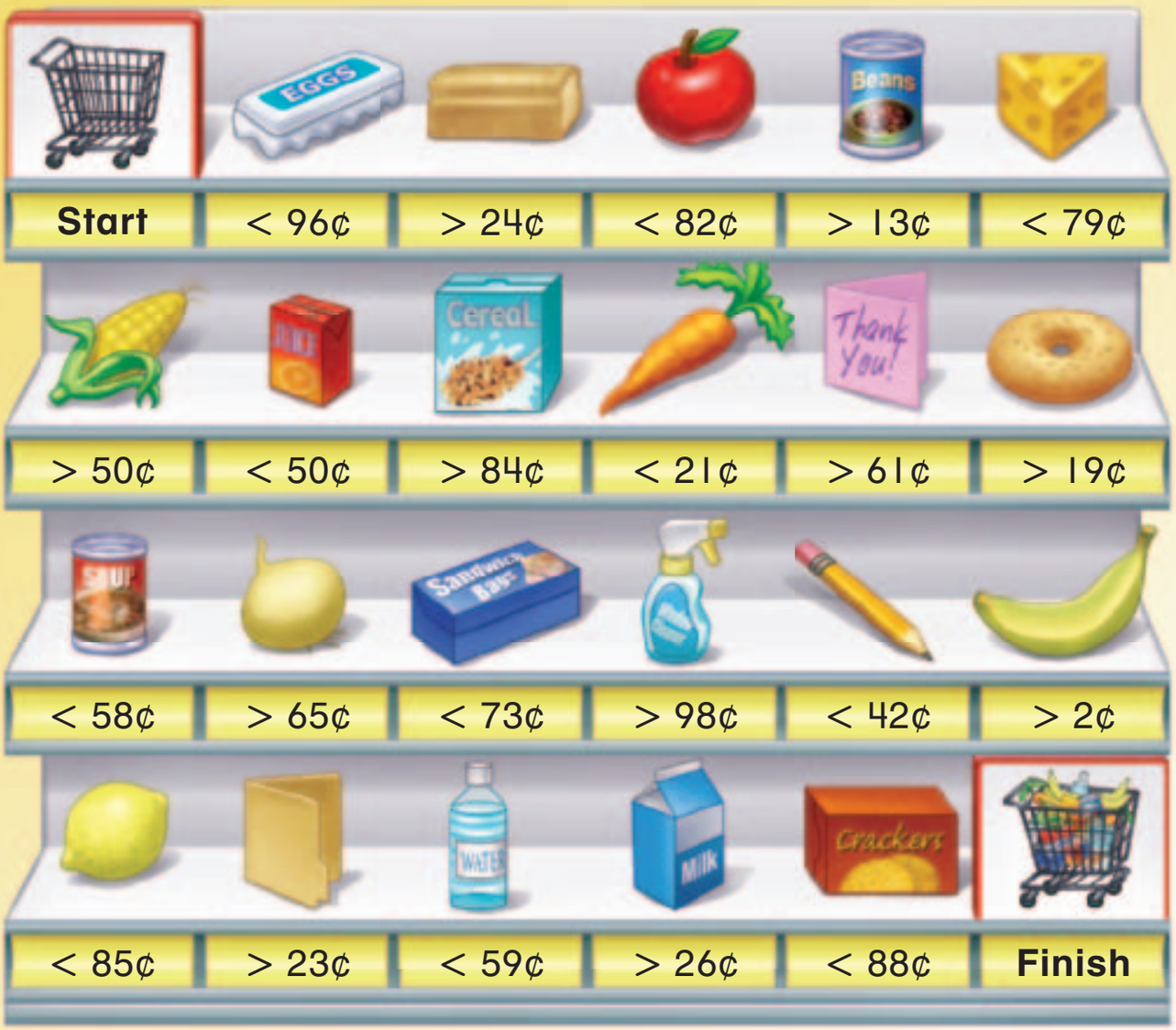
Compare Numbers

You Will Need

-
-

Play with a partner:

- Put your on Start.
- Roll the and move your .
- Name an item that is > or <, the item on which you land.
- Have your partner check. If you are incorrect, move back 2 spaces.
- The first person to Finish wins!



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Name _____

Patterns

Get Ready

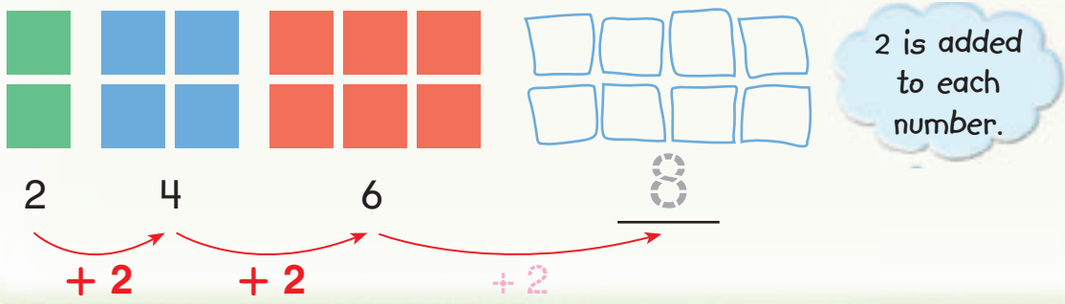
Main Idea

I will show and describe patterns.

Vocabulary

pattern

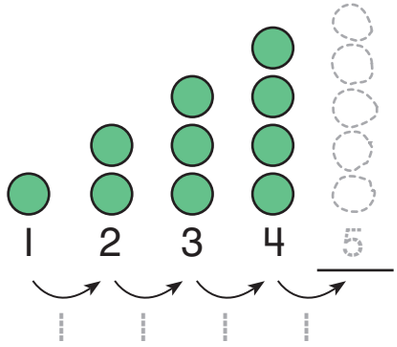
Patterns are everywhere. Some patterns grow. Growing patterns grow and get bigger or smaller. What comes next? Draw a picture to show what comes next in the pattern. Write the number.



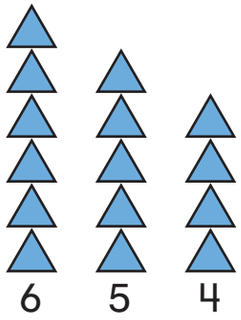
Check

Draw a picture to show what comes next in the pattern. Write the number.

1.

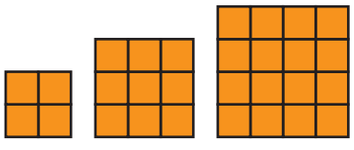


2.



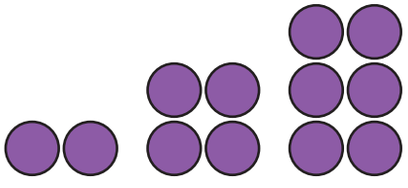
_____ _____ _____

3.



_____

4.



_____

5. Talk About It Look at Exercise 3. Tell about the pattern.

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Practice

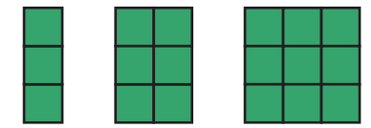
Write what comes next in the pattern.

6. 5, 10, 15, 20, ___, ___, ___

7. 10, 20, 30, ___, 50, ___, ___, 80

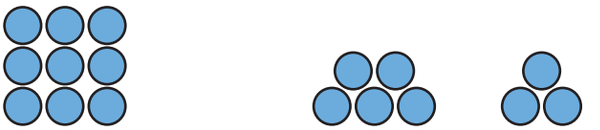
Draw a picture to show what comes next in the pattern.
Write the number.

8.



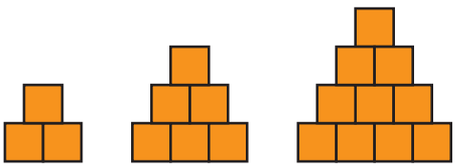
___ ___ ___ ___

9.



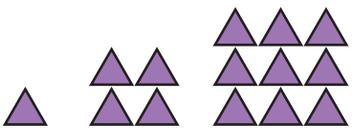
___ ___ ___ ___

10.



3 6 10 ___

11.



1 4 9 ___

Problem Solving

12. Visual Thinking Amy saved 10 pennies the first week, 20 pennies the second week, and 30 pennies the third week. If this pattern continues for six weeks, how many pennies will Amy have?

_____ pennies

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Math at Home Activity: Ask your child to create a repeating pattern and a growing pattern using cereal.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve the problem.

Your Mission: Find how many rocks are on the shelves.

I have a collection of rocks. I put 1 on the top shelf, 3 on the second shelf, and 5 on the third shelf. If I put rocks on the next 2 shelves in the same pattern, how many rocks total will I have on the shelves?

Understand

What do I need to find out?

Circle it.

Plan

How will I solve the problem?

Solve

One way is to draw a picture.

Check

Look Back

Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Draw a picture
- Act it out
- Use logical reasoning

Choose a strategy. Solve.

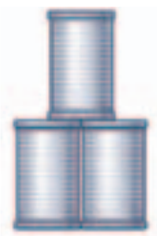
1. There are three pigs in the barn. Two chickens go into the barn. How many animals are in the barn?

_____ animals

2. The water ride is open. Five log boats are being used. 1 child is in the first boat. 3 children are in the second boat. 5 are in the third boat. If this continues, how many children will be in the fifth boat?

_____ children

3. Mrs. Walker's class is collecting cans to recycle. Jeff brought in 10 cans and Sally brought in 8 cans. How many cans do they have in all?



_____ cans

4. What's my number?
It is greater than 41.
It is less than 49.
It has a 7 in the ones place.

_____

Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

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Name _____

Hands-On Activity

Patterns on a Hundred Chart

Get Ready

Main Idea

I will skip count to create patterns on a hundred chart.

Vocabulary

skip count

You can use patterns to count. This is called **skip counting**. You can skip count by 2s to count pairs of shoes.

2 4 6 8 10

Skip counting on a hundred chart shows patterns.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60

Check

Use the hundred chart.

1. Skip count by 2s. Color the numbers blue.
2. Skip count by 5s. Circle the numbers.
3. Skip count by 10s. Draw a line under the numbers.
4. Talk About It — What patterns did you make in the hundred chart?

1		3				7		9	
11		13				17		19	
21		23				27		29	
31		33				37		39	
41		43				47		49	
51		53				57		59	
61		63				67		69	
71		73				77		79	
81		83				87		89	
91		93				97		99	

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Practice

Use the hundred chart.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

5. Count by 2s. 2, 4, 6, 8,

_____, _____, _____, _____

6. Count by 4s. 12, 16, 20, 24,

_____, _____, _____, _____

Write the missing numbers. Name the pattern.

7. 34, 36, 38, _____

Skip counting by _____.

8. 10, _____, 30, 40

Skip counting by _____.

9. 55, 58, _____, 64

Skip counting by _____.

10. 75, _____, _____, 90

Skip counting by _____.

Problem Solving

Number Sense

11. There are 6 gloves. Each glove has 5 fingers. How many fingers are there in all?

_____ fingers

12. There are 20 wheels. Each bicycle has 2 wheels. How many bicycles are there?

_____ bicycles

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Math at Home Activity: Ask your child to skip count out loud by twos, threes, and fives.

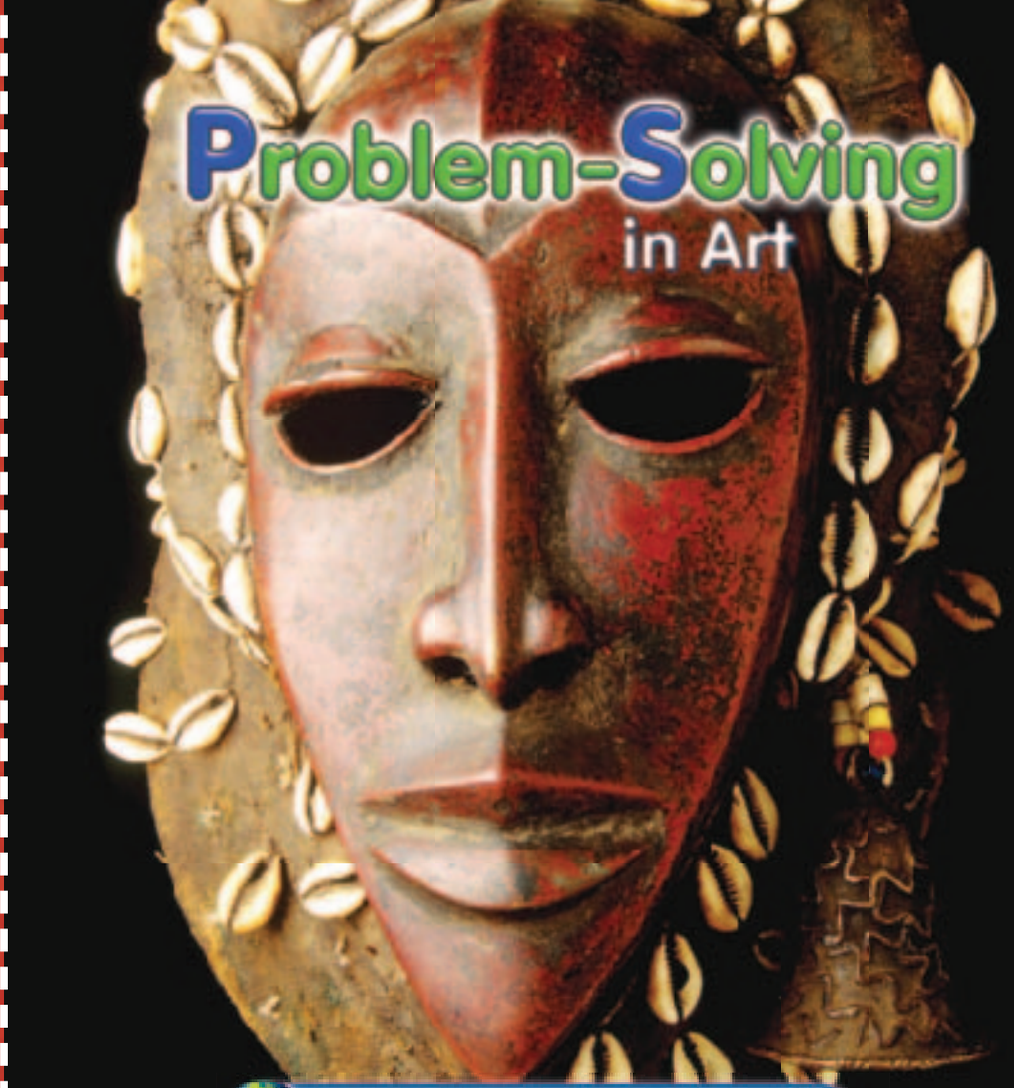
What do you celebrate? What special events do you dress up for?

Draw a mask you could wear.

D

FOLD DOWN

Problem-Solving in Art



Real-World MATH

Some people dress up for celebrations. This is an African mask used in a special ceremony.

This book belongs to

_____

©Vanessa Vick/Photo Researchers, Inc.

A

These masks are from Mexico.

This mask
is about
25 years old.

This mask
is about
60 years old.

Circle the mask that is older.

latinamericanfolkart.com

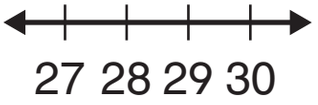
This is a mask from Japan.
It is over 1,000 years old!

©Burstein Collection/CORBIS

Name _____

Vocabulary

Draw lines to match.

1. digit	**a.** $23 > 20$
2. number line	**b.** 26
3. is greater than	**c.**  27 28 29 30
4. is less than	**d.** $7 < 8$

Concepts

Circle the estimate.

5.

? 10 marbles

about 10 about 20 about 40

Write the number.

6. 4 tens 3 ones = _____

7. 1 ten 7 ones = _____

Circle the value of the red digit.

8. 45

4 or 40

9. 75

5 or 50

10. Circle the value of the two in eighty-two.

2 or 20

Write the number and number name.

11. ninety-three

_____

12. 10

_____

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Use the number line to fill in the blanks.

30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

13. 42, _____, 44

14. 46, _____, 48, _____

15. 33, _____, 31

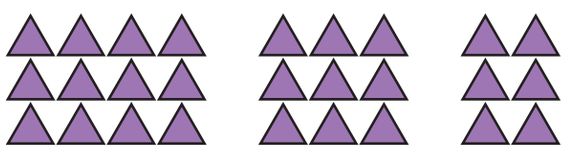
---

16. Compare. Write >, <, or =.

51 ◯ 57 94 ◯ 91 33 ◯ 33 49 ◯ 59

Draw a picture to show the pattern.

17.



___ ___ ___ ___

Write the missing number. Name the pattern.

18. 74, _____, 78, 80

Skip counting by _____.

19. 35, _____, 45, _____

Skip counting by _____.

---

20. Abby, Daniel, and Jamal have different favorite colors: blue, green, and yellow. Jamal likes green. Abby does not like yellow.

What is Daniel's favorite color? _____

21. What is Sophia's address? There are 3 tens. There are more tens than ones.

Sophia's address is _____.

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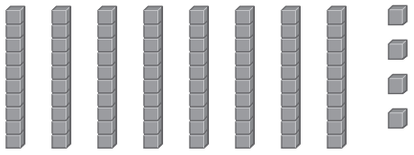
Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A What is the place value of the four in eighty-four?



4 ○ 8 ○

40 ○ 80 ○

B Which number sentence is true?

43 = 24 ○ 43 < 24 ○

43 > 24 ○ 24 > 43 ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 Which number has 5 tens and 7 ones?

57 ○ 53 ○ 37 ○ 12 ○

3 Which of these shows how many apples?

10 + 10 ○ 3 + 3 + 3 + 1 ○

10 + 10 + 10 + 4 ○ 1 + 1 + 1 + 1 ○

2 A number has 6 tens. What is the number?

6 ○ 16 ○ 60 ○ 76 ○

4 Which of these shows the number name for 15?

thirty ○ fifteen ○ five ○ twenty ○

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5 What is another way to write eighty-nine?

8 + 9 ○

40 + 9 ○

90 + 8 ○

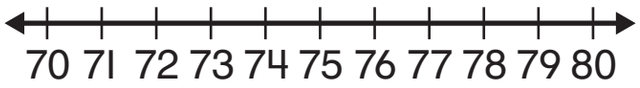
80 + 9 ○

6 Which number will make the sentence true?

_____ > 44

24 ○ 58 ○ 31 ○ 14 ○

7 What number comes after 76?



67 ○ 73 ○ 75 ○ 77 ○

8 About how many stars are there?

about 10 ○

about 40 ○

about 20 ○

about 50 ○

9 Gina is counting her socks. She has 5 pairs of socks. How many socks are there in all?

5 ○ 10 ○ 15 ○ 20 ○

10 There are 53 crayons in a jar. How many tens and ones are there?

5 tens 3 ones ○

3 tens 5 ones ○

5 tens 0 ones ○

3 tens 1 one ○

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CHAPTER 2

Addition Strategies

Key Vocabulary

- add
- addend
- sum
- doubles

Explore

Look at the picture. How could you find how many?

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Ludovic Maisant/CORBIS

Name _____

Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 2?

Write the number.

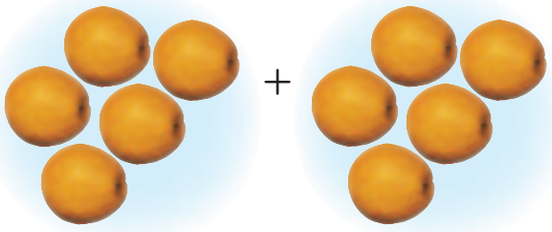
1.

_____

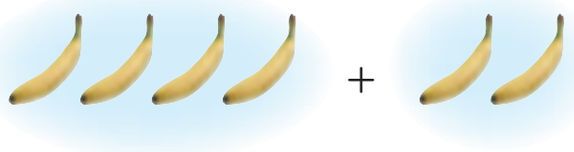
2.

_____

Add.

3. 

_____ oranges

4. 

_____ bananas

5.

7 + 1 = _____

6.

3 + 4 = _____

Look at the picture. Write the number sentence. Add.

7.

_____ + _____ = _____ apples

Solve.

8. There are 2 flies and 1 spider on a spider web. How many bugs are there in all?

_____ bugs

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This page checks skills needed for Chapter 2.

MATH at HOME

Dear Family,

Today my class started Chapter 2, **Addition Properties**. In this chapter, I will learn to use different strategies to solve addition problems. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child count the number of pictures on each page of the newspaper. How many more pictures would there need to be to reach 10?

Key Vocabulary

addend any numbers or quantities being added together $6 + 2 = 8$

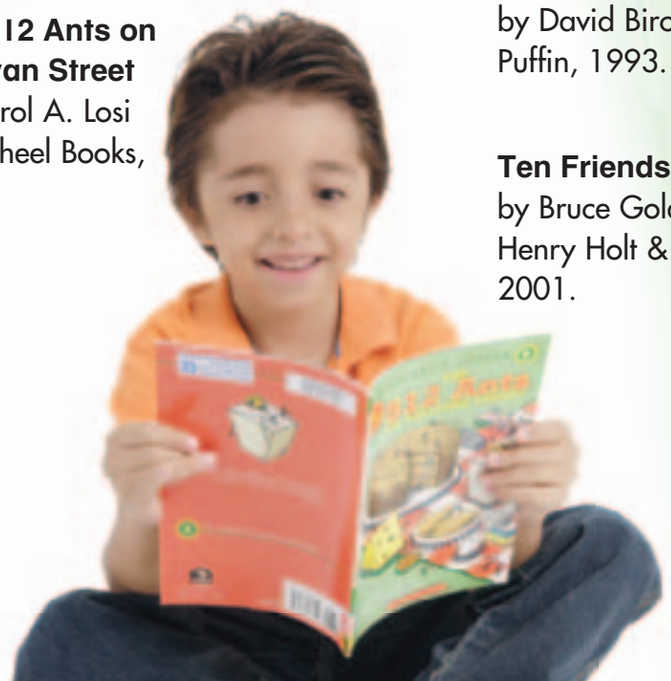
addend addend

doubles two addends that are the same number $3 + 3 = 6$

MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

The 512 Ants on Sullivan Street
by Carol A. Losi
Cartwheel Books, 1997.



The King's Chessboard
by David Birch
Puffin, 1993.

Ten Friends
by Bruce Goldstone
Henry Holt & Co, 2001.

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MATEMÁTICAS en CASA

Estimada familia,

Hoy mi clase comenzó el Capítulo 2, **Propiedades de la adición**. En este capítulo, aprenderé a usar diferentes estrategias para resolver problemas de adición. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Pídanle a su hijo(a) que cuente el número de imágenes en cada página del periódico. ¿Cuántas imágenes adicionales se necesitan para llegar hasta 10? Conversen sobre lo que muestran las imágenes acerca de los artículos.

Vocabulario clave

sumando sumando cualquier número o cantidad que se suma $6 + 2 = 8$

sumando ↑ ↑ sumando

dobles la suma de un número más sí mismo dos adendos idénticos: $3 + 3 = 6$

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Las 512 hormigas en la calle Sullivan
de Carol A. Losi
Cartwheel Books, 1997.

El tablero de ajedrez del rey
de David Birch
Puffin, 1993.

Diez amigos
de Bruce Goldstone
Henry Holt & Co, 2001.

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Name _____

Addition Properties

Get Ready

Main Idea

I will add zero and add in any order to find sums.

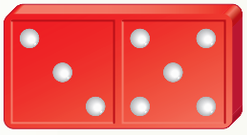
Vocabulary

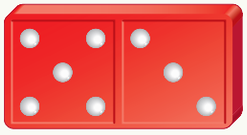
add

addend

sum

You **add** to find a sum. The numbers you add together are called **addends**. The answer is the **sum**.





You can add numbers in any order. The sum is the same. This is the Commutative Property.

$3 + 5 = 8$ (addends: 3, 5; sum: 8)

$5 + 3 = 8$

When you add zero to a number, the sum is always that number.

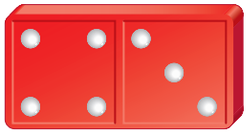
$5 + 0 = 5$ (addends: 5, 0; sum: 5)

$0 + 5 = 5$

Check

Find each sum.

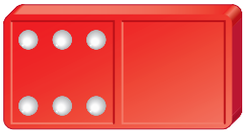
1.



$4 + 3 = 7$

$3 + 4 = 7$

2.



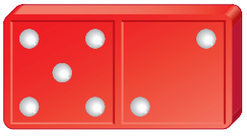
$6 + 0 =$ _____

$0 + 6 =$ _____

3.

$\begin{array}{r} 2 \\ +\ 4 \\ \hline \end{array}$ $\begin{array}{r} 4 \\ +\ 2 \\ \hline \end{array}$

4.



$\begin{array}{r} 2 \\ +\ 5 \\ \hline \end{array}$ $\begin{array}{r} 5 \\ +\ 2 \\ \hline \end{array}$

5. Talk About It

Why is the sum the same when you add 3 + 2 or 2 + 3?

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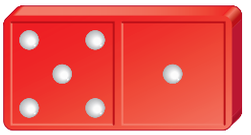
Practice

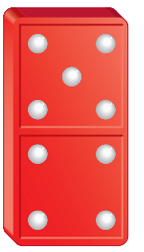
Find each sum.

Remember
You can add numbers in any order. The sum will be the same.

6. 

$5 + 1 =$ _____

$1 + 5 =$ _____

7. 

$\begin{array}{r} 5 \\ +\ 4 \\ \hline \end{array}$ $\begin{array}{r} 4 \\ +\ 5 \\ \hline \end{array}$

8. $\begin{array}{r} 0 \\ +\ 3 \\ \hline \end{array}$ $\begin{array}{r} 3 \\ +\ 0 \\ \hline \end{array}$	**9.** $\begin{array}{r} 6 \\ +\ 3 \\ \hline \end{array}$ $\begin{array}{r} 3 \\ +\ 6 \\ \hline \end{array}$	**10.** $\begin{array}{r} 7 \\ +\ 1 \\ \hline \end{array}$ $\begin{array}{r} 1 \\ +\ 7 \\ \hline \end{array}$
11. $6 + 2 =$ _____ $2 + 6 =$ _____	**12.** $8 + 0 =$ _____ $0 + 8 =$ _____	**13.** $4 + 2 =$ _____ $2 + 4 =$ _____
14. $3 + 4 =$ _____ $4 + 3 =$ _____	**15.** $0 + 9 =$ _____ $9 + 0 =$ _____	**16.** $8 + 1 =$ _____ $1 + 8 =$ _____

Problem Solving

Algebra Write the missing numbers.

17. $4 + \square = 3 + 4$

18. $1 + 6 = 6 + \square$

19. $7 + 2 = \square + 7$

20. $\square + 5 = 5 + 0$

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Math at Home Activity: Using objects in the house, have your child show one group of 2 and one group of 3. Have your child tell you two addition sentences about the objects.

Name _____

Count On to Add

Get Ready

Main Idea

I will use a number line to count on to add.

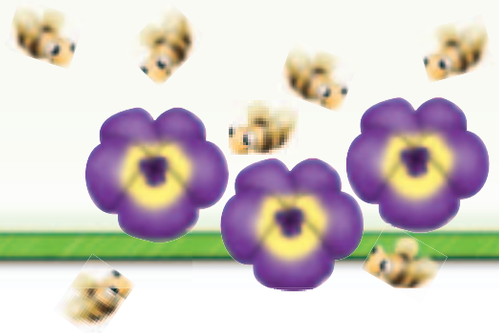
Use a number line to **count on** to add.
Find 3 + 7. Start with the greater addend.

Start at 7. Count on 3.

3 + 7 = 10 and 10 = 3 + 7 are the same.

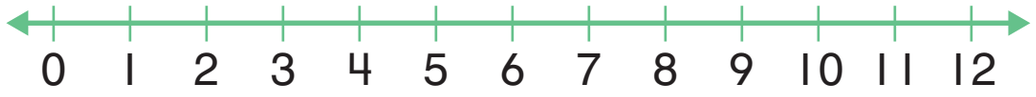
3 + 7 = 10

10 = 3 + 7



Check

Count on to add. You can use the number line.



Think
Start with the greater number and count on.

1. 6 + 3 = 9	**2.** 5 + 3 = _____	
3. 2 + 9 = _____	**4.** 1 + 3 = _____	**5.** 6 + 2 = _____
6. _____ = 2 + 7	**7.** _____ = 9 + 1	**8.** _____ = 4 + 3

9. Talk About It — Why should you count on from the greater addend?

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Practice

Remember
Start with the greater addend.

Count on to add. You can use the number line.

10. _____ = 5 + 2

11. 7 + 1 = _____

12. 3 + 5 = _____

13. 3 + 8 = _____

14. 6 + 1 = _____

15. _____ = 3 + 4

16. _____ = 9 + 3

17. 2 + 8 = _____

18. 7 + 3 = _____

19.
$$\begin{array}{r} 2 \\ +\ 7 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 3 \\ +\ 2 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 1 \\ +\ 9 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 5 \\ +\ 1 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 2 \\ +\ 4 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 3 \\ +\ 6 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 1 \\ +\ 4 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 3 \\ +\ 1 \\ \hline \end{array}$$

27.
$$\begin{array}{r} 2 \\ +\ 6 \\ \hline \end{array}$$

28.
$$\begin{array}{r} 9 \\ +\ 2 \\ \hline \end{array}$$

29. WRITING IN MATH How does a number line help you add?

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Math at Home Activity: Give your child an addition fact. Have them count on from the greater number to find a sum.

Name _____

Problem-Solving Strategy

Act It Out

Main Idea

I will act out the problem to solve it.

Harold sold all of the green peppers and all of the onions.

How many vegetables did Harold sell?

Understand

What do I need to find out?

Circle the question.

Plan

How will I solve the problem?

Solve

Act it out with models.

Check

Look Back

Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Act it out with models.

1. There are 8 ants on the ant hill.
2 more ants come.
How many ants are there now?

_____ ants

2. 3 ladybugs climb onto a leaf.
8 more join them.
How many ladybugs are on the leaf?

_____ ladybugs

Your Turn

Act it out with models.

3. 7 butterflies are on a flower.
2 more land on the flower.
How many butterflies are on the flower now?

_____ butterflies

4. 9 bees are in a hive.
0 bees join them.
How many bees are there in all?

_____ bees

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Hands-On Activity

Doubles

Get Ready

Main Idea

I will use doubles facts to find sums.

Vocabulary

doubles

Addends that are the same are called **doubles**.

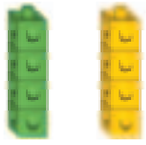
Use doubles facts to find the sum.

6 + 6 = 12

addend addend

Check

Add. Use cubes to help.

1. 

4 + 4 = 8

2.

3 + 3 = _____

3. 5 + 5 = _____

4. 9 + 9 = _____

5. 7 + 7 = _____

6. 8 + 8 = _____

7. Talk About It How do you remember 5 + 5? 2 + 2?

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Richard Hutchings

Practice

Add. Circle the doubles facts.

8. 0 + 0	**9.** 7 + 1	**10.** 2 + 8	**11.** 8 + 8	**12.** 3 + 6	**13.** 7 + 3
14. 8 + 3	**15.** 5 + 2	**16.** 2 + 9	**17.** 4 + 4	**18.** 6 + 6	**19.** 3 + 3
20. 2 + 2	**21.** 7 + 7	**22.** 1 + 1	**23.** 9 + 3	**24.** 7 + 2	**25.** 9 + 9

Problem Solving

Number Sense Draw a picture to solve. Write the number sentence.

26. Andy has 3 dogs. Chris has the same number of dogs. How many dogs do they have altogether?

____ + ____ = ____

____ dogs

Math at Home Activity: Have your child use objects to make doubles and tell the addition fact.

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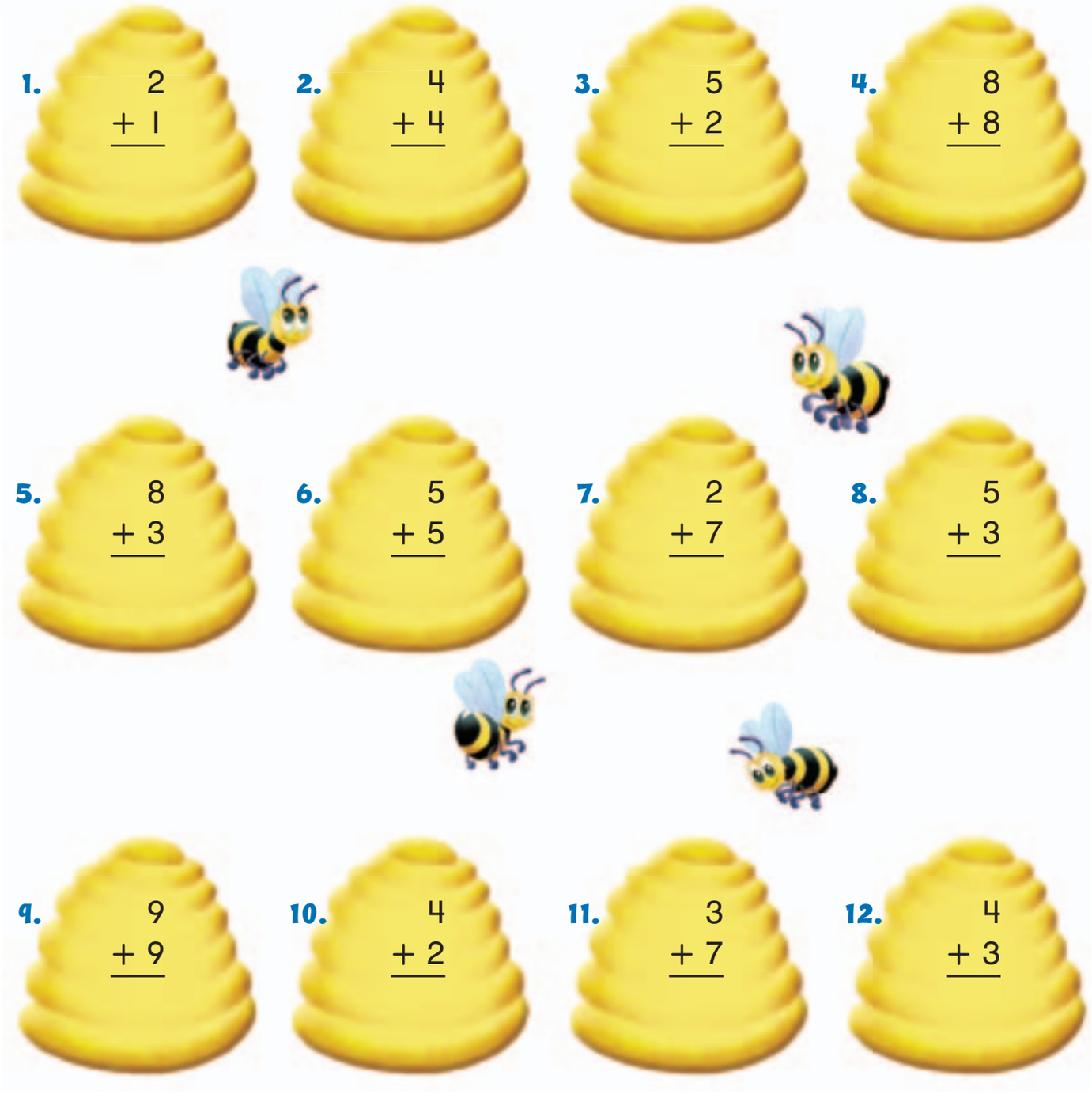
Name _____

Find the sum.



1. 2 + 1 = ___
2. 4 + 4 = ___
3. 5 + 2 = ___
4. 8 + 8 = ___
5. 8 + 3 = ___
6. 5 + 5 = ___
7. 2 + 7 = ___
8. 5 + 3 = ___
9. 9 + 9 = ___
10. 4 + 2 = ___
11. 3 + 7 = ___
12. 4 + 3 = ___

13. ____ + ____ = 6

14. ____ + ____ = 8

15. ____ + ____ = 10

16. ____ + ____ = 12

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Game Time

Packing for a Picnic

Doubles

You Will Need

-

How To Play:

- Work with a partner. Take turns.
- Put your on Start.
- Roll the .
- Move your that many spaces.
- Which addends can you double to get the number on the space?
- Check your answer with your partner.
- Find the picnic item that matches the sum.
- Draw that item in your picnic basket.
- Play until someone reaches Finish.

1

2

6

8

10

12

Start	16	4	2	24	12	20	Finish

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Name _____

Hands-On Activity

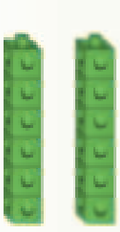
Near Doubles

Get Ready

Main Idea

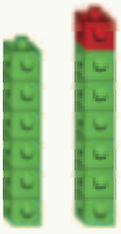
I will use doubles facts to find other sums.

Doubles facts can help you to learn other facts. If you know 6 + 6 = 12, you can find 6 + 7 or 6 + 5.



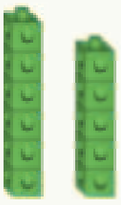
6 + 6 = 12

Doubles



6 + 7 = 13

Doubles plus 1



6 + 5 = 11

Doubles minus 1

Check

Find the sum. Use cubes to help.

1.

3 + 3 = 6

3 + 4 = 7

2. 7 + 7 = _____

7 + 8 = _____

3. 2 + 2 = _____

2 + 1 = _____

4. 5 + 5 = _____

5 + 6 = _____

5. 9 + 9 = _____

9 + 8 = _____

6. Talk About It — How does knowing doubles help you learn near doubles?

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Practice

Find the sum. Use cubes to help.

7. 4 + 4 = _____ **8.** 4 + 5 = _____

9. 1 + 1 = _____ **10.** 1 + 2 = _____

11. 4 + 3 = _____ **12.** 8 + 8 = _____

13. 0 + 0 = _____ **14.** 5 + 6 = _____

15. 7 + 8 **16.** 7 + 7 **17.** 6 + 6 **18.** 3 + 2 **19.** 4 + 3 **20.** 8 + 7

21. 5 + 4 **22.** 7 + 6 **23.** 9 + 9 **24.** 8 + 9 **25.** 6 + 5 **26.** 8 + 8

Problem Solving

Number Sense

27. What doubles facts can help you solve 7 + 8?

_____ + _____ = _____

or _____ + _____ = _____

7 + 8 = _____

28. What doubles facts can help you solve 5 + 6?

_____ + _____ = _____

or _____ + _____ = _____

5 + 6 = _____

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Math at Home Activity: Ask your child what the doubles-plus-one fact would be for 4 + 4.

Name _____

Find the sum.

1. $\begin{array}{r} 5 \\ +\ 1 \\ \hline \end{array}$ $\begin{array}{r} 1 \\ +\ 5 \\ \hline \end{array}$

2. $\begin{array}{r} 7 \\ +\ 0 \\ \hline \end{array}$ $\begin{array}{r} 0 \\ +\ 7 \\ \hline \end{array}$

Use the number line. Count on to add.

3. 10 + 3 = _____

4. 1 + 3 = _____

Add. Circle the doubles facts.

5. $\begin{array}{r} 0 \\ +\ 3 \\ \hline \end{array}$ **6.** $\begin{array}{r} 1 \\ +\ 1 \\ \hline \end{array}$ **7.** $\begin{array}{r} 3 \\ +\ 6 \\ \hline \end{array}$ **8.** $\begin{array}{r} 9 \\ +\ 9 \\ \hline \end{array}$ **9.** $\begin{array}{r} 6 \\ +\ 4 \\ \hline \end{array}$

10. $\begin{array}{r} 9 \\ +\ 8 \\ \hline \end{array}$ **11.** $\begin{array}{r} 7 \\ +\ 6 \\ \hline \end{array}$ **12.** $\begin{array}{r} 4 \\ +\ 5 \\ \hline \end{array}$ **13.** $\begin{array}{r} 8 \\ +\ 8 \\ \hline \end{array}$ **14.** $\begin{array}{r} 5 \\ +\ 5 \\ \hline \end{array}$

Solve.

15. Carla picked 6 daisies. Daniel picked 7 daisies. How many daisies did they pick?

_____ + _____ = _____

_____ daisies

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Getty Images

Spiral Review Chapters 1–2

Circle the value of the red digit.

16. 19

1 or 10

17. 63

3 or 30

18. 40

4 or 40

Compare. Write >, <, or =.

19. 13 ◯ 31

20. 90 ◯ 89

21. 26 ◯ 42

22. 73 ◯ 73

23. Write which number goes in the box.

69 < ☐ < 71

48 < ☐ > 50

Find the sum.

24. 4 + 5 = _____

25. 5 + 6 = _____

Write the missing number. Then name the pattern.

26. 53, 56, _____, 62

Skip counting by _____

27. 30, _____, 50, _____

Skip counting by _____

Add. Circle the doubles facts.

28. 8 + 2 = _____

29. 6 + 6 = _____

30. 3 + 2 = _____

31. 7 + 6 = _____

32. 3 + 8 = _____

33. 7 + 7 = _____

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Name _____

Hands-On Activity

Make 10

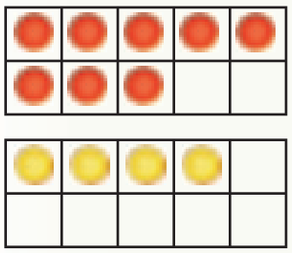
Get Ready

Main Idea

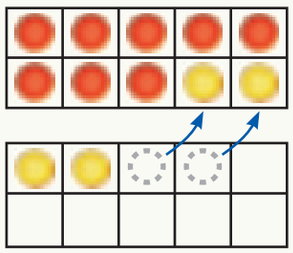
I will make ten to solve addition problems.

You can make ten to help you add. Find 8 + 4.

First:
Show 8.
Then show 4.

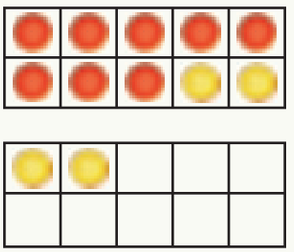


Next:
Move 2 counters to make 10.



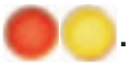
Show 8 + 4 as 10 + 2.

Last:
Add.

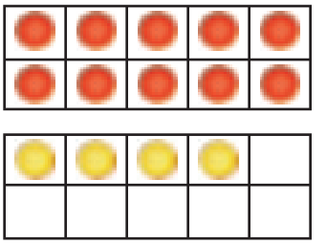


8 + 4 = 12

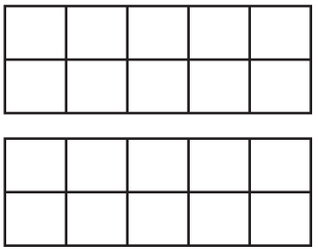
Check

Use WorkMat 1 and  . Add.

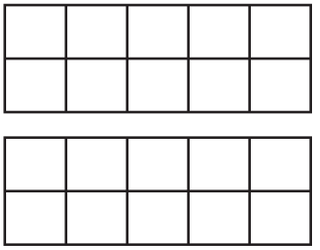
1. 9 + 5 = 14



2. 7 + 5 = _____



3. 8 + 5 = _____



4. 6 + 5 = _____

5. 6 + 8 = _____

6. 4 + 9 = _____

7. 8 + 4 = _____

8. 4 + 6 = _____

9. 2 + 9 = _____

10. Talk About It How does making a ten help you add?

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Practice

Remember
Use a ten, count on, or find doubles.

Use WorkMat 1 and . Add.

13. $9 + 4 =$ _____	**14.** $7 + 7 =$ _____	**15.** $9 + 7 =$ _____
16. $4 + 8 =$ _____	**17.** $8 + 9 =$ _____	**18.** $6 + 8 =$ _____
19. $3 + 9 =$ _____	**20.** $7 + 5 =$ _____	**21.** $4 + 6 =$ _____

22. $\begin{array}{r} 3 \\ +\ 7 \\ \hline \end{array}$	**23.** $\begin{array}{r} 4 \\ +\ 9 \\ \hline \end{array}$	**24.** $\begin{array}{r} 2 \\ +\ 9 \\ \hline \end{array}$	**25.** $\begin{array}{r} 7 \\ +\ 8 \\ \hline \end{array}$	**26.** $\begin{array}{r} 8 \\ +\ 8 \\ \hline \end{array}$	**27.** $\begin{array}{r} 1 \\ +\ 9 \\ \hline \end{array}$
28. $\begin{array}{r} 9 \\ +\ 9 \\ \hline \end{array}$	**29.** $\begin{array}{r} 2 \\ +\ 8 \\ \hline \end{array}$	**30.** $\begin{array}{r} 3 \\ +\ 9 \\ \hline \end{array}$	**31.** $\begin{array}{r} 4 \\ +\ 7 \\ \hline \end{array}$	**32.** $\begin{array}{r} 6 \\ +\ 9 \\ \hline \end{array}$	**33.** $\begin{array}{r} 7 \\ +\ 3 \\ \hline \end{array}$

H.O.T. Problem

34. Algebra Write the missing numbers. What pattern do you see?

10	+	0	=	9	+	1		
10	+	1	=	9	+	2		
10	+		=		+	3		
10	+		=		+			
	+		=		+			

Explain the pattern.

_____

_____

_____

_____

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Math at Home Activity: Ask your child to tell you how to use a ten-frame to add 8 + 7.

Name _____

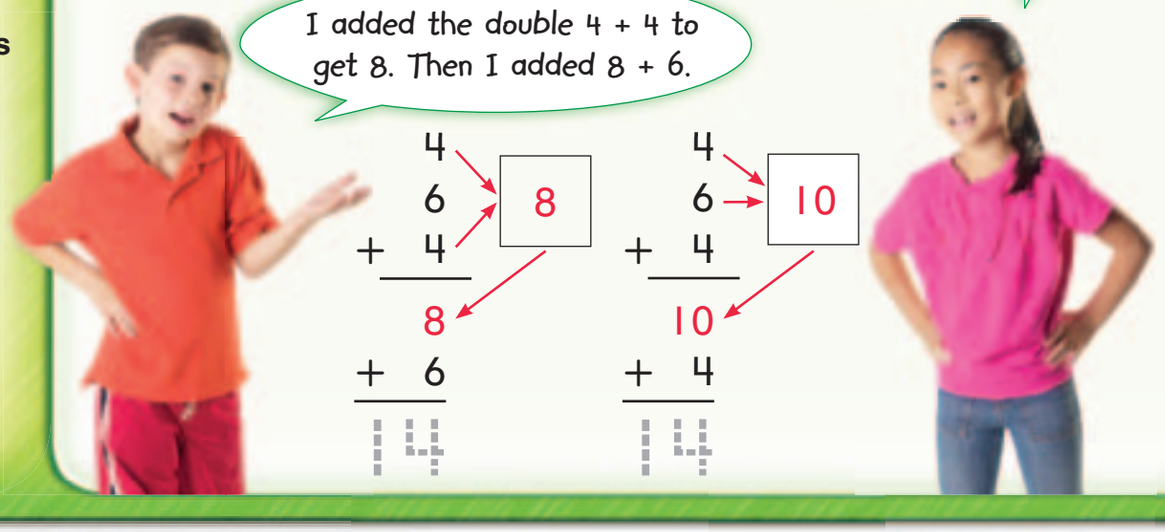
Add Three Numbers

Get Ready

Main Idea

I will group addends in different ways to make the same sum.

You can group addends in different ways. The sum is the same.



Check

Find each sum. Circle the numbers you add first. Write that sum in the box.

1.
$$\begin{array}{r} 7 \\ 4 \\ +\ 7 \\ \hline \end{array} \quad \square$$

2.
$$\begin{array}{r} 9 \\ 1 \\ +\ 2 \\ \hline \end{array} \quad \square$$

3.
$$\begin{array}{r} 3 \\ 9 \\ +\ 3 \\ \hline \end{array} \quad \square$$

4.
$$\begin{array}{r} 2 \\ 4 \\ +\ 2 \\ \hline \end{array} \quad \square$$

5.
$$\begin{array}{r} 2 \\ 7 \\ +\ 8 \\ \hline \end{array} \quad \square$$

6.
$$\begin{array}{r} 1 \\ 6 \\ +\ 9 \\ \hline \end{array} \quad \square$$

7. Talk About It — How did you decide which numbers to add first in number 6?

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Richard Hutchings

Practice

Find each sum.

8. $4 + 3 + 4 =$ _____

9. $4 + 3 + 7 =$ _____

10. $2 + 8 + 3 =$ _____

11. $6 + 1 + 6 =$ _____

12. $5 + 5 + 5 =$ _____

13. $6 + 6 + 3 =$ _____

14. $7 + 4 + 7 =$ _____

15. $9 + 8 + 1 =$ _____

Remember
Add two numbers first. Look for facts you know.

16.
$$\begin{array}{r} 1 \\ 7 \\ +\ 3 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 5 \\ 7 \\ +\ 5 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 3 \\ 5 \\ +\ 7 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 7 \\ 7 \\ +\ 1 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 9 \\ 8 \\ +\ 1 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 2 \\ 2 \\ +\ 8 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 6 \\ 6 \\ +\ 5 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 8 \\ 4 \\ +\ 6 \\ \hline \end{array}$$

Data File

Molera Park Activities	
Activity	People
Hike	7
Bike	4
Camp	4
Ride Horses	3

24. How many people rode bikes, went camping, and rode horses? _____

25. How many people rode horses, went hiking, and went biking? _____

Math at Home Activity: Have your child show you how to add $7 + 7 + 1$.

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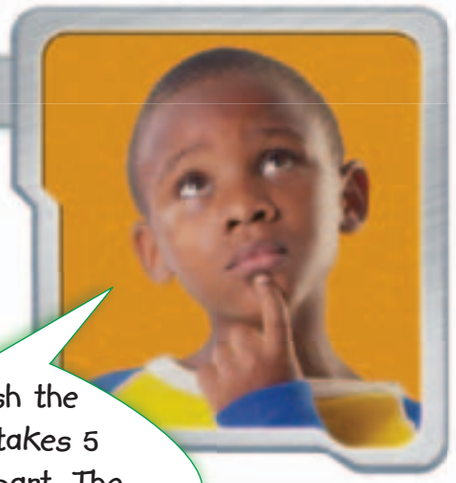
Name _____

Problem-Solving Investigation

Main Idea

I will choose a problem-solving strategy to solve problems.

Your Mission:
Find out how long the math test will take Joe to finish.



It takes me 5 minutes to finish the first part of my math test. It takes 5 more minutes to finish the next part. The last part takes me 4 minutes. How long will it take me to finish the test?

Understand

What do I need to find out?
Circle it.

Plan

How will I solve the problem?

Solve

One way is to draw a picture.

Joe will finish in 14 minutes.

Check

Look Back.
Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Draw a picture
- Logical reasoning
- Act it out

Choose a strategy. Solve.

1. Maria has 9 goldfish. She wants to put them into two fish tanks. What ways could she do this?

2. Steve, Elena and Ian are playing with toy airplanes. Steve gave 8 planes to Ian and 8 to Elena. He had 2 airplanes left. How many airplanes did he start with?

_____ planes

3. The library has 4 books about brown bears. They have 3 books about black bears. There is 1 fewer book about polar bears than black bears. How many books about bears are there altogether?

_____ books

4. Arielle has 4 markers. Julia has 3 more markers than Arielle. How many markers do they have in all?

_____ markers

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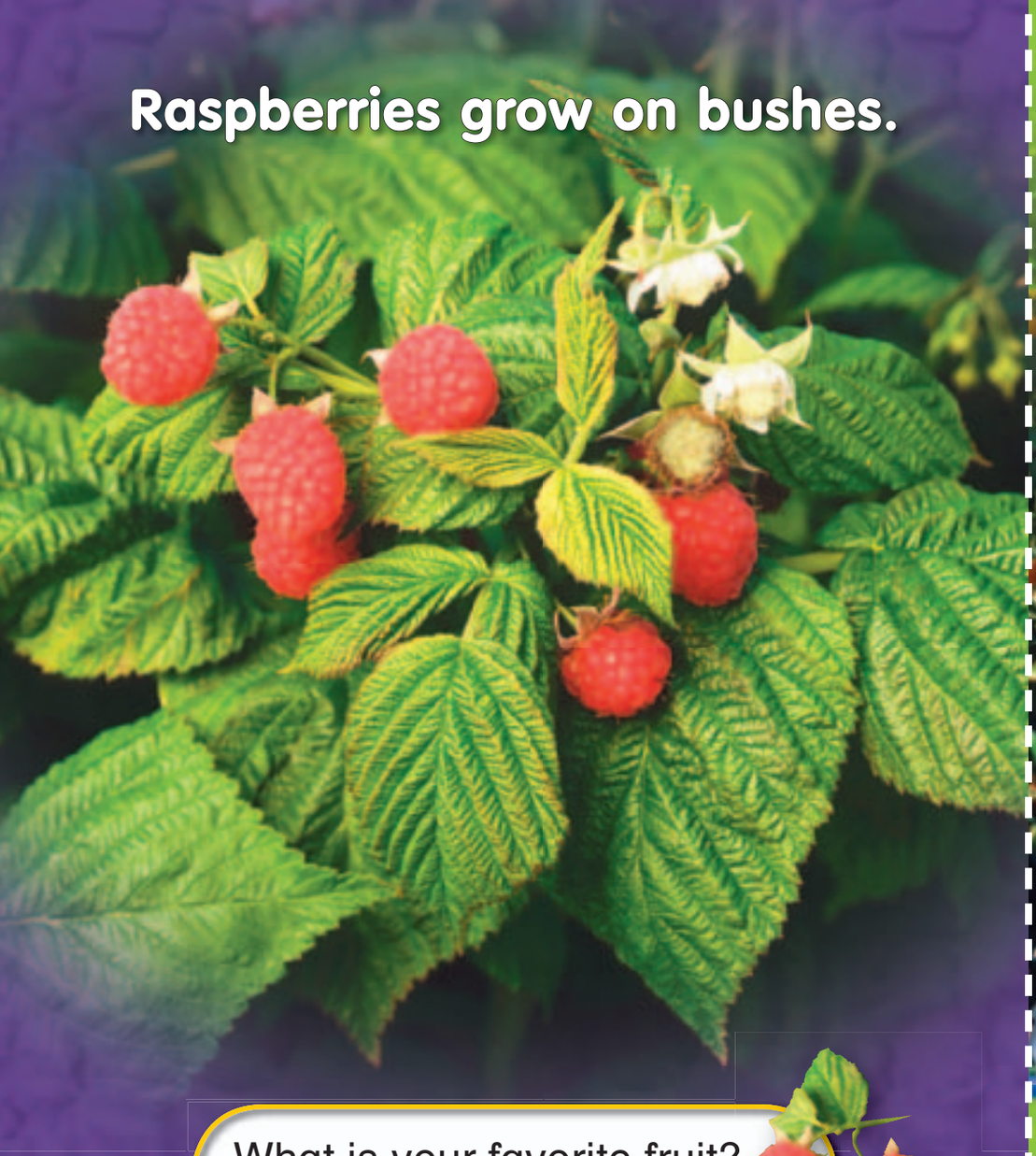
Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Raspberries grow on bushes.



What is your favorite fruit?

_____

Where does it grow?

_____

D

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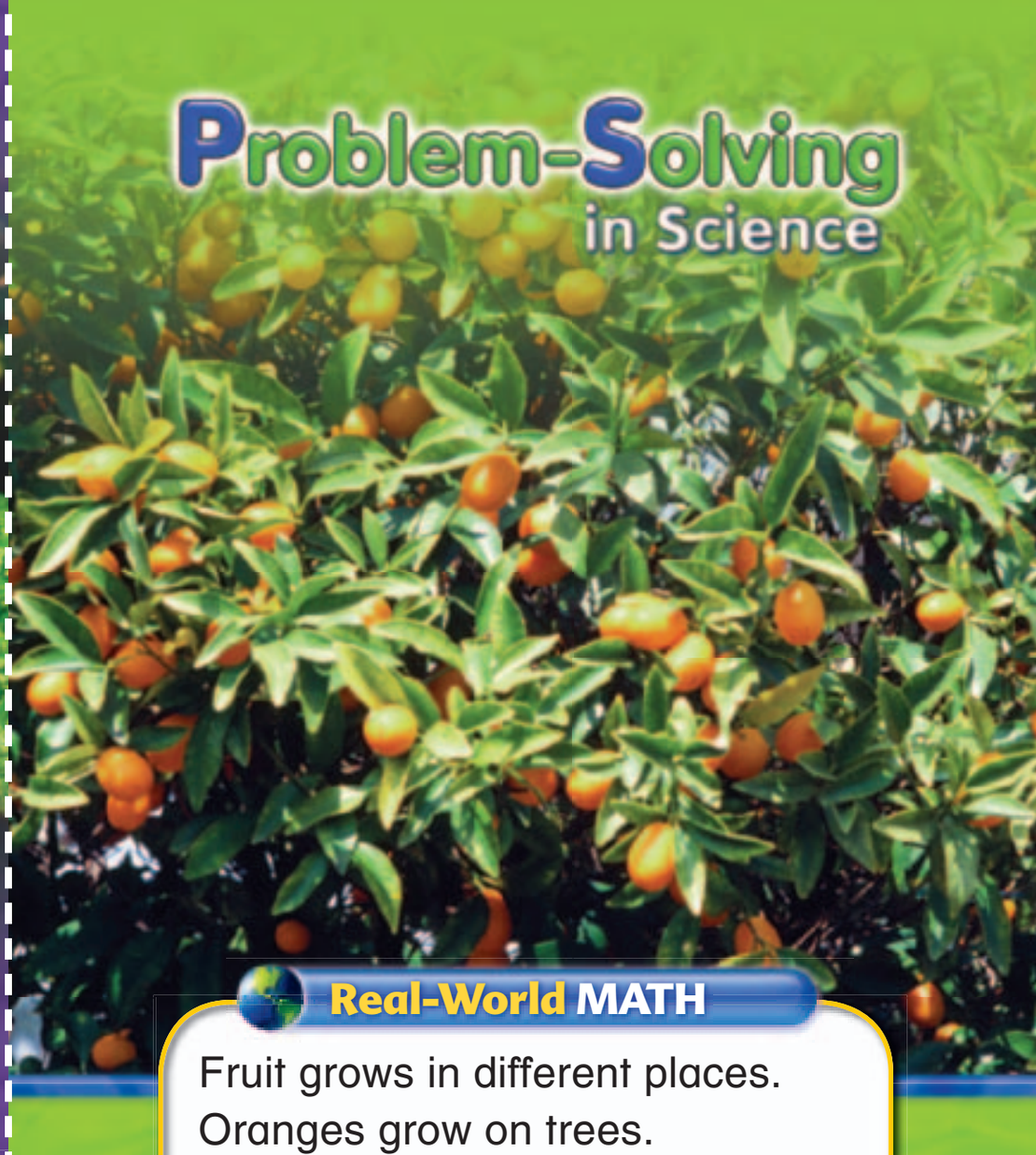
FOLD DOWN

Problem-Solving in Science



Real-World MATH

Fruit grows in different places.
Oranges grow on trees.

This book belongs to

_____

A

Grant Heilman

Watermelons grow on a vine. There are many watermelons on each vine.

Alex has 3 watermelon vines. Each vine has 5 watermelons. Draw a picture to find out how many watermelons Alex has.

_____ watermelons

Alex saved some seeds from last year's watermelons and planted them.

Richard Hutchings

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Name _____

Vocabulary

Circle the right answer.

1. doubles plus 1

6 + 5 5 + 5

2. doubles

6 + 3 4 + 4

3. add

5 + 1 5 − 1

Find each sum.

4.
$$\begin{array}{r} 8 \\ +\ 2 \\ \hline \end{array} \qquad \begin{array}{r} 2 \\ +\ 8 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 4 \\ +\ 3 \\ \hline \end{array} \qquad \begin{array}{r} 3 \\ +\ 4 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 9 \\ +\ 1 \\ \hline \end{array} \qquad \begin{array}{r} 1 \\ +\ 9 \\ \hline \end{array}$$

Use the number line to solve.

7. 9 + 5 _____

8. 7 + 4 _____

9. 6 + 5 _____

Add. Circle the doubles facts.

10.
$$\begin{array}{r} 2 \\ +\ 3 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 1 \\ +\ 2 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 7 \\ +\ 7 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 7 \\ +\ 6 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 5 \\ +\ 4 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 3 \\ +\ 4 \\ \hline \end{array}$$

16. 4 + 5 = _____

17. 9 + 8 = _____

18. 0 + 0 = _____

19. 6 + 6 = _____

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Find the sum.

20. $8 + 7 =$ _____ **21.** $7 + 6 =$ _____ **22.** $9 + 3 =$ _____

23. $2 + 8 + 4 =$ _____ **24.** $5 + 1 + 5 =$ _____

25. $6 + 4 + 6 =$ _____ **26.** $7 + 8 + 3 =$ _____

27.
$$\begin{array}{r} 5 \\ 3 \\ +\ 5 \\ \hline \end{array}$$

28.
$$\begin{array}{r} 1 \\ 6 \\ +\ 4 \\ \hline \end{array}$$

29.
$$\begin{array}{r} 3 \\ 9 \\ +\ 1 \\ \hline \end{array}$$

30.
$$\begin{array}{r} 8 \\ 8 \\ +\ 1 \\ \hline \end{array}$$

Problem Solving

31. Roderick, Alex, and Chris are playing with baseballs. Roderick throws 5 to Alex and 5 to Chris. He has 6 baseballs left. How many baseballs did he start with?

_____ baseballs

32. Shani walks the dogs in her neighborhood. She has 1 dog. One neighbor has 3 dogs. Another neighbor has 2 dogs. How many dogs does she walk?

_____ dogs

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Name _____

Listen as your teacher reads the problem.
Choose the correct answer.

A What is the solution to this problem?

$7 + 4 =$ _____

3	4	10	11
○	○	○	○

B

$$\begin{array}{r} 4 \\ +\ 4 \\ \hline \end{array}$$

9	8	10	12
○	○	○	○

Listen as your teacher reads each problem.
Choose the correct answer.

1 Add.

$$\begin{array}{r} 3 \\ +\ 5 \\ \hline \end{array}$$

8	9	10	15
○	○	○	○

2 What number goes in the box to make this number sentence true?

$0 + 3 = \square + 0$

0	3	4	6
○	○	○	○

3 What is the solution to this problem?

$9 + 3 =$ _____

12	14	15	16
○	○	○	○

4 Jack has 7 tomatoes. He picked 7 more. How many tomatoes does Jack have?

13	14	15	20
○	○	○	○

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5 Look at the addition problem in the box. Which other problem has the same answer?

$2 + 6 + 3 = 11$

- ○ $11 + 2 + 3 = \square$
- ○ $3 + 6 + 2 = \square$
- ○ $6 + 3 + 11 = \square$
- ○ $11 + 8 + 6 = \square$

6 A number has four tens and six ones. What is the number?

6	10	16	46
○	○	○	○

7 Betty has 3 cats. Lebron has the same number of cats. How many cats do they have altogether?

3	4	5	6
○	○	○	○

8 Look at the cars. About how many cars are there?

about 10	about 20
○	○
about 30	**about 40**
○	○

9 What number is between 73 and 76?

$73 < \square < 76$

72	73	75	77
○	○	○	○

10 A number has 4 tens. What is the number?

49	34	14	4
○	○	○	○

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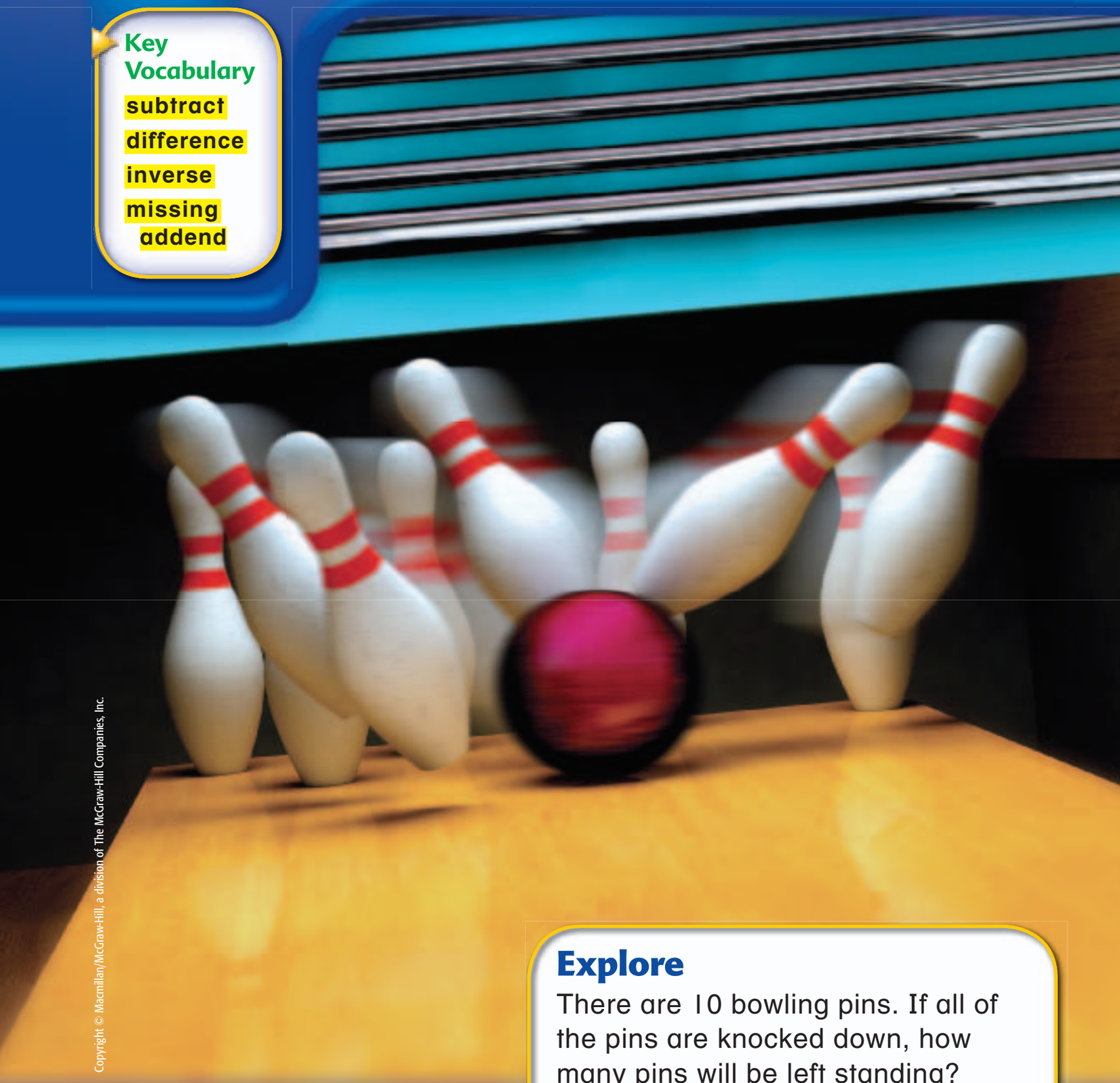
CHAPTER 3

Subtraction Strategies

Key Vocabulary

- subtract
- difference
- inverse
- missing addend



Explore

There are 10 bowling pins. If all of the pins are knocked down, how many pins will be left standing?

_____ bowling pins

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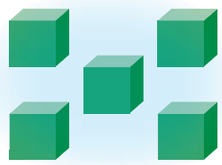
Name _____

Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 3?

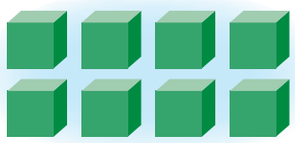
Count. Write the number.

1.



_____

2.



_____

Subtract.

3.

4 − 3 = _____

4.

6 − 3 = _____

5.

3 − 2 = _____

6.

9 − 7 = _____

Draw an X on the boxes to solve.

7.

5 − 1 = _____

8.

8 − 4 = _____

Solve.

9. Christy put 6 marbles in a group. 2 marbles rolled away. How many marbles are left?

_____ marbles

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This page checks skills needed for Chapter 3.

MATH at HOME

Dear Family,

Today my class started Chapter 3, **Subtraction Strategies**. In this chapter, I will learn to use different strategies to solve subtraction problems. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Place up to 7 items on the table for your child to count. Take away one item. Ask how many are there now. Take away two more items. Ask how many are left.

Key Vocabulary

difference the answer to a subtraction problem

$3 - 1 = 2$ ← difference

fact family addition and subtraction sentences that use the same numbers

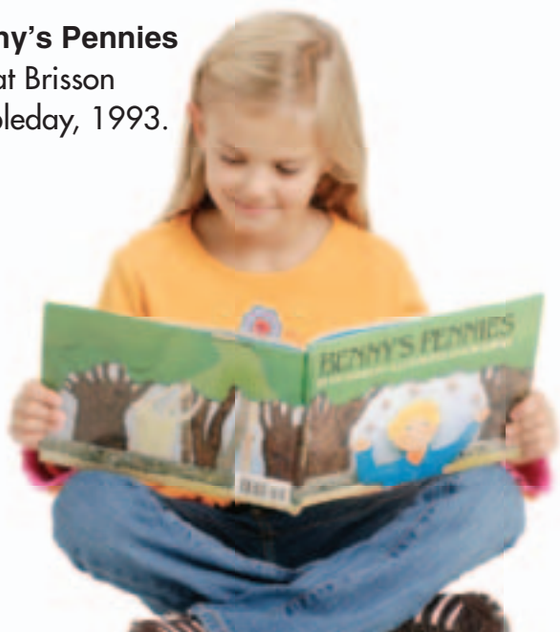
$5 - 3 = 2$ $\quad$ $5 - 2 = 3$

$3 + 2 = 5$ $\quad$ $2 + 3 = 5$

MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Benny's Pennies
by Pat Brisson
Doubleday, 1993.



How Many Bluebirds Flew Away?
by Paul Gigianti
Greenwillow Publishing, 2005.

Safari Park
by Stuart J. Murphy
Harper Collins Publishers, 2002.

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Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 3, **Estrategias de sustracción.** En este capítulo, aprenderé a usar diferentes estrategias para resolver problemas de sustracción. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños,

_____

Actividad

Escriban los números del 0 al 10 en trozos de papel separados y colóquenlos en una bolsa. Ambos jugadores sacan un número y escriben el enunciado de adición. Compitan entre sí para escribir todos los miembros de su familia de hechos. La persona que termine primero obtiene un punto. 5 puntos es el ganador. La primera persona en obtener 5 puntos es el ganador.

Vocabulario clave

diferencia respuesta a un problema de sustracción

familia de operaciones enunciados de adición o sustracción que usan los mismos números

$5 - 3 = 2$ $\quad$ $5 - 2 = 3$

$3 + 2 = 5$ $\quad$ $2 + 3 = 5$

Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Las monedas de 1¢ de Benny
de Pat Brisson Doubleday, 1993

¿Cuántos gayos se fueron volando?
de Paul Gigianti Greenwillow Publishing, 2005

Parque Safari de Stuart J. Murphy
HarperCollins Publishing, 2002

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Name _____

Count Back to Subtract

Get Ready

Main Idea

I will use a number line to subtract.

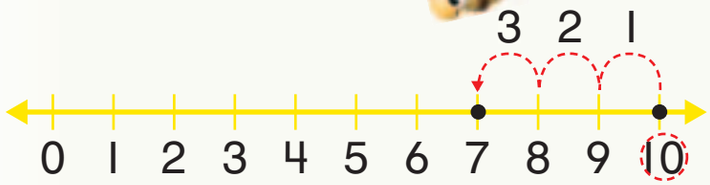
Vocabulary

count back

subtract

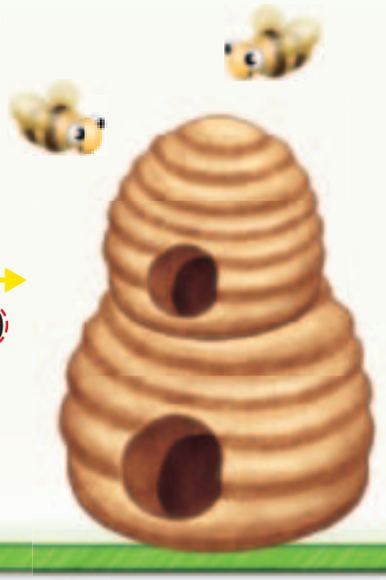
difference

Use a number line. **Count back** to **subtract**.
You subtract to find the **difference**.
Find 10 – 3.



Start at 10. Count back 3.

10 – 3 = 7



Check

Count back to subtract. Use the number line.

1. 7 – 3 = 4
2. 8 – 1 = _____
3. 9 – 2 = _____
4. 10 – 2 = _____
5. 5 – 1 = _____
6. 6 – 3 = _____
7. 8 – 2 = _____
8. 7 – 2 = _____
9. 4 – 1 = _____

10. Talk About It — Explain how you count back on a number line to find a difference.

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Practice

Count back to subtract. Use the number line.

11. 3 − 2 = _____ **12.** 12 − 3 = _____ **13.** 5 − 2 = _____

14. 8 − 3 = _____ **15.** 11 − 3 = _____ **16.** 10 − 3 = _____

17. 9 − 3 = _____ **18.** 11 − 2 = _____ **19.** 3 − 1 = _____

20. 9 − 1 **21.** 5 − 3 **22.** 10 − 1 **23.** 4 − 2 **24.** 6 − 2

25. 3 − 1 **26.** 5 − 2 **27.** 8 − 1 **28.** 7 − 2 **29.** 6 − 2

30. WRITING IN MATH When you count back on a number line, what number is the difference?

_____

_____

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Math at Home Activity: Say a number between 3 and 12. Have your child subtract 1, 2, or 3. Have your child count back to find the difference.

Name _____

Subtract All and Subtract Zero

Get Ready

Main Idea

I will subtract all or zero to find the difference.

You can subtract to find the difference.

Find how many frogs are left.

Subtract all.

$5 - 5 = \underline{0}$

$\underline{0}$ frogs are left.

Subtract zero.

$5 - 0 = \underline{5}$

$\underline{5}$ frogs are left.

Check

Subtract.

1. $3 - 3 = \underline{0}$ $3 - 0 = \underline{3}$	**2.** $5 - 0 = ____$ $5 - 5 = ____$	**3.** $6 - 6 = ____$ $6 - 0 = ____$
4. $9 - 0 = ____$ $9 - 9 = ____$	**5.** $4 - 4 = ____$ $4 - 0 = ____$	**6.** $7 - 7 = ____$ $7 - 0 = ____$

7. Talk About It Explain how you know $8 - 8 = 0$ and $8 - 0 = 8$.

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Practice

Remember
When you subtract zero from a number, the difference is the same as the number.

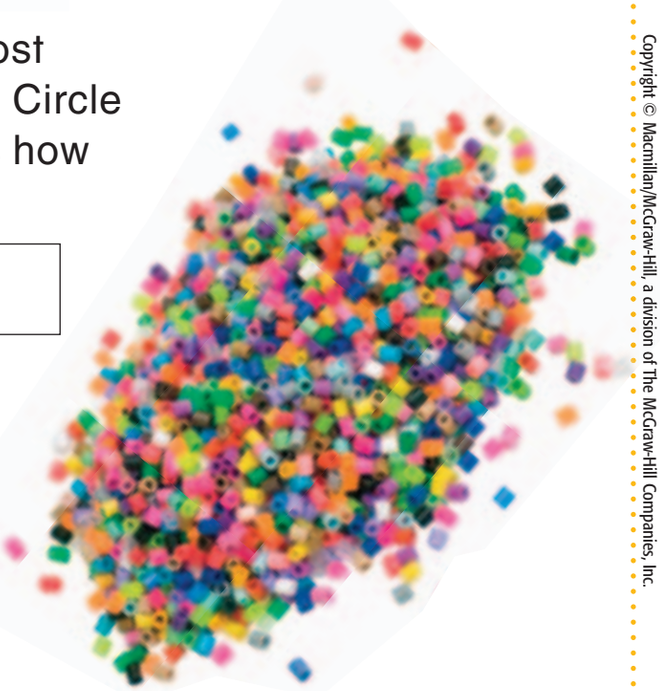
Subtract. Circle the problem if the difference is zero.

8. 9 − 3	**9.** 8 − 1	**10.** 8 − 3	**11.** 4 − 4	**12.** 7 − 3
13. 3 − 1	**14.** 8 − 8	**15.** 8 − 4	**16.** 6 − 0	**17.** 5 − 5
18. 9 − 1	**19.** 3 − 2	**20.** 6 − 6	**21.** 7 − 2	**22.** 4 − 0
23. 7 − 7	**24.** 9 − 0	**25.** 6 − 0	**26.** 9 − 9	**27.** 9 − 2

Problem Solving

28. Algebra Todd had 12 beads. He lost some of them. Now he has 7 beads. Circle the subtraction sentence that shows how many beads Todd lost.

$12 - \square = 7$ or $12 - 7 = \square$



29. How many beads did Todd lose?

_____ beads

30. Check your answer.

_____ + _____ = _____

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Math at Home Activity: Have your child use small objects to show 5 − 5 and 5 − 0.

Name _____

Use Doubles to Subtract

Hands-On Activity

Get Ready

Main Idea

I will use doubles facts to subtract.

You can use doubles facts to help you subtract. Find 16 − 8.

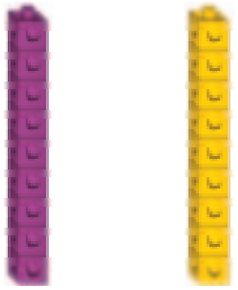
I know... 8 + 8 = 16

So 16 − 8 = 8

Check

Use doubles facts to help you subtract. Use cubes.

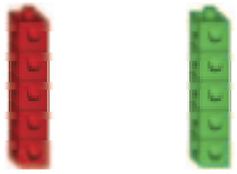
1.



9 + 9 = 18

18 − 9 = 9

2.



5 + _____ = 10

10 − 5 = _____

3. 6 + _____ = _____

12 − 6 = _____

4. 4 + _____ = _____

8 − 4 = _____

5. 14 − 7 = _____

6. 16 − 8 = _____

7. Talk About It

Explain how you can use a doubles fact to subtract.

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Richard Hutchings

Practice

Subtract. Circle the problem if you use doubles to subtract. Use cubes.

8. $9 - 3 =$ _____ **9.** $11 - 9 =$ _____ **10.** $5 - 5 =$ _____

11. $6 -$ _____ $= 3$ **12.** $7 - 3 =$ _____ **13.** $12 -$ _____ $= 6$

14.
$$\begin{array}{r} 16 \\ -\ \square \\ \hline 8 \end{array}$$

15.
$$\begin{array}{r} 7 \\ -\ 0 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 10 \\ -\ \square \\ \hline 5 \end{array}$$

17.
$$\begin{array}{r} 9 \\ -\ 2 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 6 \\ -\ 2 \\ \hline \end{array}$$

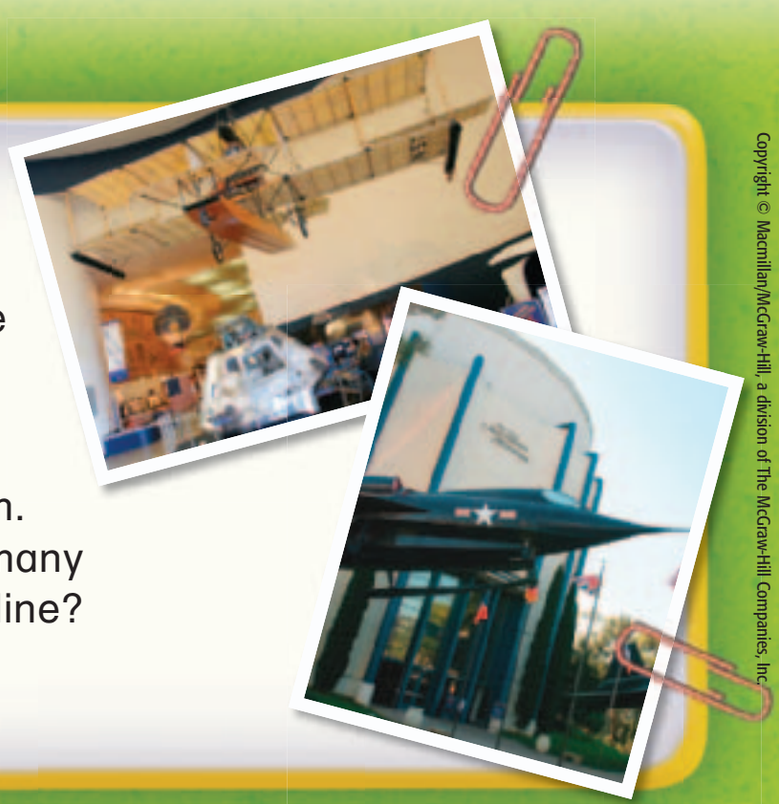
19.
$$\begin{array}{r} 8 \\ -\ 3 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 13 \\ -\ \square \\ \hline 6 \end{array}$$

21.
$$\begin{array}{r} 7 \\ -\ 2 \\ \hline \end{array}$$

Data File

The San Diego Air and Space Museum is a fun place to learn about science and math. Hundreds of people visit the museum each year.



22. 18 people are waiting in line to go into the museum. 9 people go inside. How many people are still waiting in line?

_____ people

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Math at Home Activity: Call out a doubles fact. Have your child name the subtraction problem for each double.

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Name _____

Problem-Solving Strategy

Find a Pattern

Main Idea

I will find a pattern to solve a problem.

Tanya works in a pet shop. She had 10 fish in a tank. She sold 2 fish the first day. The next day she sold 2 more fish. On the third day she sold 2 more.

If the pattern continues, how many fish will be left in the tank on day five?

Understand

What do I need to find out?

Circle the question.

Plan

How will I solve the problem?

Solve

Find a pattern.

_____ fish

Check

Look Back

Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Find the pattern. Complete the chart to solve.

1. Juan's parents gave him a choice for his allowance. They asked if he would want to get 5¢ a day for 1 week or 50¢ for 1 week. Which allowance would be a better choice?

Number of Days	1	2	3	4	5	6	7
Cents	5	10	15	20	25	30	

On day 7, Juan would have _____ ¢.

Which is a better choice? _____

Your Turn

Find the pattern. Complete the chart to solve.

2. Jeff has a feather collection. There are 3 shelves. He puts 4 feathers on each shelf. How many feathers does Jeff have in all?

Shelves	1	2	3
Feathers	4		

Jeff has _____ feathers.

3. The second grade class is selling pencils. The number of pencils sold each day is in the table.

Day	1	2	3	4	5	6	7
Pencils Sold	5	7	9	11			

If this pattern continues, how many pencils will be sold for days 5, 6, and 7? Finish the chart to solve.

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Math at Home Activity: Have your child choose an exercise and tell you about the pattern.

Name _____

Count back to subtract. Use the number line.

1. 7 − 3 = _____

2. 12 − 3 = _____

3. 11 − 8 = _____

4. 9 − 0 = _____

Subtract. Circle the problem if the difference is zero.

5. 7 − 6 = _____

6. 3 − 3 = _____

7. 10 − 5 = _____

8. 8 − 8 = _____

Subtract. Circle the problem if you use doubles to subtract.

9. 6 − 5 = _____

10. 5 − 5 = _____

11. 16 − 8 = _____

12. 8 − _____ = 4

13. Alexa had 12 pumpkins. She sold 7 of them. How many pumpkins does Alexa have now?

_____ − _____ = _____

_____ pumpkins

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Spiral Review Chapters 1–3

Find each sum.

14.
$$\begin{array}{r} 1 \\ 9 \\ +\ 2 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 4 \\ 3 \\ +\ 3 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 6 \\ 7 \\ +\ 6 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 6 \\ 8 \\ +\ 4 \\ \hline \end{array}$$

Count back to subtract.

18. 8 − 3 = _____

19. 5 − 2 = _____

20. 9 − 1 = _____

21. 4 − 3 = _____

Write the number.

22. 70 + 9 = _____

23. 30 + 4 = _____

24. What is the value of the 2 in twenty-seven?
Circle the answer.

2 20 7 70

Compare. Write >, <, or =.

25. 83 ◯ 21

26. 82 ◯ 82

27. 49 ◯ 94

28. 61 ◯ 16

29. Jay is counting numbers. He missed a number.
Write the missing number. Name the pattern.

30, _____, 38, 42 Skip counting by _____.

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Name _____

Relate Addition to Subtraction

Get Ready

Main Idea

I will use addition facts to subtract.

Vocabulary

related facts

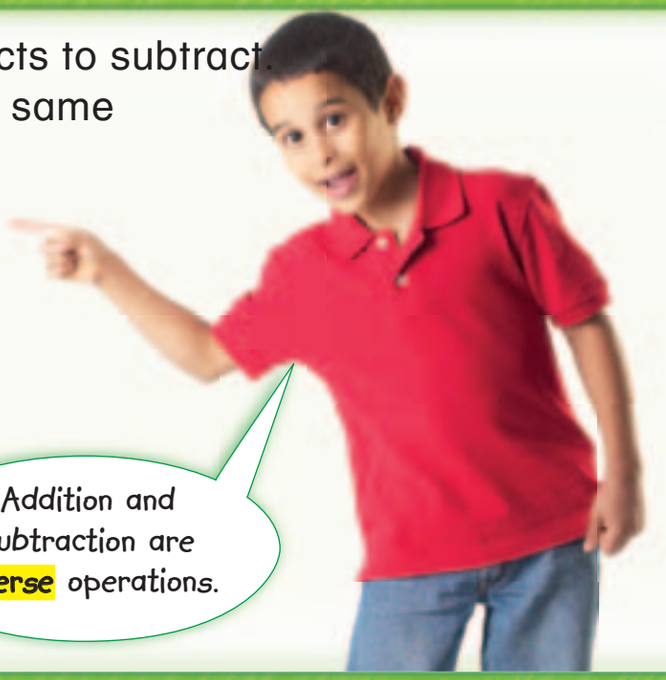
inverse

You can use addition facts to subtract. **Related facts** have the same three numbers.

$5 + 4 = 9$

$9 - 4 = 5$

$9 - 5 = 4$



Check

Use addition facts to subtract.

1.

$6 + 7 = 13$ $13 - 6 = 7$

$13 - 7 = 6$

2.

$5 + 7 =$ _____ $12 - 7 =$ _____

$12 - 5 =$ _____

3.

$9 + 6 =$ _____ $15 - 6 =$ _____

$15 - 9 =$ _____

4.

$7 + 4 =$ _____ $11 - 4 =$ _____

$11 - 7 =$ _____

5. Talk About It — Explain how addition and subtraction are related.

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Richard Hutchings

Practice

Remember
Related facts have the same three numbers.

Use addition facts to subtract.

6.	8 + 9 =	17 − 8 =	**7.**	9 + 6 =	15 − 9 =	**8.**	9 + 5 =	14 − 5 =	**9.**	7 + 6 =	13 − 6 =
10.	8 + 4 =	12 − 8 =	**11.**	8 + 7 =	15 − 7 =	**12.**	8 + 5 =	13 − 8 =	**13.**	5 + 7 =	12 − 5 =

14. $7 + 9 =$ _____
$16 - 9 =$ _____
$16 - 7 =$ _____

15. $5 + 6 =$ _____
$11 - 6 =$ _____
$11 - 5 =$ _____

16. $6 + 8 =$ _____
$14 - 8 =$ _____
$14 - 6 =$ _____

17. $9 + 4 =$ _____
$13 - 4 =$ _____
$13 - 9 =$ _____

Problem Solving

Number Sense Circle the subtraction sentence that you would use to check each addition sentence.

18. $9 + 4 = 13$

$13 - 1 = 12$ $13 - 4 = 9$ $10 - 4 = 6$

19. $7 + 5 = 12$

$12 - 4 = 8$ $12 - 1 = 11$ $12 - 5 = 7$

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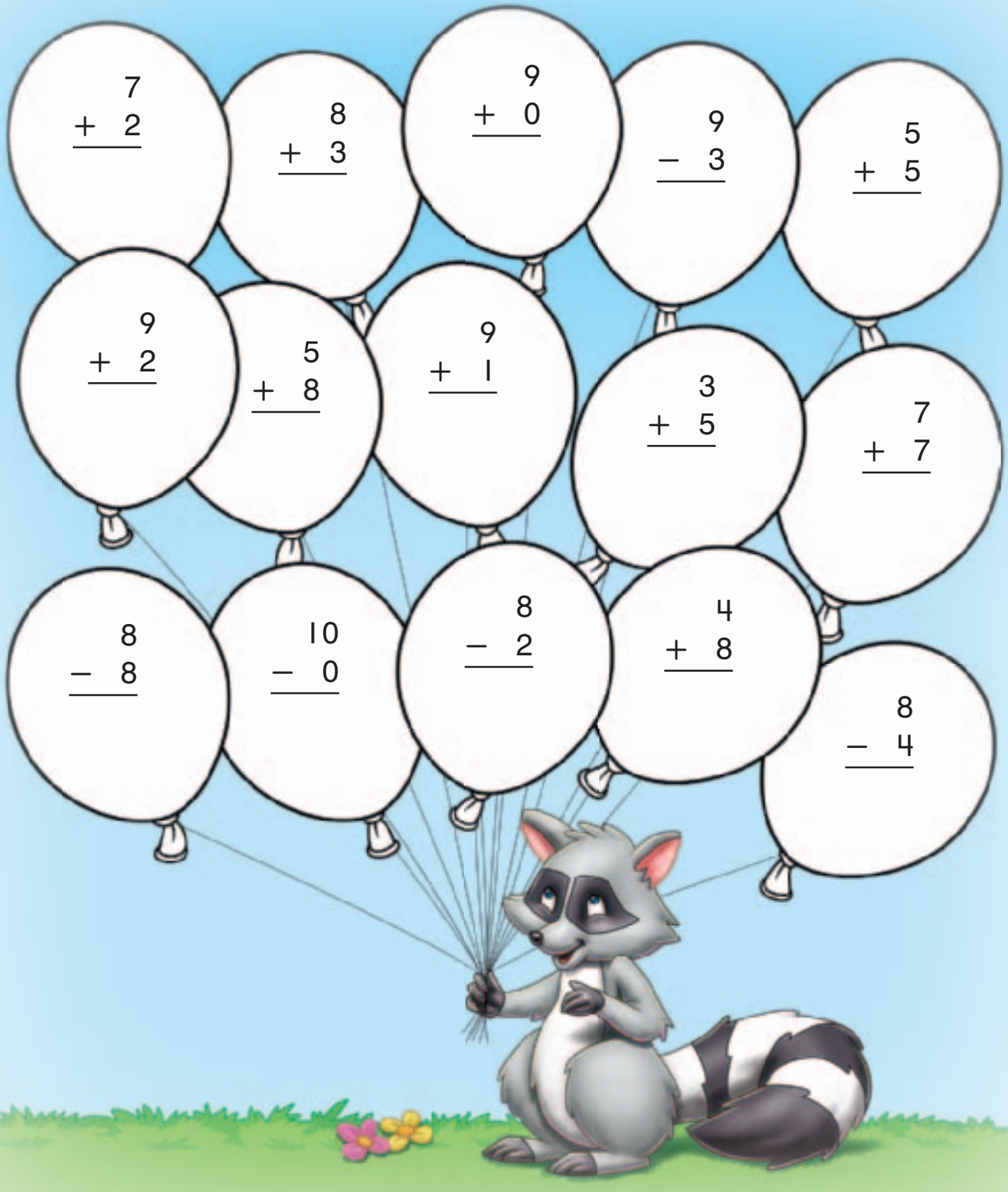
Math at Home Activity: Ask your child to show you an addition sentence with spoons and relate it to subtraction.

Name _____

Add or subtract.
Color answer greater than 10 crayon.
Color answers less than 10 crayon.
Color answers equal to 10 crayon.



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Game Time

Switcheroo

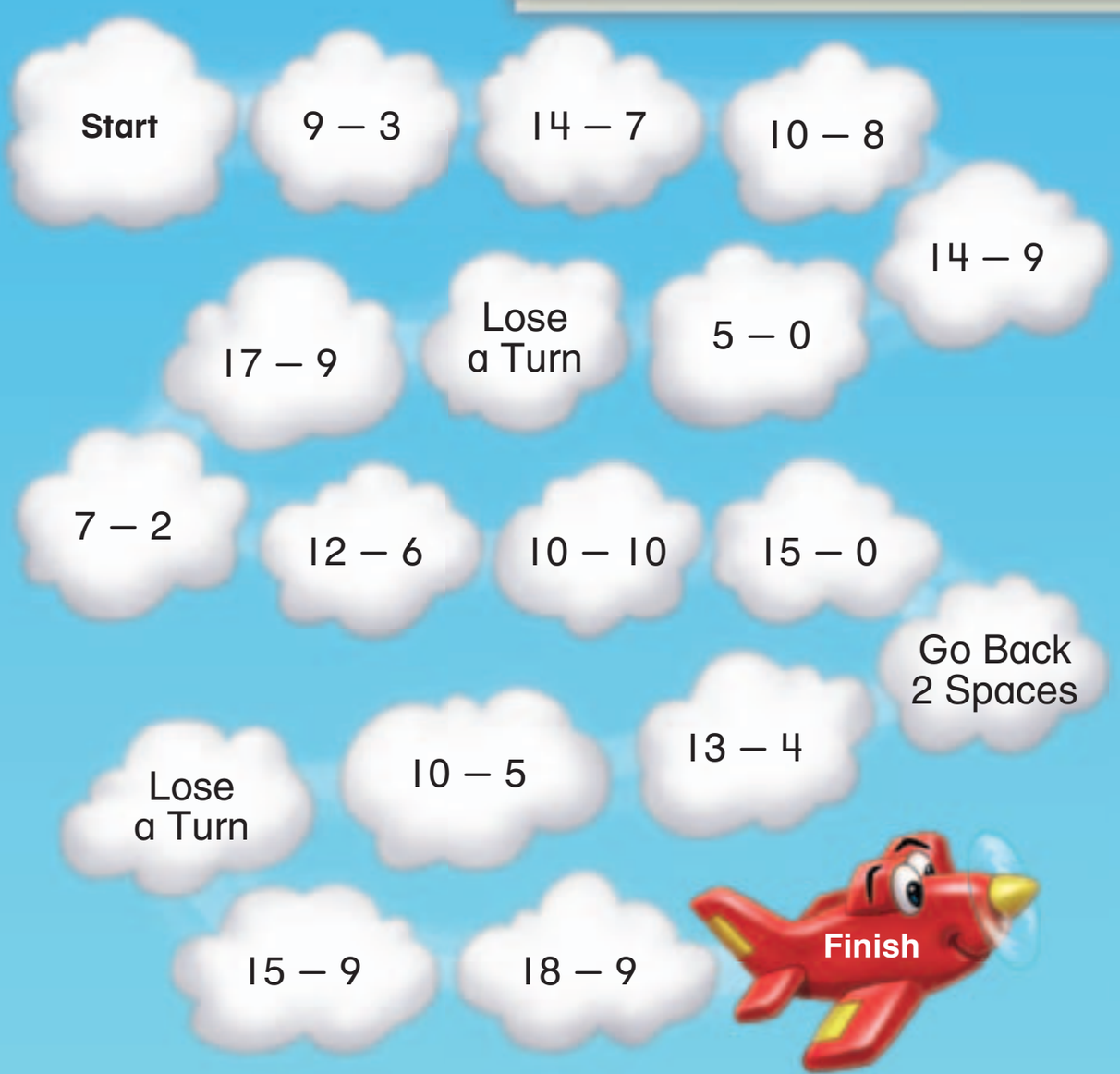
Related Facts

You Will Need

- 1 cube
- 1 counter

Play with a partner:

- Put your counter on **Start**.
- Roll 1 cube and move your counter.
- Give the addition fact for the subtraction problem you land on. For example, if the space says 7 − 6, the addition fact is 1 + 6 = 7.
- If you are right, take a counter. Have your partner check your work.
- If your fact is a double, move forward 1 space.
- The first player to Finish wins!



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Name _____

Missing Addends

Get Ready

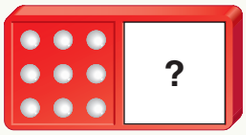
Main Idea

I will use subtraction facts to help find missing addends.

Vocabulary

missing addend

You can use a related subtraction fact to help you find a **missing addend**.

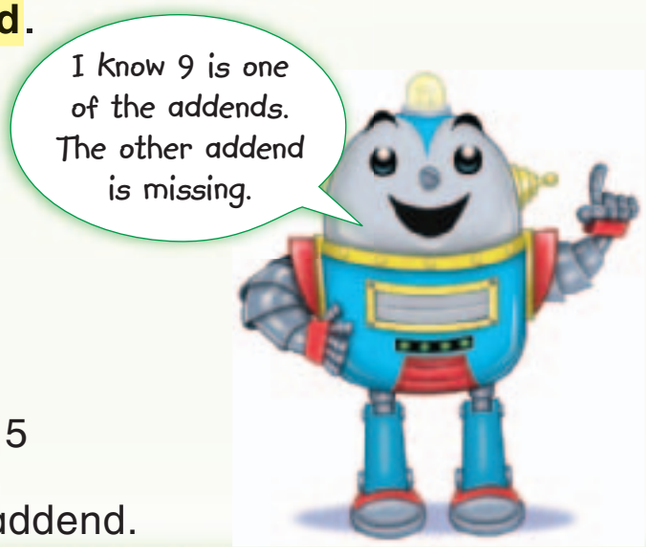


$9 + \square = 15$

$15 - 9 = 6$

So $9 + 6 = 15$

6 is the missing addend.



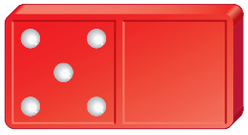
Check

Find the missing addend. Draw dots to help.

1.

$8 + 6 = 14$ $14 - 8 = 6$

2.

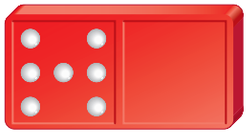


$5 + \square = 11$ $11 - 5 = \square$

3.

$4 + \square = 8$ $8 - 4 = \square$

4.



$7 + \square = 15$ $15 - 7 = \square$

5. Talk About It

How do you find the missing addend in $5 + \square = 13$?

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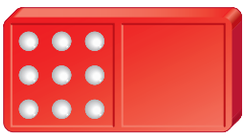
Practice

Find the missing addend.

6. 

$14 - 9 = \square$

$9 + \square = 14$

Remember
14 − 9 = 5 and 9 + 5 = 14 are related facts.

7. $12 - 6 = \square$

$\square + 6 = 12$

8. $8 - 7 = \square$

$7 + \square = 8$

9. $12 - 9 = \square$

$9 + \square = 12$

10. $7 - 2 = \square$

$\square + 2 = 7$

11. $15 - \square = 8$

$8 + \square = 15$

12. $\square - 7 = 7$

$7 + \square = 14$

13.

$$\begin{array}{r} 9 \\ +\ \square \\ \hline 8 \end{array} \qquad \begin{array}{r} 18 \\ -\ \square \\ \hline \end{array}$$

14.

$$\begin{array}{r} 6 \\ +\ \square \\ \hline 13 \end{array} \qquad \begin{array}{r} 13 \\ -\ \square \\ \hline 6 \end{array}$$

Problem Solving

15. Algebra There are 11 students with brown hair, red hair, and blonde hair. 5 have brown hair. 4 have red hair. How many have blonde hair?

$5 + \square + 4 = 11.$

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Math at Home Activity: Ask your child to tell you the subtraction fact that will help him or her add $7 + \square = 15$.

Name _____

Fact Families

Get Ready

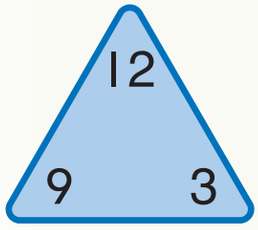
Main Idea

I will use related facts to write fact families.

Vocabulary

fact family

A **fact family** is a set of related facts. The numbers in this fact family are 12, 9, and 3.



$9 + 3 = \underline{12}$

$3 + 9 = \underline{12}$

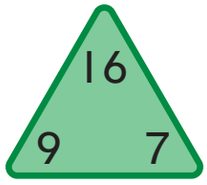
$12 - 9 = \underline{3}$

$12 - 3 = \underline{9}$

Check

Complete each fact family.

1.



$7 + 9 = ____$ $\quad 16 - 9 = ____$

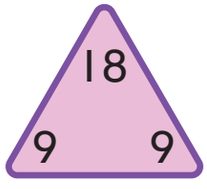
$9 + 7 = ____$ $\quad 16 - 7 = ____$

2.

$9 + 8 = ____$ $\quad 17 - 9 = ____$

$____ + ____ = ____$ $\quad ____ - ____ = ____$

3.



$9 + 9 = ____$ $\quad 18 - 9 = ____$

4. Talk About It

Why does Exercise 3 have only two number facts?

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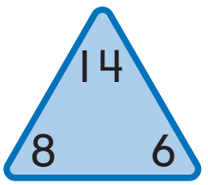
Richard Hutchings

Practice

Remember
Each fact in a fact family uses the same numbers.

Complete each fact family.

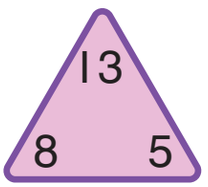
6.



____ + ____ = ____ ____ − ____ = ____

____ + ____ = ____ ____ − ____ = ____

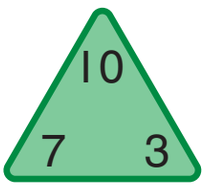
7.



____ + ____ = ____ ____ − ____ = ____

____ + ____ = ____ ____ − ____ = ____

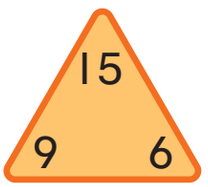
8.



____ + ____ = ____ ____ − ____ = ____

____ + ____ = ____ ____ − ____ = ____

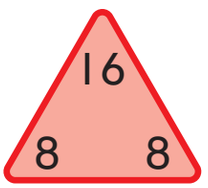
9.



____ + ____ = ____ ____ − ____ = ____

____ + ____ = ____ ____ − ____ = ____

10.



____ + ____ = ____ ____ − ____ = ____

H.O.T. Problem

11. Thinking Math Find the missing number. Write the number in the boxes.

$3 + \square = 13$ $\square - 3 = 10$

$\square + 3 = 13$ $13 - \square = 3$

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Math at Home Activity: Have your child name the fact family for the addition sentence 6 + 7 = 13.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve the problem.

Your Mission: Find how many bananas are left.

Five friends came to my house. Mom put 10 bananas in a fruit basket for us. My friends and I each ate a banana. How many bananas are left?

Understand

What do I need to find out?

Circle it.

Plan

How will I solve the problem?

Solve

One way is to write a number sentence.

_____ bananas

Check

Look Back

Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Write a number sentence
- Find a pattern
- Act it out

Choose a strategy. Solve.

1. There were 18 rabbits at the farm. The farmer sold 9. How many rabbits were left?

_____ rabbits

2. Li always picks 2 flowers on her way home from school. If she goes to school for 5 days, how many flowers will she have by Friday?

_____ flowers

3. Two families each had 4 people in them. They all went on a picnic. Each person ate 2 hot dogs. How many hot dogs did they eat?

_____ hot dogs

4. Mrs. Lewis has 13 students in her reading group. 4 students are home sick. How many students are in school today?

_____ students

5. Dave was adding two-digit numbers. His answer was 25. One of the numbers was 10. What was the other number?

_____

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Math at Home Activity: Tell a simple addition or subtraction problem. Have your child write a number sentence to solve.

When it was time to go back to school, no one wanted to leave. Ms. Gardner counted heads while the students stood in line. "We are going to have a picnic on the playground before school is over this year," said Ms. Gardner. The students clapped and cheered!

How many students will be at the picnic? 10 + 10 = _____ students
What happened when Ms. Gardner told the class about the picnic?

_____

_____

D

Michael Newman/PhotoEdit

FOLD DOWN

Problem-Solving in Language Arts

Real-World MATH

Spring is a good time for outdoor field trips. Veronica's class is going to the park.

This book belongs to

_____

A

David Frazier/PhotoEdit

Ms. Gardner counted all the students when they got to the park.

Usually there are 20 students in Veronica's class, but today 2 students were absent. How many students are at the park?

_____ students

B

Purestock/PunchStock

After Ms. Gardner counted, the students went to play.

10 students left to go swing, but there were only 5 swings. How many students did not get to swing?

_____ students

C

Fabio Cardoso/zefa/CORBIS

Name _____

Vocabulary

Draw lines to match.

1. missing addend
2. fact family
3. subtract

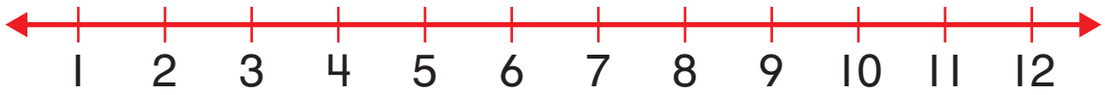
a. $2 + 1 = 3$ $1 + 2 = 3$ $3 - 1 = 2$ $3 - 2 = 1$

b. $4 - 2 = 2$

c. $3 + \square = 7$

Concepts

Count back to subtract. Use the number line.



4. $10 - 2 =$ _____

5. $9 - 3 =$ _____

Subtract. Circle the problem if the difference is zero.

6. $\begin{array}{r} 6 \\ -\,6 \\ \hline \end{array}$

7. $\begin{array}{r} 9 \\ -\,9 \\ \hline \end{array}$

8. $\begin{array}{r} 8 \\ -\,3 \\ \hline \end{array}$

9. $\begin{array}{r} 7 \\ -\,1 \\ \hline \end{array}$

Subtract. Circle the problem if you use doubles to subtract.

10. $8 - 4 =$ _____

11. $12 - 8 =$ _____

12. $10 - $ _____ $= 5$

13. $9 - 5 =$ _____

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Use addition facts to subtract.

14.
$$\begin{array}{r} 8 \\ +\,6 \\ \hline \end{array} \qquad \begin{array}{r} 14 \\ -\,6 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 9 \\ +\,7 \\ \hline \end{array} \qquad \begin{array}{r} 16 \\ -\,9 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 9 \\ +\,5 \\ \hline \end{array} \qquad \begin{array}{r} 14 \\ -\,5 \\ \hline \end{array}$$

17. Circle the related subtraction sentence.

$$8 + 5 = 13$$

$13 - 5 = 8$ $\quad$ $18 - 15 = 13$ $\quad$ $12 - 5 = 7$ $\quad$ $16 - 8 = 8$

Find the missing addend.

18. $7 + \square = 14$

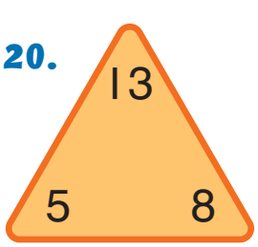
$14 - 7 = \square$

19. $5 + \square = 11$

$11 - 5 = \square$

Complete the fact family.

20.



_____ + _____ = _____ $\quad$ _____ − _____ = _____

_____ + _____ = _____ $\quad$ _____ − _____ = _____

Problem Solving

21. Elam drew 14 people. 9 of the people were boys. How many girls did he draw?

_____ girls

22. Jeff planted 9 flower seeds. 3 of the seeds grew into plants. How many seeds did not grow?

_____ seeds

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Name _____

Listen as your teacher reads the problem.
Choose the correct answer.

A Use the number line to count back. What is the difference?

11 − 4 = _____

6	7	11	15
○	○	○	○

B Which addition sentence is related to 16 − 9?

9 + 6 = 15	16 − 7 = 9	9 + 7 = 16	16 − 1 = 15
○	○	○	○

Listen as your teacher reads the problem.
Choose the correct answer.

1 What is the solution to this problem?

9 − 1 = _____

8	9	10	7
○	○	○	○

2 Which of these can be used to check the answer 13 − 6?

13 + 6 = 19	13 − 7 = 6
○	○
6 + 6 = 12	6 + 7 = 13
○	○

3 Which number makes the number sentence true?

2 + _____ + 4 = 12

5	6	8	10
○	○	○	○

4 How many ones are in 64?

4	10	64	6
○	○	○	○

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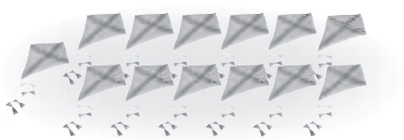
5 A number has 5 tens. What is the number?

5 ○ 15 ○ 35 ○ 53 ○

6 Look at the kites. About how many kites are there?



about 10 ○ about 20 ○

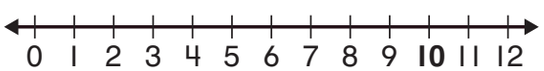
about 30 ○ about 40 ○

7 Which number will make the sentence true?

_____ = 72

27 ○ 68 ○ 72 ○ 90 ○

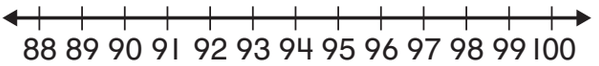
8 Use the number line to count back. What is the difference?



10 − 3 = _____

18 ○ 7 ○ 6 ○ 3 ○

9 What number is between 90 and 96?



79 ○ 81 ○ 93 ○ 98 ○

10 Miguel has twelve crayons. He lets Stacey borrow eight. How many crayons does Miguel have left?

3 ○ 4 ○ 5 ○ 6 ○

11 What number completes the fact family?

3 + ☐ = 12

8 ○ 9 ○ 10 ○ 11 ○

12 What is another name for sixteen?

14 ○ 15 ○ 16 ○ 17 ○

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CHAPTER 4

Data and Graphs

Key Vocabulary

- data
- picture graph
- bar graph
- mode
- range

Favorite Recess Activity		
Activity	Tallies	Total
Sliding	𝍸 | | |	
Climbing	𝍸 𝍸	
Jumping	𝍸 𝍸 |	

Explore

Look at the tally chart. Total the tallies. Which activity is the favorite?

_____

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Rob Walls/Alamy Images

Name _____

Math Online
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 4?

Circle the group that has more.

1.

2.

Use the tally chart to answer these questions.

Favorite Animal	Tally	Total
Cat	𝍸	3
Hamster	𝍸	4
Dog	𝍸 ‖	7
Rabbit	‖	2

3. 𝍸 = 1

Show 4 using tally marks. _____

4. How many people picked cats? _____

Use the picture to solve.

5. Roy walks four dogs every day. How many brown dogs does he walk?

_____ brown dogs

6. Sally, Steve, Manuel, and Elan play tic-tac-toe. They keep track of their points on this chart. Put their scores in order from least to greatest.

Tic -Tac-Toe Scores	
Sally	𝍸	
Steve	𝍸 ‖‖
Manuel	‖
Elan	𝍸

_____, _____, _____, _____

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This page checks skills needed for Chapter 4.

MATH at HOME

Dear Family,

Today my class started Chapter 4, **Data and Graphs**. In this chapter, I will learn different ways to display data. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child pick five colors. Then count the number of cars of each color in a parking lot. Use tally marks to record the data.

Key Vocabulary

key tells what or how many each symbol in a graph stands for

mode the number that occurs most often in a set of numbers

range the difference between the greatest and the least numbers in a set of data

MathOnline Click on the eGlossary at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Five Creatures
by Emily Jenkins
Farrar, Straus and Giroux, 2005.

How Much is that Guinea Pig in the Window?
by Joanne Rocklin
Sagebrush Education Resources, 1999.

The Judge: An Untrue Tale
by Harve Zemach
Farrar, Straus and Giroux, 1988.

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MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 4, **Los datos y las gráficas**. En este capítulo, aprenderé varias formas de presentar datos. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Pídanle a su hijo(a) que seleccione cinco colores. Luego, cuenten el número de autos de un mismo color en un estacionamiento. Usen marcas de conteo para registrar los datos. Luego, utilicen una gráfica de barras para presentar sus datos. ¿De qué color es la moda de los autos?

Vocabulario clave

clave indica en una gráfica

moda el número que ocurre con más frecuencia en un conjunto de números

rango en un conjunto de datos.

Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Cinco criaturas
de Emily Jenkins
Farrar, Straus and Giroux, 2005.

¿Cuánto cuesta ese conejillo de Indias en la vitrina?
de Joanne Rocklin
Sagebrush Education Resources, 1999.

El juez: Una historia engañosa
de Harve Zemach,
Farrar, Straus and Giroux, 1988.

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Name _____

Hands-On Activity

Take a Survey

Get Ready

Main Idea

I will take a survey using tally marks.

Vocabulary

survey

tally marks

data

When you take a **survey**, you ask a question. Use **tally marks** to record the answers, or data. **Data** is information.

Steps for Conducting a Survey:

1. Write a question.
2. Ask your question.
3. Record each person's answer with a tally mark
4. Count the number of tally marks.

Type of Book	Tallies	Total
Scary	𝍸	
Funny	𝍸 𝍸 | | |	
Sports	𝍸	

Check

Take a survey. Ask ten students their favorite season. Use tally marks to record the data.

Use the data in the chart to answer the questions.

Favorite Season	Tallies	Total
Winter		
Spring		
Summer		
Fall		

1. Which season do students like best? _____

2. How many students like winter and fall? Write a number sentence to solve.

_____ ◯ _____ = _____

3. Talk About It — How do tally marks help you organize data?

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Richard Hutchings

Practice

Take a survey. Ask ten students their favorite picnic food. Use tally marks to record the data.

Picnic Food	Tallies	Total

Use the data in the chart to answer the questions.

4. How many children like hamburgers best? _____

5. How many children like hot dogs? _____

6. What is the favorite picnic food? _____

7. How would the chart change if you added your favorite food? _____

_____

Problem Solving

8. **Using Data** Students in Grade 2 took a survey for Fun Friday activities. Seven students want a picnic. Five students want to go to the zoo. Eight students want to watch a movie. Which chart shows these results? Circle the correct survey.

Fun Friday	
Picnic	||||	
Zoo	||||
Movie	|||

Fun Friday	
Picnic	|||| ||
Zoo	||||
Movie	|||| |||

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Math at Home Activity: Have your child think of a survey question to ask five people. Make a tally chart to show the results.

Name _____

Picture Graphs

Get Ready

Main Idea

I will make picture graphs and pictographs to show data.

Vocabulary

symbol
key
picture graph
pictograph

You can show data with a picture graph or a pictograph. The pictures are a **symbol** for the data. The **key** tells how many each symbol stands for.

Molly and Jeremy took a survey about favorite pets. They made a tally chart. Then they made a graph to show the data.

Favorite Pet	Tallies
Fish	𝍸 |
Dog	||
Cat	𝍸

One Way:

Molly made a **picture graph**.

Favorite Pet

Fish						
Dog						
Cat						

Key: Each animal = 1 vote

Another Way:

Jeremy made a **pictograph**.

Favorite Pet

Fish	☺	☺	☺	
Dog	☺			
Cat	☺	☺		

Key: ☺ = 2 votes

Use the data from the graphs to answer the questions.

1. Which pet is the favorite? _____

2. How many votes does each smiley face stand for? _____

3. How many votes does each animal picture stand for? _____

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Check

Use the data from the tally chart to make a picture graph.

How We Get to School		
Method	Tally	Total
Bus	II	
Walk	𝍸	
Bike	I	
Car	II	

How We Get to School

Bus						
Walk						
Bike						
Car						

Key: = 1

4. How do most students get to school? _____

5. How many students ride the bus and ride in cars? _____

6. How many students voted? _____ students

7. How will the graph change if you add another way to get to school? _____

Complete the sentence to write questions about the chart.

8. How many more children _____ than _____ ?

9. Complete the number sentence to answer your question.

_____ − _____ = _____

10. Talk About It — How many students were surveyed? How do you know?

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GO on

Name _____

Practice

Remember
Look at the key to make sure you count the tallies correctly.

Use the tally chart to complete the pictograph. Answer the questions.

Favorite Pizza Toppings	
Pepperoni	𝍸 | |
Sausage	|
Cheese	𝍸
Vegetables	| |

Favorite Pizza Toppings

Pepperoni						
Sausage						
Cheese						
Vegetables						

Key: = 1

11. How many different pizza toppings are there? _____

12. How many students chose vegetables? _____

13. How many students chose cheese or pepperoni? _____

14. How many students were surveyed in all? _____

15. Which pizza topping had only one vote? _____

16. Write a question about the data. Have a friend answer the question.

_____

_____

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Practice

Use the tally chart to complete the pictograph.
Answer the questions.

Weekly Attendance	
Day	Tallies
Monday	𝍸 𝍸 𝍸 |||
Tuesday	𝍸 𝍸 𝍸 |
Wednesday	𝍸 𝍸 𝍸 𝍸
Thursday	𝍸 𝍸 𝍸 |
Friday	No School

Weekly Attendance

Days	Students present
Monday	☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺
Tuesday	
Wednesday	
Thursday	
Friday	

Key: Each ☺ stands for two students

17. There are 20 students in this class. On which day of the week was no one absent?

_____

18. How many students were absent on Monday? _____

19. How many students came to school on Thursday? _____

H.O.T. Problem

20. Make It Right For Exercise 18, James wrote 4 for his answer. Tell why James is wrong. Make it right.

_____

_____

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Math at Home Activity: Ask your child to make a pictograph of the number of socks and shoes in their bedroom.

Name _____

Problem-Solving Strategy
Write a Number Sentence

Main Idea

I will write a number sentence to solve problems.

Neil carried 2 pails at the beach.
He collected sand dollars and seashells.

How many sand dollars and shells did Neil collect?

Collection

Sand dollar				
Seashell				

Key: and = 1

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?

Solve

Write a number sentence.

_____ ◯ _____ = _____

Check

Look Back

Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

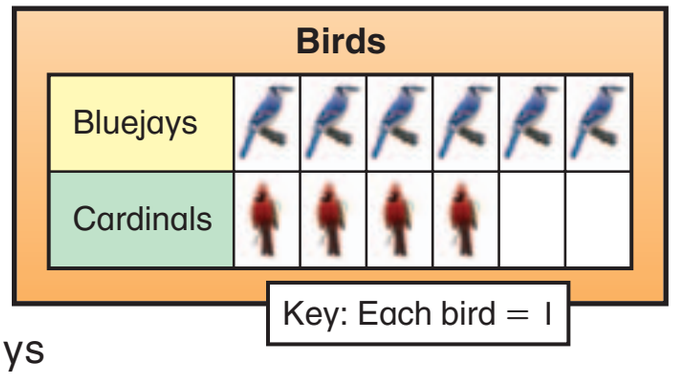
Write a number sentence to solve.

1. There is a fish tank in the Grade 2 room. How many fish are in the tank?

Fish Tank	
Fish	Tallies
Goldfish	𝍸 𝍸
Guppies	𝍸 |

_____ ◯ _____ = _____ fish

2. A group of students went bird-watching. How many more bluejays than cardinals did they see?



_____ ◯ _____ = _____ bluejays

Your Turn

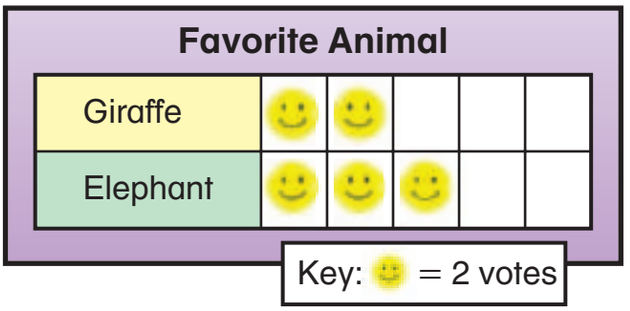
Write a number sentence to solve.

Animals Caught	
Animals	Tallies
Frogs	𝍸 |
Fireflies	𝍸

3. Leslie caught frogs. Ava caught fireflies. How many frogs and fireflies did they catch?

_____ ◯ _____ = _____ frogs and fireflies caught

4. The second grade class took a field trip to the zoo. They voted for their favorite animal. How many votes between the favorite and the least favorite animals?



_____ ◯ _____ = _____ votes

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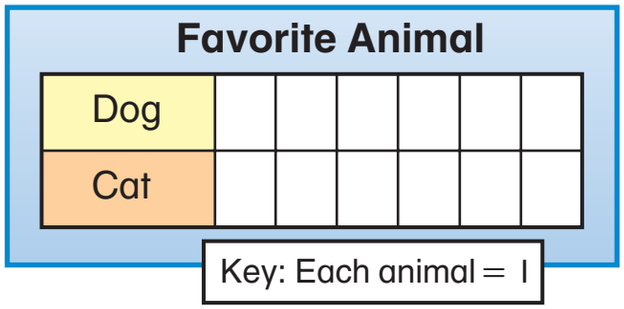
Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

1. Use the data from the tally chart to make a picture graph.

Favorite Animal	
Dog	𝍸 |
Cat	𝍸



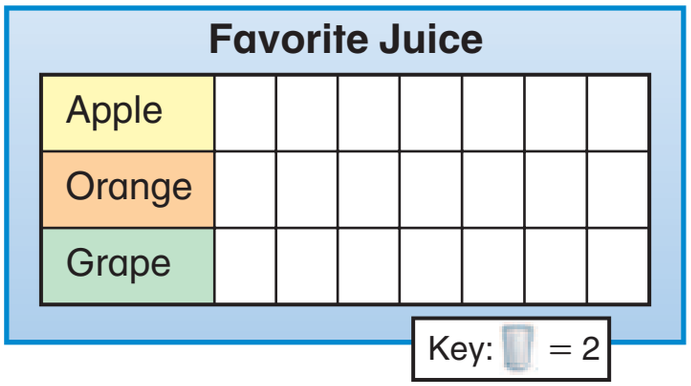
2. How many more students like dogs than cats? Write a number sentence to solve.

_____ ◯ _____ = _____ fish

---

3. Use the tally chart to complete the pictograph. Answer the questions.

Favorite Juice	
Apple	𝍸 |||
Orange	𝍸 |
Grape	||



4. How many students took the survey?

_____ students

5. How many students like orange juice and apple juice?

_____ students

6. How many votes does each cup stand for?

_____ votes

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Spiral Review Chapters 1–4

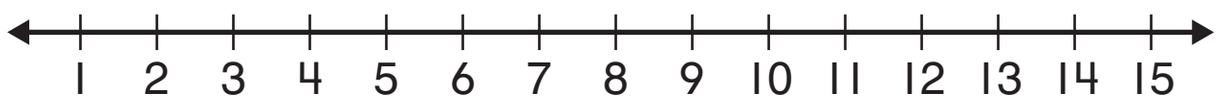
Find each sum.

7.
$$\begin{array}{r} 2 \\ +\ 0 \\ \hline \end{array} \qquad \begin{array}{r} 0 \\ +\ 2 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 3 \\ +\ 9 \\ \hline \end{array} \qquad \begin{array}{r} 9 \\ +\ 3 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 5 \\ +\ 2 \\ \hline \end{array} \qquad \begin{array}{r} 2 \\ +\ 5 \\ \hline \end{array}$$

Use the number line to solve.



10. $8 + 3 =$ _____ **11.** $6 + 1 =$ _____ **12.** $9 + 2 =$ _____

Add. Use doubles facts.

13. $7 + 8 =$ _____ **14.** $6 + 5 =$ _____

15. $8 + 9 =$ _____ **16.** $4 + 5 =$ _____

Use addition facts to subtract.

17.
$$\begin{array}{r} 4 \\ +\ 9 \\ \hline \end{array} \qquad \begin{array}{r} 13 \\ -\ 9 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 9 \\ +\ 6 \\ \hline \end{array} \qquad \begin{array}{r} 15 \\ -\ 6 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 8 \\ +\ 4 \\ \hline \end{array} \qquad \begin{array}{r} 12 \\ -\ 4 \\ \hline \end{array}$$

20. Eight friends came to Abdul's picnic. About how many apples did Abdul need? Circle the answer.

? 10 apples

about 5 about 10 about 15

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Name _____

Bar Graphs

Get Ready

Main Idea

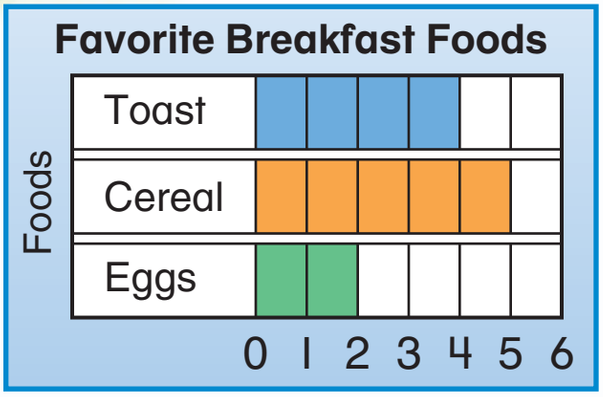
I will make a bar graph to show data.

Vocabulary

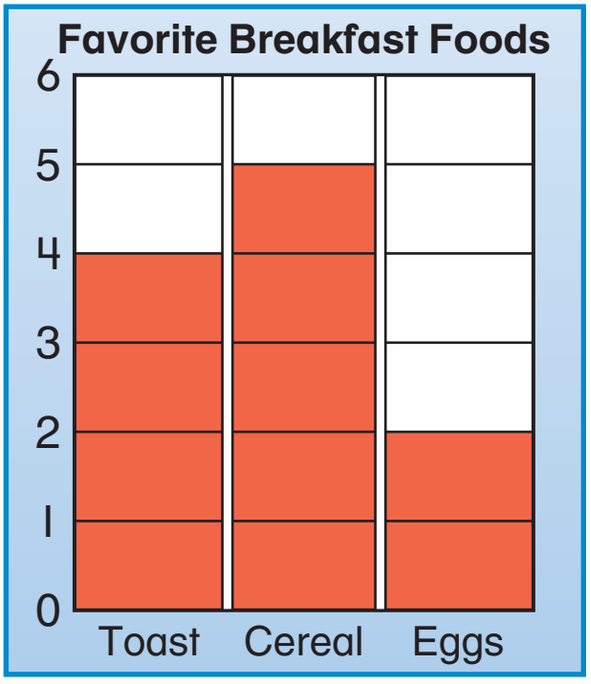
bar graph

A **bar graph** uses bars to show data.
To make a bar graph color one box for each vote.
Bar graphs can look different.

One Way:



Another Way:



1. Which breakfast food is the least favorite? _____

2. Which breakfast food is the most favorite? _____

3. How many more students chose cereal than toast? _____

4. If 5 more students chose eggs, how many students would have been surveyed? _____

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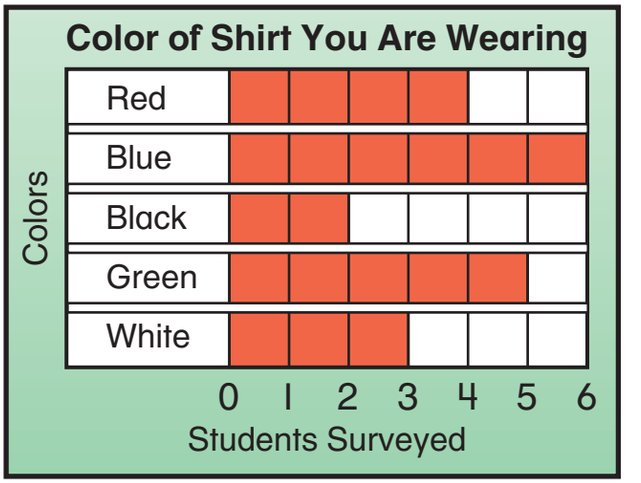
Check

Complete the tally chart. Make a bar graph.
Then answer the questions.

Color of Shirt You Are Wearing		
Colors	Tally	Total
Red	𝍸	
Blue	𝍸 |	
Black	||	
Green	𝍸	
White	|||	



5. Which color are most of the students wearing?

_____

6. How do you know? _____

_____

7. Write a question about the graph.
Have a friend answer the question.

_____

_____

8. If four more students were wearing white shirts,

how many students would be wearing white? _____

9. Talk About It — How is a bar graph different from a picture graph?

GO on

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Math at Home Activity: Ask your child what the doubles-plus-one fact would be for 4 + 4.

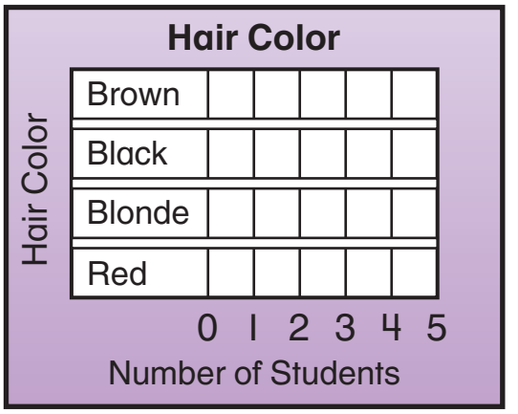
Name _____

Practice

Remember
Only color in 1 box for each tally mark.

Complete the tally chart. Make a bar graph. Then answer the questions.

Hair Color		
Color	Tally	Total
Brown	𝍸	
Black	𝍸	
Blonde	𝍸	
Red	𝍸	



Complete the sentences. Then write the number sentence to answer each question.

10. How many students have _____ hair and _____ hair?

11. _____ ◯ _____ = _____

12. How many more students have _____ hair than _____ hair?

13. _____ ◯ _____ = _____

14. Which two hair colors show the same data or same amount? _____

15. Look at the bar graph. Write a question about the graph. Have a friend answer the question.

_____

_____

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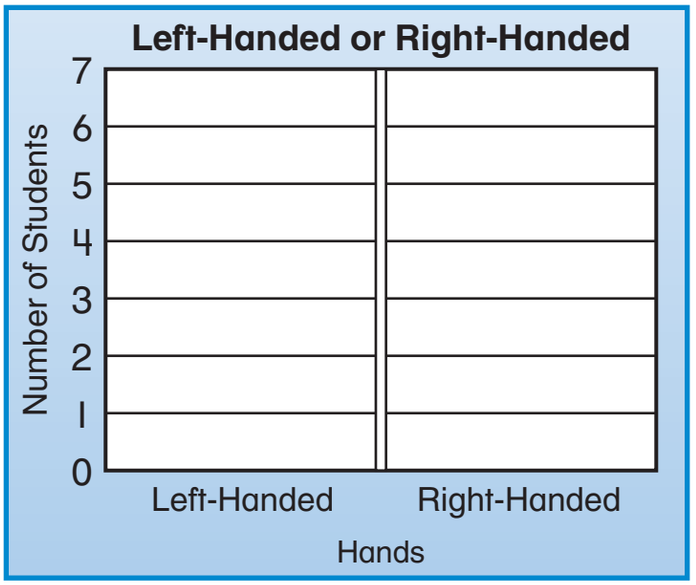
Complete the tally chart. Make a bar graph.
Then answer the questions.

Left-Handed or Right-Handed		
Hands	Tally	Total
Left-Handed	𝍸	
Right-Handed	𝍸 |	



16. How many students are right-handed? _____

17. How many students are left-handed? _____

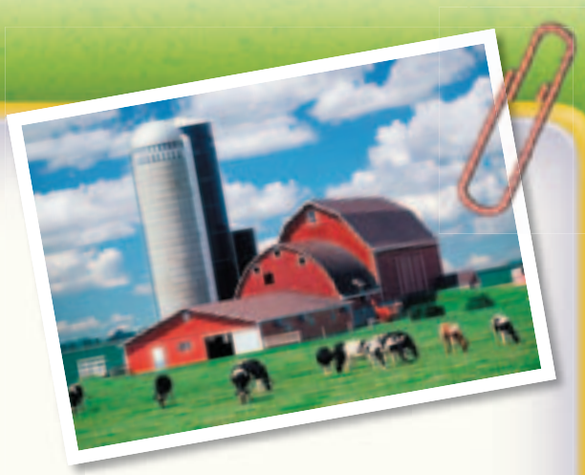
18. How many students were surveyed in all?

_____ students

Data File

California has many dairy farms. Milk from the cows on these farms is made into foods such as yogurt.

Use the information from the bar graph to answer the questions.

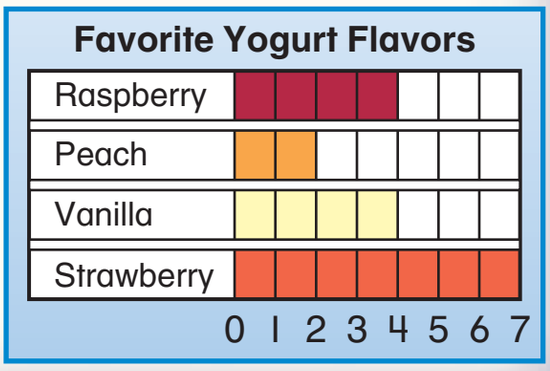


19. Which flavor got the most votes?

_____

20. Which 2 flavors got the same number of votes?

_____



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Math at Home Activity: Ask your child to explain how he or she made the bar graph on this page.

©Richard Price/Getty Images

Name _____

Different Ways to Show Data

Get Ready

Main Idea

I will show data in different ways.

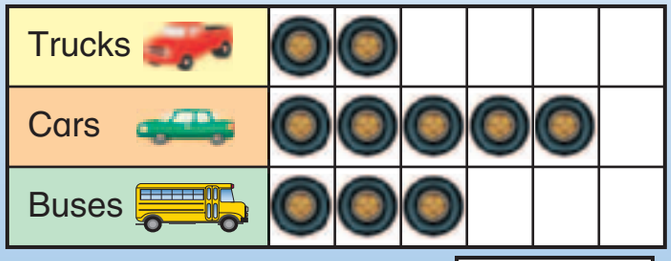
You can show the same data in more than one way. Each student counted and recorded the different types of vehicles they saw in the school parking lot.

Vehicles In Our Parking Lot

Vehicle	Tallies	Total
Trucks	𝍸	4
Cars	𝍸 𝍸	10
Buses	𝍸	6

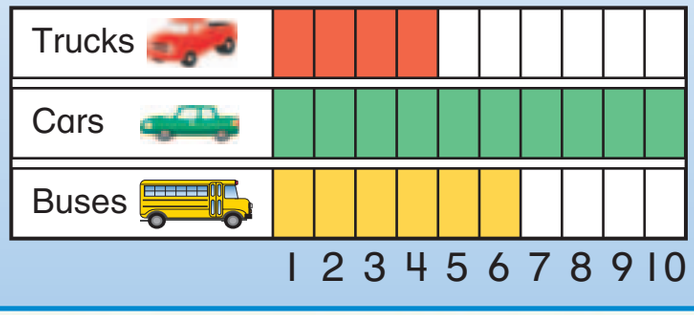
They used the data from the tally chart to make graphs.

Vehicles In Our Parking Lot



Key: = 2

Vehicles In Our Parking Lot



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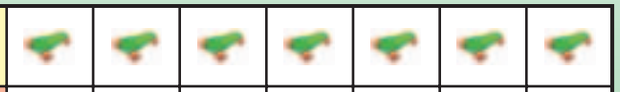
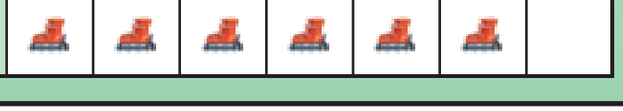
(r)Eclipse Studios, (l)Richard Hutchings

Check

Use the picture graph. Make a tally chart to show the data. Answer the questions.

Favorite Sport with Wheels

Skateboard	
Bicycle	
Scooter	
Inline Skate	

Favorite Sport with Wheels

Sports	Tally	Total
Skateboard	𝍸 ||	7
Bicycle		
Scooter		
Inline Skate		

1. Which sport is the least favorite? _____

2. How many more students like to inline skate than ride scooters? _____

Complete the sentence to write a question about the graph.

3. How many children like _____ and _____.

4. Complete the number sentence to answer your question.

   _____ + _____ = _____

5. How many students were surveyed?

   _____ students

6. How would the chart change if you added your favorite sport with wheels?

   _____

7.

How is a picture graph different from a tally chart?

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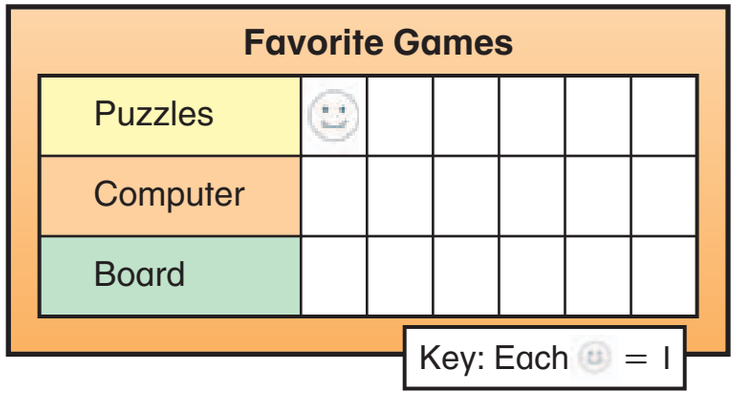
Math at Home Activity: Tell addition stories to your child. Have your child use buttons or pennies to show the story.

Name _____

Practice

Use the tally chart. Make a pictograph to show the data. Answer the questions.

Favorite Games	
Games	Tally
Puzzles	𝍸
Computer	𝍸 |
Board	||



8. Which game is the favorite? _____

9. Which game is the least favorite? _____

10. How many students were surveyed?

_____ students

11. How many more students chose computer games than board games?

_____ – _____ = _____

12. Write a question about the graph.
Have a friend to answer the question.

_____

_____

_____

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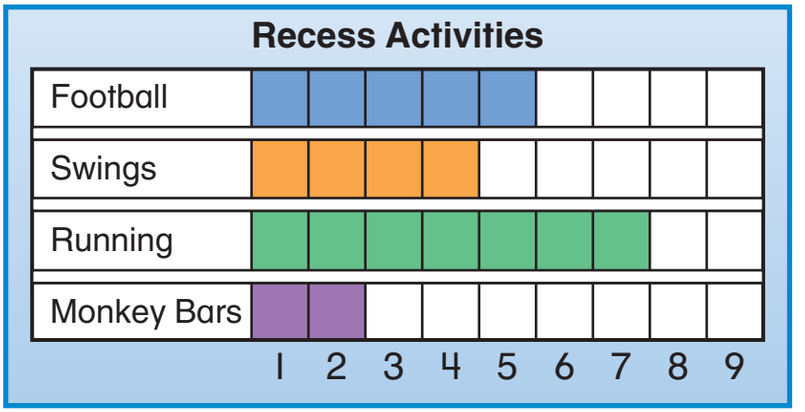
Practice

Use the bar graph. Make a tally chart to show the data. Answer the questions.



Recess Activities		
Activity	Tally	Total
Football		
Swings		
Running		
Monkey Bars		

13. How many students chose swings? _____

14. How many students chose running and football?

_____ + _____ = _____

15. How many more students chose running than swings? _____

Problem Solving

16. **Using Data** Use the tally chart. Put the activities in order from the most favorite to the least favorite. Draw a smiley face beside the one that is the second favorite activity.

_____ _____ _____ _____

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Math at Home Activity: Have your child record how much homework is done for a week. Ask your child to show the data in different ways.

Name _____

Our Favorite Weather		
Weather	Tallies	Total
Snow		
Sunny		
Rain		

Ask 8 of your classmates about their favorite weather. Make tally marks to show their answers.

Answer the questions.

1. How many of your classmates chose sunny?

   _____ classmates

2. How many of your classmates chose snow or rain?

   _____ classmates

3. What kind of weather do most of your classmates like? _____

4. What kind of weather do the least number of your classmates like? _____

5. What types of weather have the same number of tally marks? _____

6. What is your favorite weather? _____

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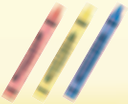
Game Time

Spring Sports

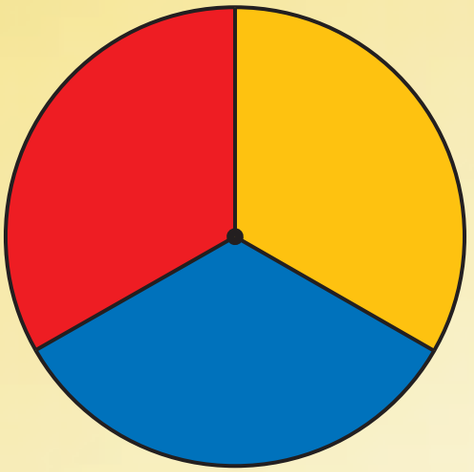
Bar Graph

You Will Need

-
- 

How To Play:

- Each player picks a crayon.
- Place the over the color wheel and spin the dial.
- If it lands on your color, shade one box in your color.
- The first runner to reach Finish wins!



	1	2	3	4	5	6

FINISH

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Name _____

Range and Mode

Get Ready

Main Idea

I will use a set of data to find range and mode.

Vocabulary

mode

range

Mr. Sun's class marked their ages on a tally chart.

Mr. Sun's Class			
Age	7	8	9
Tally	|||	𝍸	||

To find the mode write the ages in order from *least* to *greatest.*

7, 7, 7, 8, 8, 8, 8, 8, 9, 9

The **mode** is the number listed most often.

8 is the number listed most often. 8 is the mode.

Find the **range** by subtracting the least number from the greatest number.

9 (greatest) − 7 (least) = 2 (range)

Check

Now Mr. Sun's class is recording the number of pets they have. Find the mode. Find the range.

Mr. Sun's Class				
Number of Pets	1	2	3	4
Tally	||	|||	||		

1. Put the data in order from *least* to *greatest.*

_____ , _____ , _____ , _____ , _____ , _____ , _____ , _____

2. Find the mode.

_____

3. Find the range.

_____ (greatest) − _____ (least) = _____ (range)

4. Talk About It — What do range and mode tell you about data? Explain.

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Practice

Now Mr. Sun's class is recording how many brothers and sisters they each have.

Mr. Sun's Class				
Number of Brothers and Sisters	1	2	3	4
Tally	||	|||	||	|

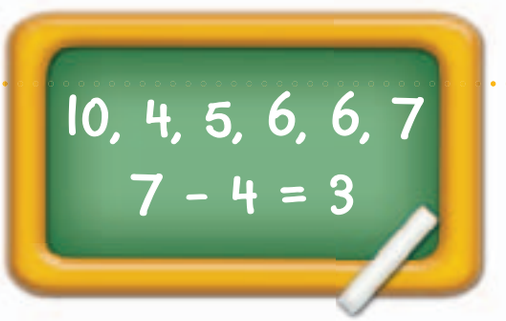
5. Put the data in order from least to greatest.

_____ , _____ , _____ , _____ , _____ , _____ , _____ , _____

6. Find the mode. _____

7. Find the range. _____ (greatest) − _____ (least) = _____ (range)

Problem Solving



8. Make It Right What is the range in this set of data? 10, 4, 5, 6, 6, 7
Lisa says it is 7 − 4 = 3.

Tell why Lisa is wrong. Make it right.

_____

_____

Make it right. _____ (greatest) − _____ (least) = _____ (range)

What is the mode in Lisa's set of data? _____

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Math at Home Activity: Ask your child to find the range in this set of data, 8, 4, 5, 7.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve problems.

Your Mission:
Find how many different pizzas Maria could order.

The pizza shop has three pizza specials. Cheese, pepperoni, or ham with one of these: onions, green peppers, or olives. How many different pizzas could I order?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle it.

Plan

How will I solve the problem?

Solve

One way is to make a list.

_____ different pizzas

Check

Look Back
Does my answer make sense?

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Richard Hutchings

Mixed Problem Solving

Problem-Solving Strategies

- Make a list
- Draw a picture
- Find a pattern

Choose a strategy. Solve.

1. My teacher says she wants all eyes looking at her. There are 24 students in my class. Each person has two eyes. How many eyes are looking at the teacher?

_____ eyes

---

2. Karen, Amanda, and Mariana all have stuffed animals. If the pattern continues, how many animals does Mariana have? Who has the most animals?

Name	Number of Stuffed Animals
Karen	5
Amanda	10
Mariana	_____

_____

---

3. Each child had 3 pennies to throw in the fountain. There were 5 children. How many pennies were there in all?

_____ pennies

---

4. Jeb, Ellen, and Jin are lining up to get a drink. How many different ways could they stand in line?

_____ different ways

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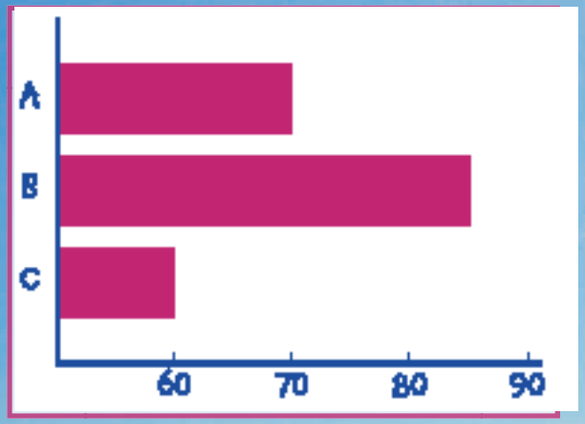
Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, putting away groceries, planning schedules, and so on.

(br)United States coin images from the United States Mint

On Friday the sun was shining.
It was a very hot day!

Days	Weather
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	



Which letter shows the temperature on Friday? _____

D

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FOLD DOWN

Problem-Solving in Science

©Rhoda Sidney/Photo Edit

Real-World MATH

Tamika loves the weather. She likes rain and thunder. She likes snow and cold. Most of all Tamika likes warm sunny days. She has been keeping track of the weather for five days in a row.

This book belongs to

_____

A

On Monday, the weather was rainy. On Tuesday, it was cloudy.

Days	Weather
Monday	
Tuesday	

How many days were sunny?

_____ days

On Wednesday the weather was sunny, and on Thursday it rained.

Days	Weather
Wednesday	
Thursday	

How many days so far have been rainy?

_____ days

CORBIS

CORBIS

Name _____

Vocabulary

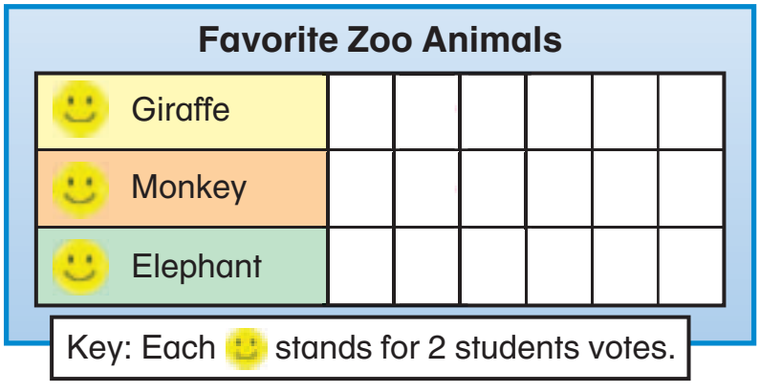
Draw lines to match.

1. **data**	a. the number that occurs the most in a set of data
2. **mode**	b. information
3. **key**	c. helps you read a graph

Concepts

Kyle's classmates voted on their favorite zoo animals.
Use the tally chart to complete the pictograph.

Favorite Zoo Animals	
Giraffe	𝍸 |
Monkey	𝍸 ‖
Elephant	‖‖



4. How many students like monkeys and elephants?

_____ students

Complete the sentence. Write a number sentence to answer the question.

5. How many students like _____

and _____?

6. _____ ◯ _____ = _____

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Tina's class is recording how many times they have been to the zoo.

Zoo Trips	
0	𝍸
1	𝍸
2	𝍸 |
3	𝍸 ||
4	|

7. Put the data in order from *least* to *greatest*.

_____, _____, _____, _____, _____, _____,

_____, _____, _____, _____, _____, _____

8. Find the mode.

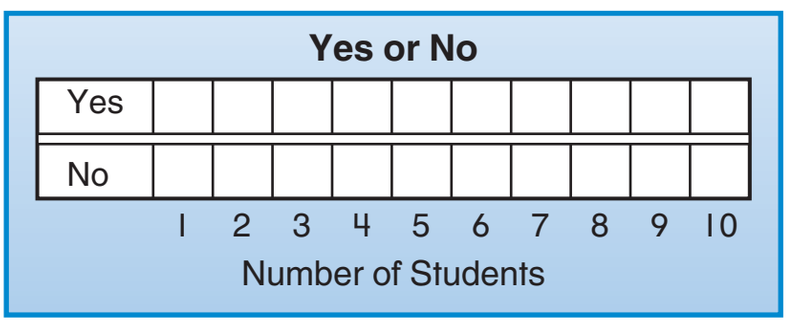
_____

9. Find the range.

_____ (greatest) – _____ (least) = _____ (range)

The graph shows how many students have been to the zoo. Use the tally chart to complete the bar graph.

Yes or No	
Yes	𝍸 𝍸
No	𝍸



10. How many students have been to the zoo?

_____ students

11. How many more students have been to the zoo than students who have not been to the zoo? Write a number sentence to solve.

_____ – _____ = _____

Problem Solving

12. There are 4 giraffes at the zoo. Each giraffe has 4 legs. How many legs are there altogether?

_____ legs

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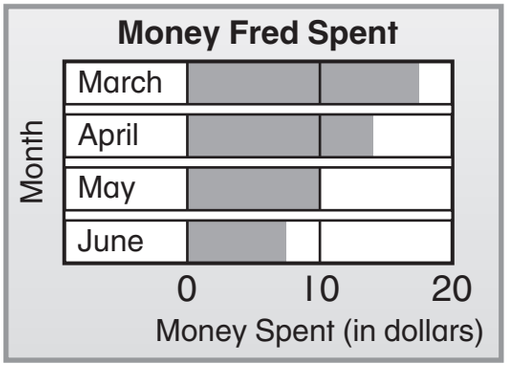
Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A Look at the bar graph. How much money did Fred spend in May?



$5 ○ $10 ○ $15 ○ $20 ○

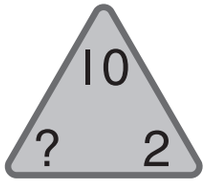
B Look at the tally chart. How many of Ben's classmates have just one pet?

How many pets?	
0	𝍸 III
1	𝍸 I
2	II
3	II

8 ○ 7 ○ 6 ○ 2 ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 Look at the fact family triangle. What number completes the fact family triangle?



15 ○ 14 ○ 9 ○ 8 ○

2 The tally chart shows how many cars from each state Jane saw on a car trip. How many cars from Alabama did Jane see?

Cars	
Virginia	III
Alabama	𝍸 𝍸 I
Georgia	𝍸
Florida	𝍸 III

21 ○ 11 ○ 10 ○ 8 ○

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3 Look at the number sentence in the box. Which of the following has the same value as seven plus two?

$7 + 2 = 9$

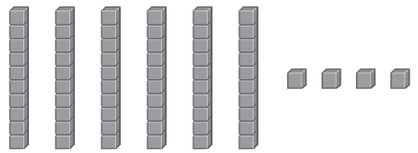
$2 + 7 = \square$ ○

$9 + 2 = \square$ ○

$7 + 9 = \square$ ○

$9 - 2 = \square$ ○

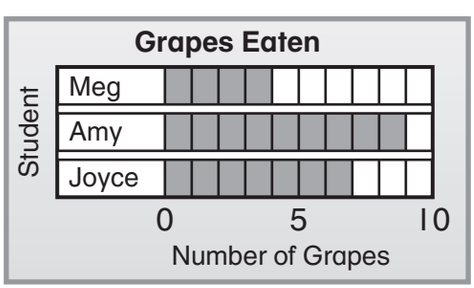
4 What number is shown?



40 ○ 46 ○ 60 ○ 64 ○

5 Look at the tally chart shown below. The tally chart shows the number of grapes each student ate. Which graph matches the tally marks in the chart?

Grapes Eaten	
Student	Number of Grapes
Meg	𝍸 ||||
Amy	||||
Joyce	𝍸 ||



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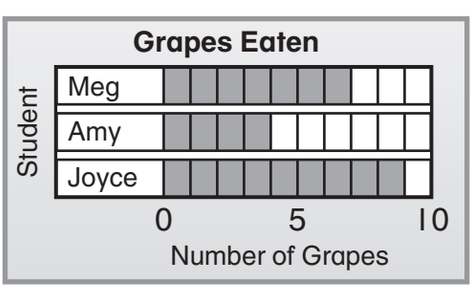

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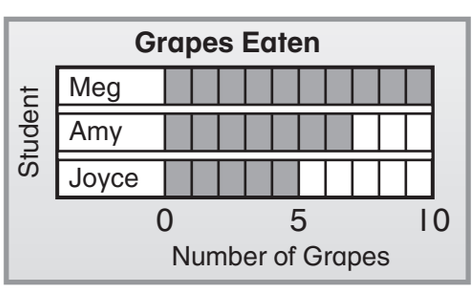

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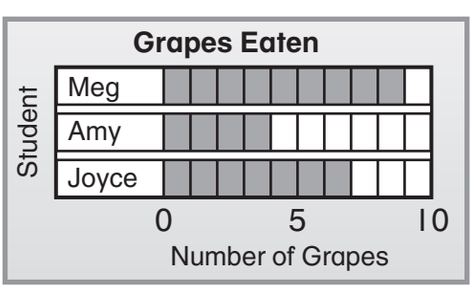

○

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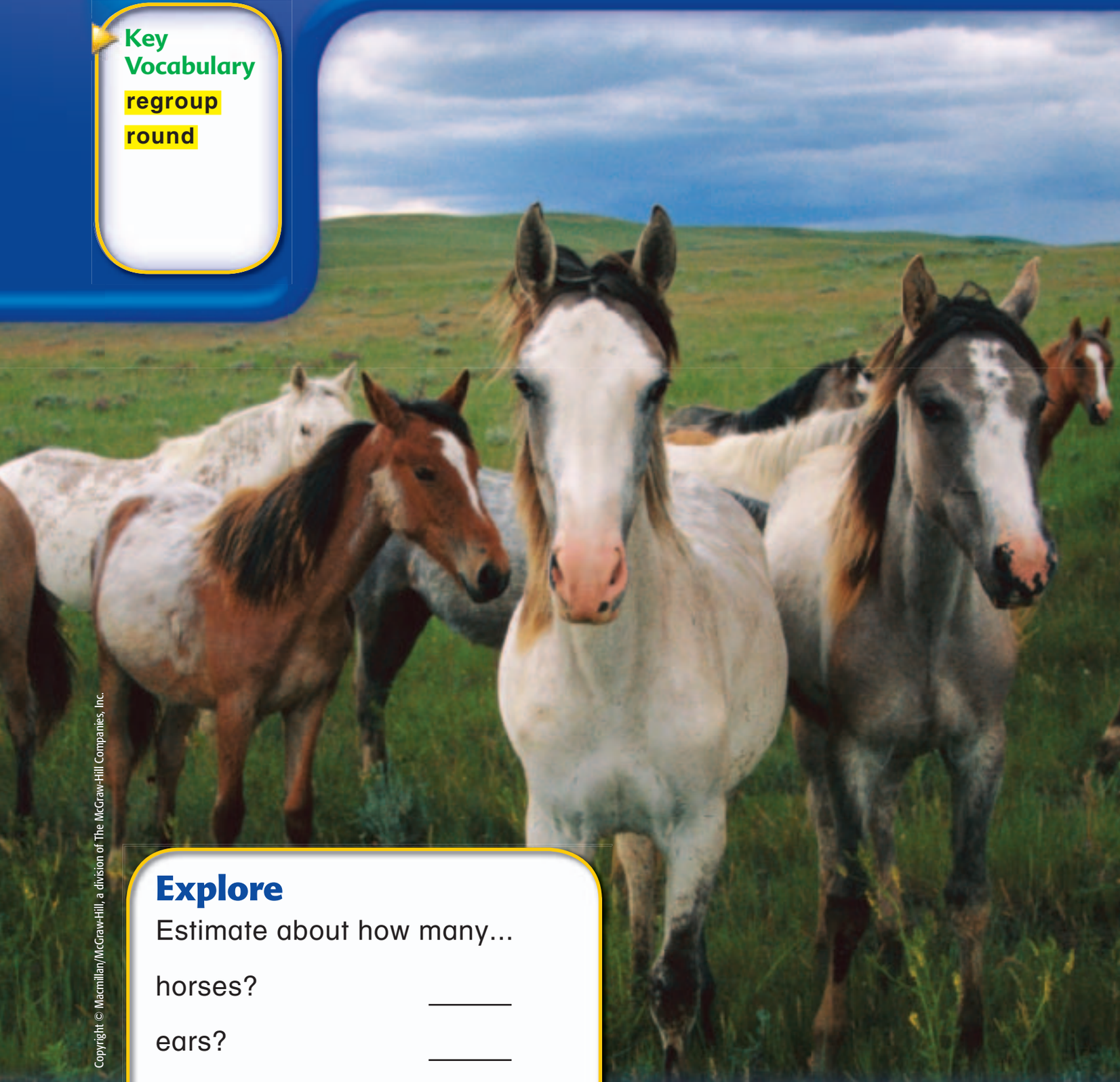
CHAPTER 5

Two-Digit Addition

Key Vocabulary

regroup

round



Explore

Estimate about how many...

horses? _____

ears? _____

legs? _____

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Yva Momatiuk/John Eastcott/Minden Pictures

Name _____

MathOnline
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 5?

Write each number two ways.

1. 18 ones = _____

_____ ten _____ ones

2. 26 ones = _____

_____ tens _____ ones

Add.

3. 9 + 7 = _____

4. 8 + 4 = _____

5. 2 + 8 = _____

6. 9 + 6 = _____

7. 6 + 5 = _____

8. 20 + 70 = _____

9. 40 + 30 = _____

10. 30 + 50 = _____

11. 60 + 10 = _____

12. 40 + 20 = _____

13. 3 + 3 + 1 = _____

14. 4 + 2 + 3 = _____

Circle the number that is closer.

15. 87 is closer to 90 or 70

16. 35 is closer to 40 or 20

Solve.

17. Jack has 5 red marbles. Beth has 3 blue marbles. Lien has 2 green marbles. How many marbles do they have altogether?

_____ marbles

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MATH at HOME

Dear Family,

Today my class started Chapter 5, **Two-Digit Addition**. In this chapter, I will learn to add two-digit numbers. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child go on a scavenger hunt to find the number of shoes and books in the house. How many groups of 10 can your child make? How many are left over?

Key Vocabulary

regroup to take apart a number to write it in a new way

round to change the value of a number to one that is easier to work with

MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Tail Feather Fun: Counting by Tens
by Michael Dahl
Picture Window Books, 2006.

Mall Mania
by Stuart J. Murphy
Harper Collins Publishers, 2006.

Toasty Toes: Counting by Tens
by Michael Dahl
Picture Window Books, 2006.

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Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 5, **Adición con dos dígitos**. En este capítulo, aprenderé a sumar números de dos dígitos. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Pídanle a su hijo(a) que comience una búsqueda para averiguar el número de zapatos, y libros que tienen en la casa. ¿Cuántos grupos de 10 puede formar su hijo(a)? ¿Cuántos sobran?

Vocabulario clave

reagrupar separar un número para escribirlo de una nueva manera

redondear cambiar el valor d en número por uno con el cual es más fácil trabajar

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Diversión con las plumas de la cola: Contemos de diez en diez
de Michael Dahl
Picture Window Books, 2006.

Manía de centros comerciales
de Stuart J. Murphy Harper Collins Publishers, 2006.

Dedos calientitos: Contemos de diez en diez
de Michael Dahl
Picture Window Books, 2006.

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Name _____

Add Tens

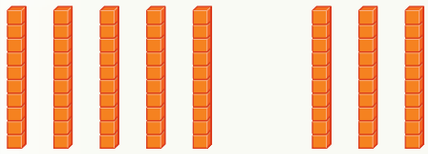
Get Ready

Main Idea

I will use addition facts to add tens.

You can use addition facts to help you add tens.

Find 50 + 30.



Think 5 + 3 = _____.

5 tens + 3 tens = _____ tens

50 + 30 = _____

Check

Add.

1. 4 tens + 2 tens = _____ tens

   40 + 20 = _____

2. 6 tens + 1 ten = _____ tens

   60 + 10 = _____

3. 3 tens + 4 tens = _____ tens

   30 + 40 = _____

4. 2 tens + 3 tens = _____ tens

   20 + 30 = _____

5. 30 + 50 = _____

6. 20 + 20 = _____

7. Talk About It — Explain how knowing 4 + 5 helps you find 40 + 50.

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Practice

Add.

8. 1 ten + 7 tens = _____ tens

10 + 70 = _____

9. 3 tens + 1 ten = _____ tens

30 + 10 = _____

10. 2 tens + 5 tens = _____ tens

20 + 50 = _____

11. 6 tens + 3 tens = _____ tens

60 + 30 = _____

12. 50 + 10 = _____

13. 20 + 40 = _____

14.
$$\begin{array}{r} 70 \\ +\ 10 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 30 \\ +\ 50 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 20 \\ +\ 20 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 50 \\ +\ 40 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 40 \\ +\ 30 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 20 \\ +\ 30 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 50 \\ +\ 20 \\ \hline \end{array}$$

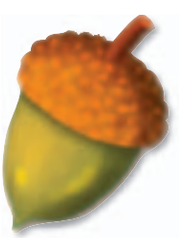
21.
$$\begin{array}{r} 80 \\ +\ 10 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 20 \\ +\ 70 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 30 \\ +\ 30 \\ \hline \end{array}$$

Problem Solving

24. Number Sense. Cora found 50 acorns on the first day of vacation. She found 10 acorns on the second day. How many acorns did Cora find in all?



_____ + _____ = _____ acorns

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Math at Home Activity: Put out 10 buttons and 20 buttons. Ask your child to show an addition sentence with the buttons.

Name _____

Count On Tens and Ones

Get Ready

Main Idea

I will count on by tens and ones to find sums.

Find 26 + 3.
Count on by ones.

26 + 3 = _____

Think
Start at 26.
Count 27, 28, 29

Find 26 + 30.
Count on by tens.

26 + 30 = _____

Think
Start at 26.
Count 36, 46, 56

Check

Count on to add. Write the sum.

1. 47 + 2 = _____	**2.** 13 + 3 = _____
3. 47 + 20 = _____	**4.** 13 + 50 = _____
5. 3 + 24 = _____	**6.** 2 + 32 = _____
7. 50 + 24 = _____	**8.** 60 + 32 = _____
9. 29 + 1 = _____	**10.** 86 + 2 = _____

11. Talk About It — How many tens do you count on to add 32 + 40? Explain.

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Practice

Count on to add. Write the sum.

Remember
To count on by tens, keep adding 10 to the number.

12. 66 + 3 = _____	**13.** 12 + 70 = _____	**14.** 12 + 2 = _____
15. 25 + 2 = _____	**16.** 51 + 30 = _____	**17.** 25 + 10 = _____
18. 53 + 20 = _____	**19.** 3 + 14 = _____	**20.** 66 + 30 = _____
21. 51 + 3 = _____	**22.** 20 + 76 = _____	**23.** 32 + 1 = _____
24. 30 + 32 = _____	**25.** 3 + 32 = _____	**26.** 40 + 44 = _____

27.
$$\begin{array}{r} 3 \\ +\ 44 \\ \hline \end{array}$$

28.
$$\begin{array}{r} 10 \\ +\ 88 \\ \hline \end{array}$$

29.
$$\begin{array}{r} 1 \\ +\ 88 \\ \hline \end{array}$$

30.
$$\begin{array}{r} 32 \\ +\ 20 \\ \hline \end{array}$$

Problem Solving

31. Number Sense Keisha and Andy each have 25 points. Keisha scores 3 more points. How many points does Keisha have now?

Keisha has _____ points.

Andy gets 30 more points. How many points does Andy have now?

Andy has _____ points.

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Math at Home Activity: Say a number between 10 and 50. Ask your child to count on by 1, 2, or 3 and then by 10, 20, or 30.

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Name _____

Problem-Solving Strategy
Work Backward

Main Idea

I will work backward to solve problems.

Eduardo has a baseball card collection. Eduardo gave 3 cards to Hana. Then he gave 2 cards to Patty. Eduardo now has 44 cards left.

How many cards did he have to start with?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?

Solve

Work Backward. Start with the number of cards Eduardo has now. Add the cards he gave away.

Check

Look Back
Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Work backward to solve.

1. During swimming lessons, the teacher passed out 23 pairs of goggles. There are 10 pairs left. How many pairs of goggles were there to start with?

_____ goggles

2. At the fair, Tamara gave 5 tickets to Jason. Then she gave 3 tickets to Shannon. Tamara has 5 tickets left. How many tickets did she have at the start?

_____ tickets

Your Turn

Work backward to solve.

3. The party store sold 15 yellow balloons and 22 orange balloons. They have 6 red balloons left. How many balloons did they start with?

_____ balloons

4. The art teacher handed out 17 bottles of glue. She has 9 left. How many did she have at the start?

_____ bottles of glue

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

(bcr)Getty Images, (br)The McGraw-Hill Companies/Joe Polillio

Name _____

Regroup Ones as Tens

Hands-On Activity

Get Ready

Main Idea

I will regroup to find sums.

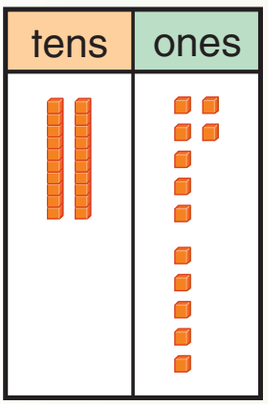
Vocabulary

regroup

Find 27 + 5

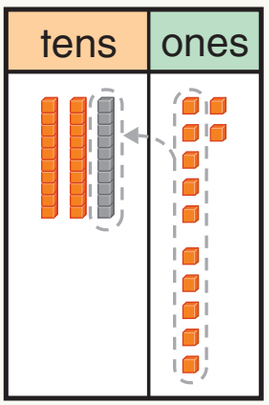
Step 1

Use and to show 27 and 5.



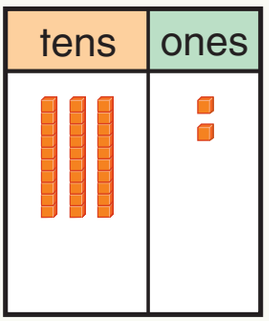
Step 2

If there are ten or more ones, regroup ten ones as 1 ten.



Step 3

Write how many tens and ones.



___ tens ___ ones

27 + 5 = _____

Check

Use WorkMat 6 and and to add.

	Add the ones. Add the tens.	Do you regroup?	Write the sum.
1. 15 + 8	_____ ten _____ ones	yes no	
2. 23 + 6	_____ ten _____ ones	yes no	

3. Talk About It

2AF1.0

When you look at a problem, how do you know if you need to regroup?

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Practice

Use WorkMat 6 and to add.

Remember
10 ones equal 1 ten.

	Add the ones. Add the tens.	Do you regroup?	Write the sum.
4. 76 + 4	_____ tens _____ ones	yes no	
5. 17 + 7	_____ ten _____ ones	yes no	
6. 32 + 6	_____ tens _____ ones	yes no	
7. 59 + 5	_____ tens _____ ones	yes no	
8. 13 + 9	_____ ten _____ ones	yes no	
9. 31 + 8	_____ tens _____ ones	yes no	
10. 25 + 6	_____ tens _____ ones	yes no	
11. 62 + 7	_____ tens _____ ones	yes no	

12. WRITING IN MATH If you add 8 to 38, will the sum be *less than* or *greater than* 40? Explain.

_____

_____

_____

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Math at Home Activity: Using rocks, have your child show you 25 + 5. Ask how many tens there are in the answer.

Name _____

Add.

1. 1 tens + 2 tens = _____ tens

40 + 20 = _____

2. 1 ten + 7 tens = _____ tens

10 + 70 = _____

Count on to add.

3. 46 + 3 = _____

4. 1 + 30 = _____

5. 16 + 2 = _____

6. 54 + 1 = _____

7. 11 + 30 = _____

8. 45 + 40 = _____

Add.

	Add the ones. Add the tens.	Do you regroup?	Write the Sum.
9. 33 + 5	_____ tens _____ ones	yes no	
10. 49 + 6	_____ tens _____ ones	yes no	
11. 72 + 8	_____ tens _____ ones	yes no	
12. 16 + 4	_____ ten _____ ones	yes no	
13. 29 + 2	_____ tens _____ ones	yes no	

14. Montel reads 10 pages of his favorite book each day for 7 days. How many pages does he read altogether?

_____ pages

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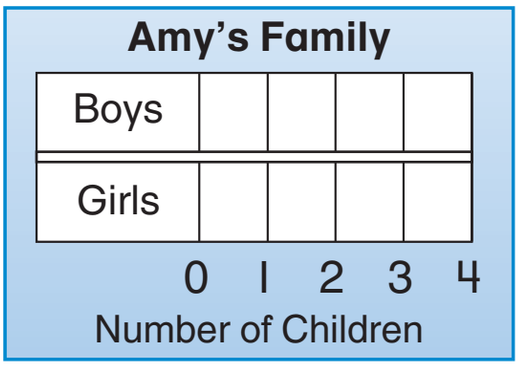
Use data from the chart to make a bar graph. Then answer the questions.

Amy's Family		
	Tally	Total
Boys	𝍸	
Girls	𝍸	



15. Write a number sentence to show the total number of children.

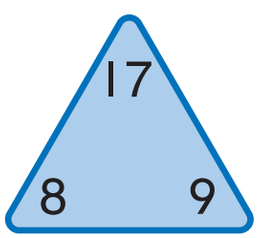
_____ + _____ = _____ children

16. Write a number sentence to show how many more boys than girls.

_____ + _____ = _____

Complete the fact family.

17.



_____ + _____ = _____

_____ + _____ = _____

_____ − _____ = _____

_____ − _____ = _____

18. Tom catches lightning bugs for a week. If the pattern continues, how many lightning bugs will he catch on Day 5? Fill in the chart.

Day	1	2	3	4	5
Lightening bugs	2	4	6	8	

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Name _____

Hands-On Activity

Add One-Digit Numbers and Two-Digit Numbers

Get Ready

Main Idea

I will add one-digit and two-digit numbers.

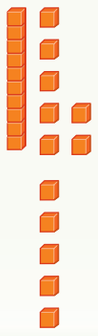
Find 17 + 5.

Step 1

Add the ones.

7 + 5 = 12

	tens	ones
	□	
	1	7
+		5

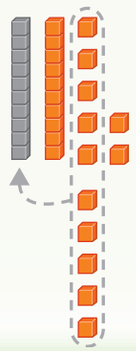


Step 2

Regroup if needed.

Write how many.

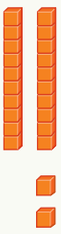
	tens	ones
	□	
	1	7
+		5



Step 3

Add the tens.

	tens	ones
	□	
	1	7
+		5

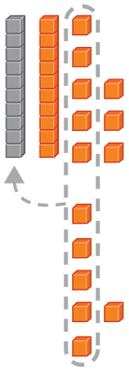


Check

Use WorkMat 6 and and to add.

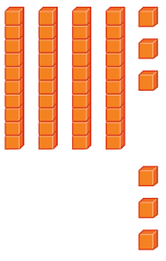
1.

	tens	ones
	□	
	1	8
+		6



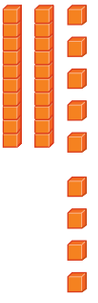
2.

	tens	ones
	□	
	4	3
+		3



3.

	tens	ones
	□	
	2	5
+		4



4.

	□	
	1	9
+		6

5.

	□	
	3	6
+		5

6.

	□	
	6	8
+		4

7. Talk About It How did you show that you regrouped?

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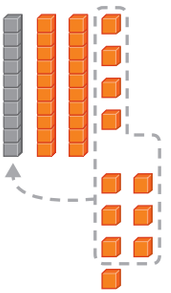
Practice

Use WorkMat 6 and and to add.

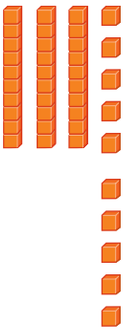
8.

tens	ones
□	
2	4
+	7



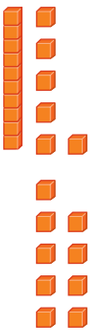
9.

tens	ones
□	
3	5
+	5



10.

tens	ones
□	
1	6
+	9



11.

tens	ones
□	
5	6
+	1

12.

tens	ones
□	
7	2
+	8

13.

tens	ones
□	
3	8
+	8

14.

□	
2	4
+	4

15.

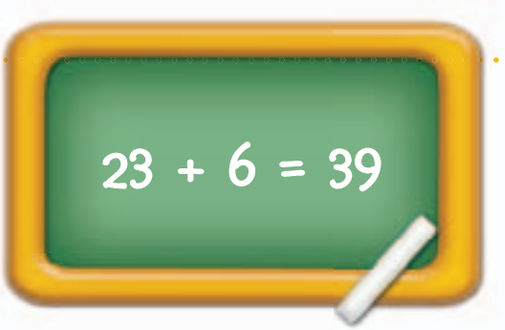
□	
4	3
+	9

16.

□	
1	3
+	7

H.O.T. Problem

17. **Make It Right** Jenny says the sum of 23 + 6 is 39. Tell why Jenny is wrong. Make it right.



_____

_____

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Math at Home Activity: Ask your child to show you how to add 14 and 8. Then ask your child to show you how to add 27 and 2.

Name _____

Add Two Digit Numbers

Hands-On Activity

Get Ready

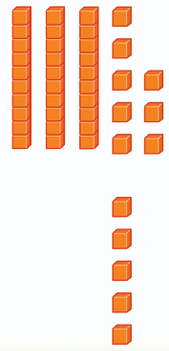
Main Idea

I will add two-digit numbers.

Find 18 + 25.

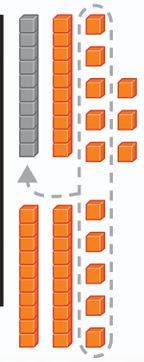
Step 1
Add the ones.
8 + 5 = 13

tens	ones
□	
1	8
+ 2	5



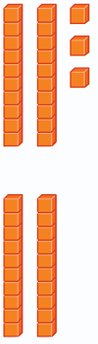
Step 2
Regroup if needed.
Write how many.

tens	ones
□	
1	8
+ 2	5



Step 3
Add the tens.
18 + 25 = 43

tens	ones
□	
1	8
+ 2	5
	3

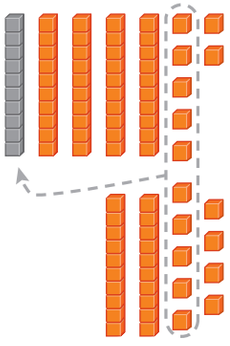


Check

Use WorkMat 6 and and to add.

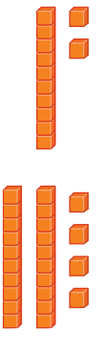
1.

tens	ones
□	
4	7
+ 2	9



2.

tens	ones
□	
1	2
+ 2	4



3.

tens	ones
□	
1	5
+ 1	6

4.

□	
8	2
+ 1	4

5.

□	
1	5
+ 1	9

6.

□	
3	3
+ 1	7

7. Talk About It — What did you do first to solve Exercise 2?

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Practice

Use WorkMat 6 and to add.

Remember
Write the new ten you make above the tens place.

7.

	tens	ones
	□	
	1	4
+	3	5

8.

	tens	ones
	□	
	3	2
+	3	8

9.

	tens	ones
	□	
	1	9
+	4	6

10.

	□	
	8	1
+	1	6

11.

	□	
	2	3
+	3	9

12.

	□	
	6	6
+	3	2

13.
$$\begin{array}{r} 54 \\ +\ 16 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 35 \\ +\ 44 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 74 \\ +\ 16 \\ \hline \end{array}$$

H.O.T. Problem

16. Number Sense

Second Graders at Summit Hall School	
Ms. Smith's Class	27
Mr. Patel's Class	26

Write a number sentence to find the total number of second graders at Summit Hall School.

_____ ◯ _____ = _____

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Math at Home Activity: Take two 2-digit numbers from your phone number and have your child add them. Example: 555–1234; 12 + 34 = 46.

Name _____

Find the sum.

1. $37 + 22$

2. $44 + 18$

3. $71 + 12$

4. $36 + 45$

5. $29 + 14$

6. $28 + 5$

7. $89 + 5$

8. $16 + 74$

9. $48 + 27$

10. $66 + 16$

11. $35 + 35$

12. $44 + 8$

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Game Time

Pick Your Path

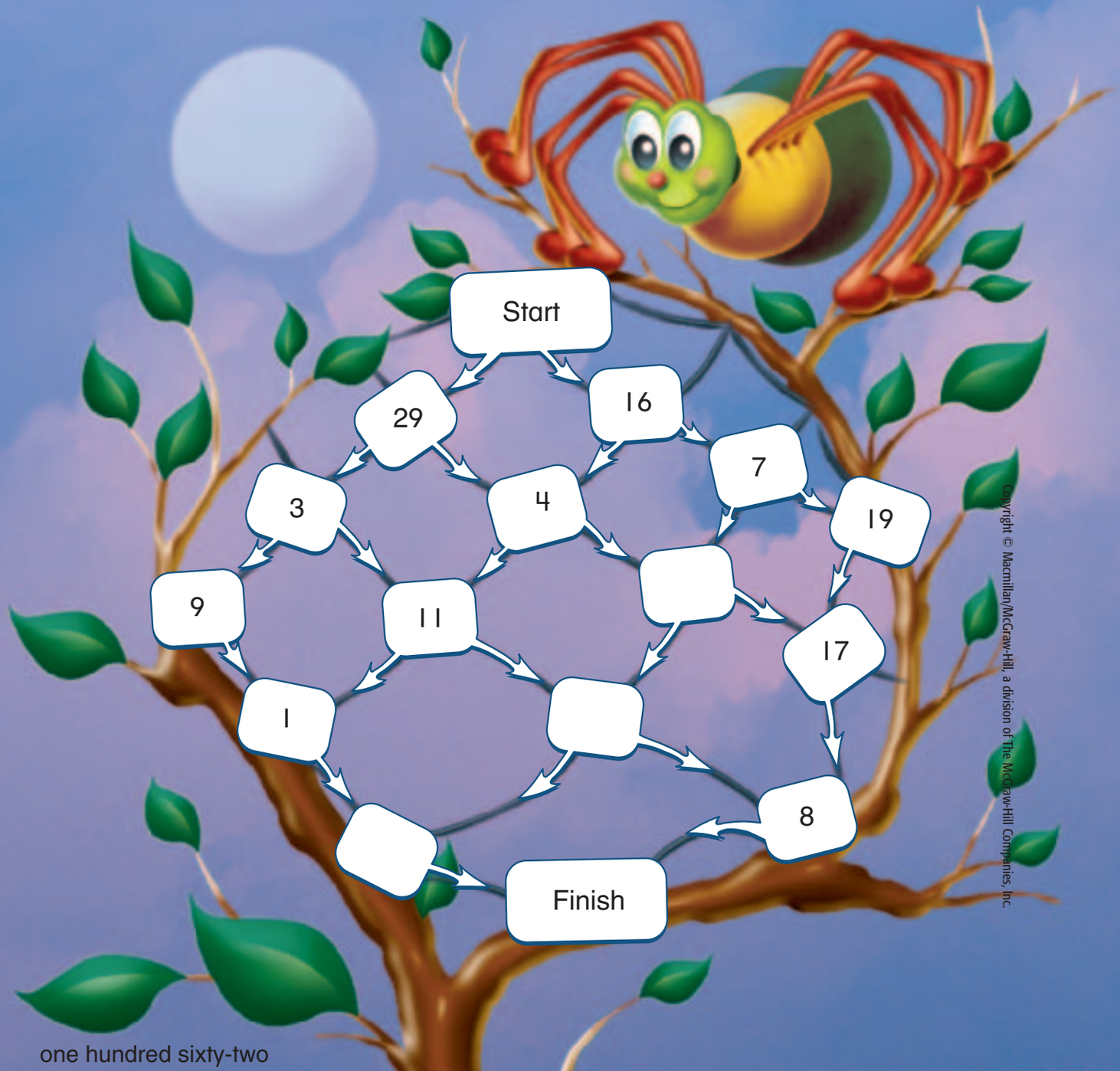
Add

You Will Need

-
- Paper and pencil
-

Play with a partner:

- Roll the . Move your .
- Write the number you land on. Add it to your total.
- Cross off the box you land on.
- The player with the most points at Finish wins!



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Name _____

Estimate Sums

Get Ready

Main Idea

I will estimate the sum.

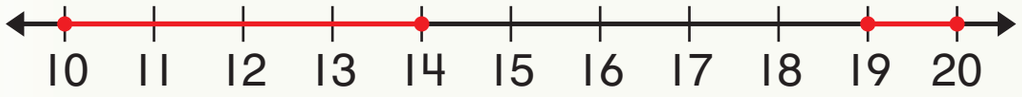
Vocabulary

round

When you do not need an exact answer, you can estimate. Estimate 14 + 19.

Step 1 **Round** each addend to the nearest 10.

14 is closer to 10. Round down.



Step 2 Add the tens to estimate the sum.

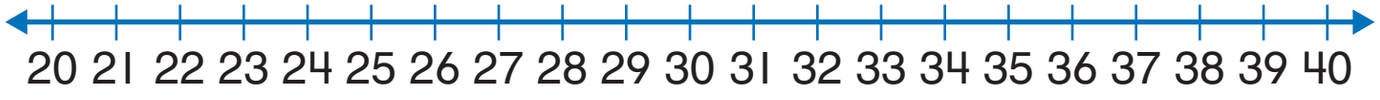
19 is closer to 20. Round up.

14 rounds to 10

+ 19 rounds to + 20

Check

Round each addend to the nearest ten. Estimate the sum.



1. 21 →

+ 26 → + ____

2. 25

+ 28 + ____

3. 33

+ 38 + ____

4. Talk About It How do you estimate sums?

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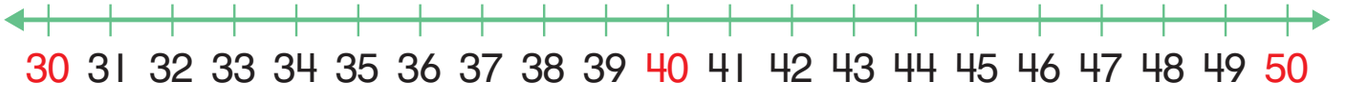
Richard Hutchings

Practice

Round each addend to the nearest ten. Estimate the sum.

Remember
1, 2, 3, and 4 round down to the nearest ten. 5, 6, 7, 8, and 9 round up to the nearest ten.

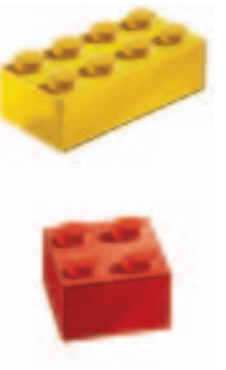


5. 31 + 47 = ___ + ___	**6.** 43 + 38 = ___ + ___	**7.** 45 + 38 = ___ + ___
8. 34 + 49 = ___ + ___	**9.** 31 + 32 = ___ + ___	**10.** 36 + 31 = ___ + ___
11. 43 + 30 = ___ + ___	**12.** 50 + 33 = ___ + ___	**13.** 43 + 33 = ___ + ___

Problem Solving

14. Thinking Math Pablo and Andrea are shopping for building blocks. They want to know about how much it will cost to buy both sets of blocks. Estimate the price of both block sets.

Building Blocks	
1 large set	$47
1 small set	$29



about $ _____

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Math at Home Activity: Ask your child to explain how to estimate the sum of 27 and 34.

Name _____

Add Three Two-Digit Numbers

Get Ready

Main Idea

I will add three two-digit numbers.

Vocabulary

estimate

round

Add 24 + 14 + 36.

Step 1

Add the ones.

Look for a ten.

$$\begin{array}{r} 2\,4 \\ 1\,4 \\ +\ 3\,6 \\ \hline \end{array}$$

4 + 6 = 10

10 + 4 = 14

Step 2

Add the tens.

$$\begin{array}{r} {\scriptstyle 1} \\ 24 \\ 14 \\ +\ 36 \\ \hline 74 \end{array}$$

Tanner, Lynn, and Dani have a total of

74 tokens.

Check

Look for two numbers in the ones column that add to ten. Circle them. Then find the sum.

1.
$$\begin{array}{r} 14 \\ 9 \\ +\ 31 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 32 \\ 42 \\ +\ 16 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 25 \\ 33 \\ +\ 13 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 42 \\ 8 \\ +\ 36 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 13 \\ 33 \\ +\ 24 \\ \hline \end{array}$$

6. Talk About It

How is adding three two-digit numbers like adding two two-digit numbers?

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Practice

Remember
Look for a double or ten first.

Look for two numbers in the ones column that add to ten. Circle them. Find the sum.

7. 25 1 + 15	**8.** 51 12 + 32	**9.** 31 19 + 20	**10.** 13 33 + 45	**11.** 16 7 + 36
12. 18 32 + 13	**13.** 2 25 + 41	**14.** 34 14 + 17	**15.** 71 10 + 9	**16.** 43 10 + 20
17. 34 13 + 3	**18.** 34 18 + 26	**19.** 15 49 + 15	**20.** 32 15 + 38	**21.** 28 24 + 36

Data File

The California Valley quail is the official state bird of California.

22. Three fences have quail sitting on them. There are 15 quail on each fence. Write an addition sentence to show the total number of quail.

_____ + _____ + _____ = _____ quail

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Math at Home Activity: Have your child explain how to add 28 + 12 + 35.

(t)©John Blair/Alamy, (br)Robert Maier/Animals Animals

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve a problem.

Your Mission:
Find how many rocks are in both collections.

Understand

What do I know?
Underline what you know.
What do I need to find out?
Circle it.

Plan

How will I solve the problem?

Solve

I will use guess and check.

Check

Look Back
Does my answer make sense?

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PhotoEdit

Mixed Problem Solving

Problem-Solving Strategies

- Guess and check
- Act it out
- Write a number sentence

Solve.

1. Parker paints 17 pictures. Her friend Jerry paints 2 more than her. How many pictures does Jerry paint?

_____ pictures

2. Jan and her friends pick up litter. Jan and Leslie collect a bag with 45 pieces. Stephanie and Angela collected the same number. How many pieces of litter do they collect altogether?

_____ pieces

3. In the morning, there were 6 cars on the highway. Six cars were waiting to get on. How many cars will be on the highway when the others get on?

_____ cars

4. Miss Risner asked Tommy to organize the cubes. He has 50 red, 70 blue, and 30 yellow. How many cubes are there in all?

_____ cubes

5. The baseball team divided into 2 groups for batting practice. Each group has 30 balls. How many total balls do they have for practice?

_____ balls

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

It takes time to pack for a summer vacation.

What would you put in your suitcase if you were going away for a week?

_____

Where would you like to go?

_____

D

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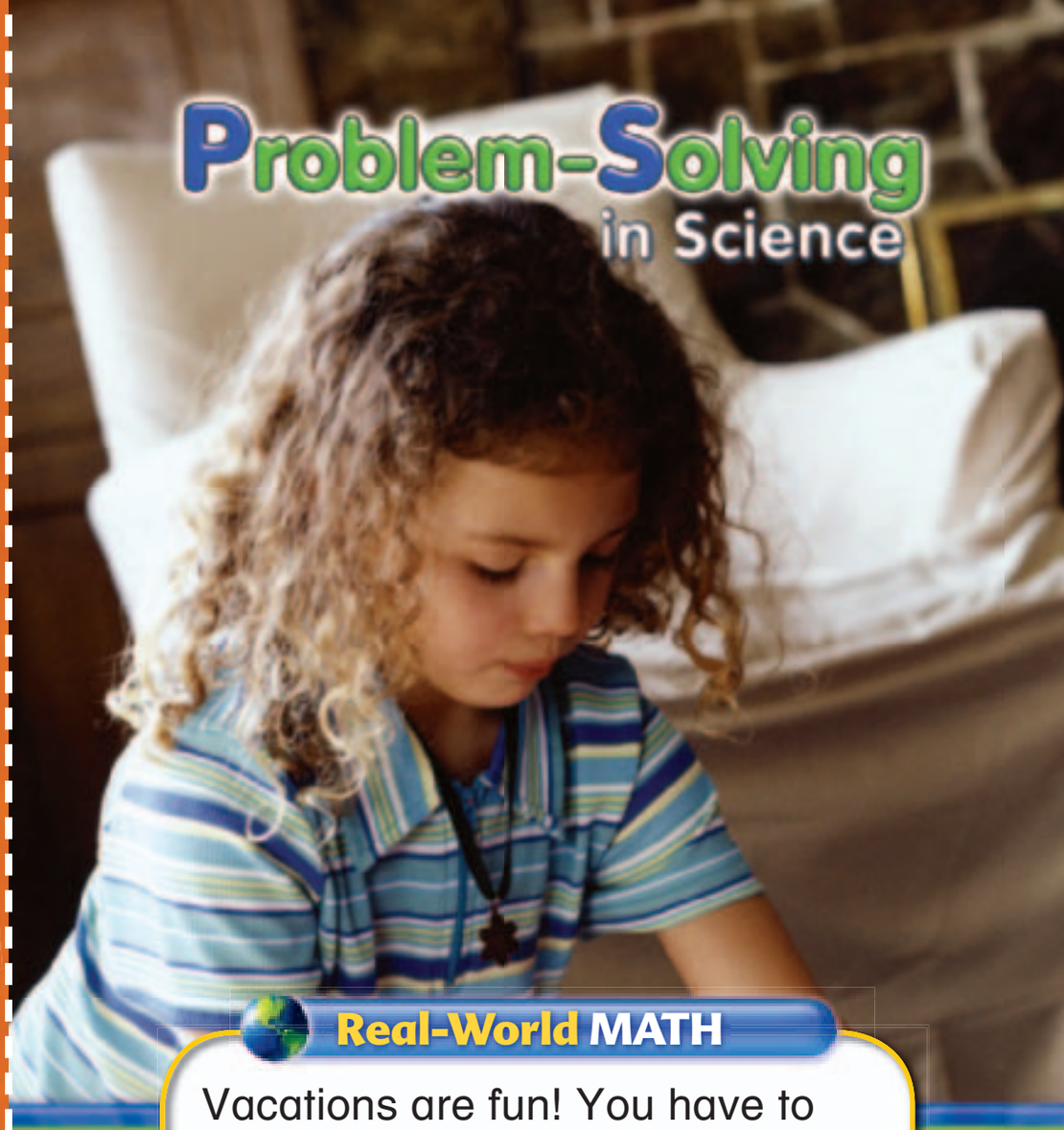
FOLD DOWN

Problem-Solving in Science



Real-World MATH

Vacations are fun! You have to plan ahead when packing.

This book belongs to

_____

A

Ericka McConnell/Taxi/Getty Images, Inc.

This girl's suitcase weighs 10 pounds more than the 50 pound limit. Write a number sentence about how much the suitcase weighs.

____ + ____ = ____ pounds

Colin Barker/The Image Book/Getty Images, Inc.

Mike Powell/Getty Images

Look at this heavy suitcase. Find something in your room that is heavier than this suitcase. What did you find?

_____

_____

Name _____

Vocabulary

Draw lines to match.

1. **regroup**
2. **round**

a. write a number in a new way
b. subtract
c. change value of a number so it's easier to work with
d. the number that occurs most often in a set of data

Concepts

Count on to add. Write the sum.

3. 27 + 3 = _____
4. 2 + 62 = _____
5. 82 + 3 = _____
6. 59 + 1 = _____

Add. Use an addition fact to help you.

7. 6 tens + 3 tens = _____ tens
   60 + 30 = _____
8. 4 ten + 4 tens = _____ tens
   40 + 40 = _____

	Add the ones. Do you regroup?	Write the sum.
9. 38 + 6	_____ tens _____ ones yes no	
10. 84 + 2	_____ tens _____ ones yes no	
11. 25 + 5	_____ tens _____ ones yes no	

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Find the sum.

11.
$$\begin{array}{r} 18 \\ +\ 36 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 55 \\ +\ 11 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 23 \\ +\ 49 \\ \hline \end{array}$$

Round each addend to the nearest ten.
Estimate the sum. Solve.

14.
$$\begin{array}{r} 12 \\ +\ 37 \\ \hline \end{array} \quad + ____$$

15.
$$\begin{array}{r} 28 \\ +\ 34 \\ \hline \end{array} \quad + ____$$

Find the sum.

16.
$$\begin{array}{r} 42 \\ 15 \\ +\ 12 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 22 \\ 18 \\ +\ 30 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 11 \\ 55 \\ +\ 31 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 16 \\ 43 \\ +\ 24 \\ \hline \end{array}$$

---

20. Vicky has 14 colored pencils. Susan brings 12 colored pencils. Mandy brings 20 colored pencils. How many colored pencils do they have altogether?

____ + ____

21. Emilio has 58 stickers. Micah has 33 stickers. How many stickers do they have altogether?

____ + ____

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Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A Look at the addition problem in the box. Which other problem has the same answer?

$26 + 14 + 19 = 59$

$19 + 14 + 26 = \square$ ○

$59 + 14 + 19 = \square$ ○

$26 + 19 + 12 = \square$ ○

$14 + 19 + 20 = \square$ ○

B John had twenty-six pennies. He found some more. Now he has thirty-two. Which number sentence could be used to find how many pennies he found?

$26 - \square = 32$ ○

$26 + 32 = \square$ ○

$32 - 10 = \square$ ○

$26 + \square = 32$ ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 What is the solution to this problem?

$50 + 20 = ____$

30 ○ 60 ○ 70 ○ 80 ○

2
$$\begin{array}{r} 40 \\ +\ 20 \\ \hline \end{array}$$

40 ○ 60 ○ 80 ○ 85 ○

3 A number has nine ones and one ten. What is the number?

19 ○ 10 ○ 91 ○ 9 ○

4 Which sign makes the number sentence true?

$34 + 28 \ \square \ 62$

− ○ + ○ = ○ > ○

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5

$$\begin{array}{r} 30 \\ +\ 70 \\ \hline \end{array}$$

10 ○ 85 ○ 90 ○ 100 ○

6 Look at the graph. How many shells did Nina and Pat collect altogether?

Shells Collected

Nina	
Pat	

Key: Each shell = 2

24 ○ 18 ○ 20 ○ 22 ○

7

$$\begin{array}{r} 32 \\ +\ 32 \\ \hline \end{array}$$

4 ○ 14 ○ 54 ○ 64 ○

8 Saul had nineteen pencils. He found some more. Now he has thirty. Which number sentence could be used to find how many pencils he found?

$19 + 30 = \square$ ○ $19 + \square = 30$ ○

$30 + 30 = \square$ ○ $19 - \square = 30$ ○

9 What is the total juice sold?

Boxes of Juice Sold

Day	Tally	Number
Friday	𝍸 𝍸 𝍸 𝍸 |	21
Saturday	𝍸 𝍸 𝍸 𝍸 𝍸	25
Sunday	𝍸 𝍸 𝍸 𝍸 |||	23

44 ○ 54 ○ 79 ○ 89 ○

10 Seth counted thirty-five bricks. Miguel counted twenty-seven bricks. How many bricks did they count altogether?

_____ + _____ = _____

STOP

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CHAPTER 6

Two-Digit Subtraction

Review Vocabulary

regroup

estimate

Explore

You are on floor 45. You push the elevator button to go to floor 40. How many floors will you go down?

_____ floors

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CORBIS

Name _____

Math Online
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 6?

Write how many.

1. How many tens are in 30? _____
2. How many tens are in 70? _____
3. How many tens are in 90? _____

Use the number line. Round to the nearest ten.

4. 26 _____
5. 18 _____
6. 13 _____
7. 31 _____
8. 35 _____
9. 22 _____

Subtract.

10. 4 − 3 = _____
11. 5 − 3 = _____
12. 9 − 6 = _____
13. 8 − 2 = _____
14. 7 − 2 = _____
15. 6 − 5 = _____

Solve.

16. Maggie has 10 animal crackers in her lunch. If Jeff eats 4 of Maggie's animal crackers, how many animal crackers are left?

_____ ◯ _____ ◯ _____ animal crackers

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This page checks skills needed for Chapter 6.

MATH at HOME

Dear Family,

Today my class started Chapter 6, **Two-Digit Subtraction**. In this chapter, I will learn to subtract two-digit numbers. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Count out 50 beans, paper clips, or buttons. Have your child close his or her eyes while you take some of them away. Count the items left on the table and figure out how many are missing.

Review Vocabulary

regroup to take apart a number to write it in a new way

estimate to find a number close to an exact amount

MathOnline Click on www.eGlossary.com to find out more about these words. There are 12 languages.

Books to Read

Math for All Seasons
by Gregory Tang
Scholastic Press, 2002.

The Relatives Came
by Cynthia Rylant
Simon & Schuster Children's Publishing, 1985.

Shark Swimathon
by Stuart J. Murphy
Harper Collins Publishers, 2001.

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Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 6, Sustracción con dos dígitos. En este capítulo, aprenderé a restar números de dos dígitos. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Cuenten 50 frijoles, clips o botones Pídanle a su hijo(a) que cierre los ojos mientras ustedes retiran algunos. Cuenten los objetos que quedan en la mesa y averigüen cuántos faltan.

Repaso de vocabulario

inverso lo opuesto; la adición y la sustracción son operaciones inversas.

reagrupar separar un número para escribirlo de una nueva manera

estimar hallar un número cercano a una cantidad exacta

Math Online Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Las matemáticas para todas las estaciones
de Gregory Tang, Scholastic Press, 2002.

Vinieron los parientes
de Cynthia Rylant
Simon & Schuster Children's Publishing, 1985.

Maratón de nado de tiburones
de Stuart J. Murphy, Harper Collins Publishers, 2001.

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Name _____

Subtract Tens

Get Ready

Main Idea

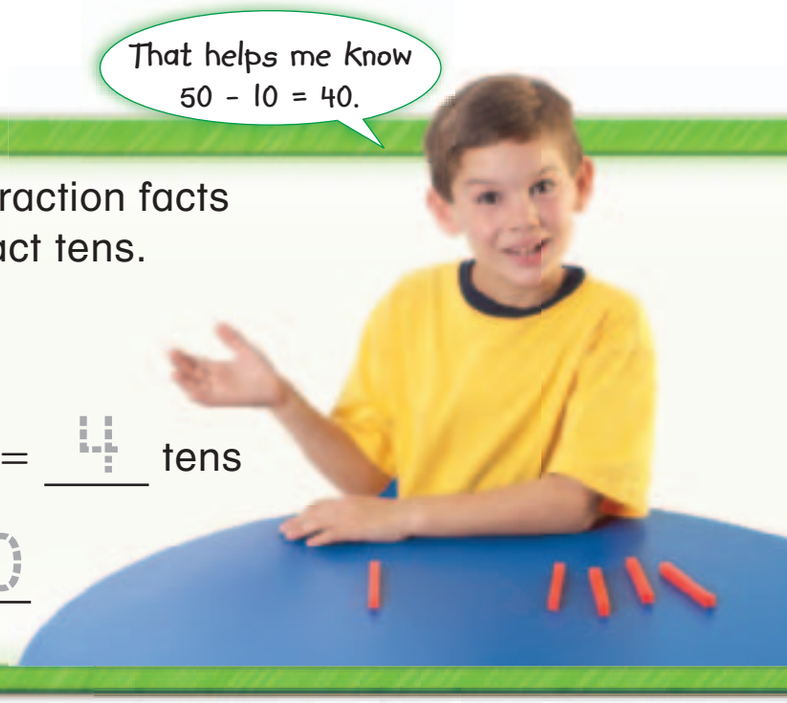
I will use subtraction facts to subtract tens.

You can use subtraction facts to help you subtract tens.

5 − 1 = 4

5 tens − 1 ten = 4 tens

50 − 10 = 40



Check

Subtract. Use a subtraction fact and to help you.

1. 6 − 4 = _____

   6 tens − 4 tens = _____ tens

   60 − 40 = _____

2. 4 − 2 = _____

   4 tens − 2 tens = _____ tens

   40 − 20 = _____

3. 3 tens − 1 ten = _____ tens

   30 − 10 = _____

4. 5 tens − 2 tens = _____ tens

   50 − 20 = _____

5. 80 − 40 = _____

6. 70 − 30 = _____

7. Talk About It — How does knowing 9 − 6 help you find 90 − 60?

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Richard Hutchings

Practice

Subtract. Use a subtraction fact and to help you.

8. 4 tens − 3 tens = ___ ten

40 − 30 = ___

9. 6 tens − 3 tens = ___ tens

60 − 30 = ___

10. 5 tens − 3 tens = ___ tens

50 − 30 = ___

11. 6 tens − 1 ten = ___ tens

60 − 10 = ___

12. 60 − 40 = ___

13. 70 − 40 = ___

14. 20 − 10 = ___

15. 80 − 30 = ___

16. 70 − 30 = ___

17. 40 − 20 = ___

18. 70 − 60 = ___

19. 90 − 50 = ___

20. 50 − 20 = ___

21. 80 − 20 = ___

22. 90 − 60 = ___

23. 60 − 20 = ___

Problem Solving

Thinking Math Solve.

24. What is 2 tens from 5 tens? _____ − _____ = _____

25. What is 3 tens from 4 tens? _____ − _____ = _____

26. What is 2 tens from 6 tens? _____ − _____ = _____

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Math at Home Activity: Place 6 dimes (tens) on a table. Cover 4 dimes (tens). Ask your child how many dimes are left. 60¢ − 40¢ = 20¢

Name _____

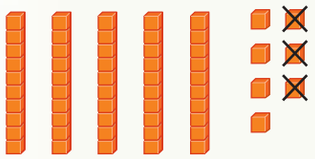
Count Back Tens and Ones

Get Ready

Main Idea

I will count back by tens and ones to subtract.

Find 57 − 3.
Count back by ones.



57 − 3 = 54

Think
Start at 57.
56, 55, 54.

Find 57 − 30.
Count back by tens.

57 − 30 = 27

Think
Start at 57.
47, 37, 27.

Check

Count back to subtract. Write the difference.

1. 37 − 2 = 35

Think
36, 35

2. 63 − 3 = _____

3. 69 − 3 = _____

4. 46 − 1 = _____

5. 29 − 3 = _____

6. 55 − 20 = _____

7. 37 − 20 = _____

8. 63 − 30 = _____

9. 69 − 50 = _____

10. 46 − 30 = _____

Think
36, 26, 16

11. Talk About It — Explain how you solved Exercises 2 and 6.

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Practice

Remember
To subtract by tens, count back by tens.

Count back to subtract. Write the difference.
Use ▭▭▭▭▭▭▭▭▭▭ to help.

12. 24 − 2 = _____

13. 79 − 30 = _____

14. 78 − 20 = _____

15. 79 − 3 = _____

15. 96 − 1 = _____

17. 96 − 10 = _____

18. 73 − 2 = _____

19. 54 − 3 = _____

20. 24 − 20 = _____

21. 34 − 10 = _____

22. 61 − 1	**23.** 6 − 2	**24.** 68 − 3	**25.** 78 − 1
26. 87 − 30	**27.** 45 − 20	**28.** 87 − 3	**29.** 66 − 1

H.O.T. Problem

30. Lamont and Carmen each have 5 dimes and 7 pennies. Lamont spends 3 pennies. Carmen spends 2 dimes. Who has more money? Tell how you know.

_____

_____

_____

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Math at Home Activity: Ask your child to count back by tens to answer this problem: 53 − 20.

Name _____

Regroup Tens as Ones

Hands-On Activity

Get Ready

Main Idea

I will regroup to find differences.

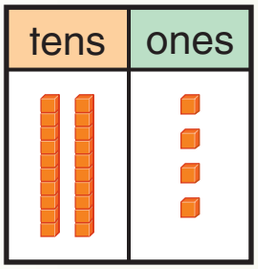
Review Vocabulary

regroup

Find 24 − 8.

Step 1:

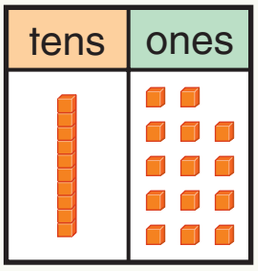
Use and to show 24.



2 tens 4 ones

Step 2:

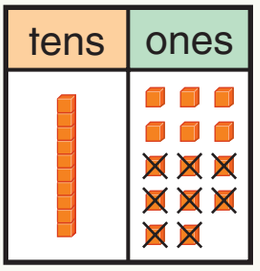
Subtract 8 ones. Do you need more ones? Regroup 1 ten as 10 ones.



1 ten 14 ones

Step 3:

Now there are enough ones. Subtract 8 ones.



1 ten 6 ones

24 − 8 = 16

Check

Use WorkMat 6 and and to subtract.

	Do you need more ones to subtract?	Write the difference.
1. 31 − 4	no yes	31 − 4 = _____
2. 27 − 50	no yes	27 − 5 = _____

3. Talk About It — How do you know when you need to regroup? Explain.

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Practice

Use WorkMat 6 and and to subtract.

Remember
If there are not enough ones to subtract, regroup 1 ten as 10 ones.

	Do you need more ones to subtract?	Write the difference.
4. 42 − 6	no yes	42 − 6 = _____
5. 21 − 2	no yes	21 − 2 = _____
6. 35 − 9	no yes	35 − 9 = _____
7. 40 − 8	no yes	40 − 8 = _____
8. 56 − 5	no yes	56 − 5 = _____
9. 22 − 6	no yes	22 − 6 = _____
10. 33 − 4	no yes	33 − 4 = _____
11. 43 − 3	no yes	43 − 3 = _____

12. WRITING IN MATH If you subtract 5 from 23,will the difference be less than 20 or greater than 20? Explain.

_____

_____

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Math at Home Activity: Have your child use straws to show you how to subtract 7 from 25.

Name _____

Problem-Solving Strategy

Write a Number Sentence

Main Idea

I will write a number sentence to solve problems.

There are 10 bees on a flower. 4 bees fly away.

How many bees are now on the flower?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?

Solve

Write a number sentence.

Check

Look Back
Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Write a number sentence to solve.

1. There are 15 ants in an ant hill. 3 ants leave. How many are there now?

_____ ◯ _____ ◯ _____ ants

---

2. The grey squirrel found 12 acorns. Then he found 5 more. How many acorns does he have now?

What I know
12 acorns
5 more acorns

_____ ◯ _____ ◯ _____ acorns

Your Turn

Write a number sentence to solve.

3. There are 18 lions in the yard at the zoo. 8 lions ran into the lion house. How many lions are left in the yard?

_____ ◯ _____ ◯ _____ lions

---

4. There are 22 parrots in a tree. 3 more join them. How many total parrots are there?

_____ ◯ _____ ◯ _____ parrots

---

5. John planted 10 daisies. His sister, Sarah, planted 9 daisies. How many more daisies did John plant than Sarah?

_____ ◯ _____ ◯ _____ daisies

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Subtract.

1. 80 − 20 = _____	**2.** 80 − 20 = _____	**3.** 60 − 10 = _____

Count back to subtract.

4. 88 − 30 = _____	**5.** 75 − 3 = _____	**6.** 28 − 2 = _____
7. 82 − 20	**8.** 49 − 1	**9.** 54 − 40

Use WorkMat 6 and and to subtract.

Show the first number.	Do you need more ones to subtract?	Write the difference.
10. 25 − 7	no yes	25 − 7 = _____
11. 33 − 2	no yes	33 − 2 = _____
12. 60 − 4	no yes	60 − 4 = _____

13. Matt had fifty-four markers. He let Paul borrow 30 of them. How many markers does he have left?

_____ markers

14. There are 15 students in line. Five students get out of line. How many students are in line now?

_____ students

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Spiral Review Chapters 1–6

Subtract. Circle the problems that you use doubles to subtract.

15. $9 - 4 =$ _____

16. $12 -$ _____ $= 6$

17. $14 - 7 =$ _____

18. $18 -$ _____ $= 8$

Find the missing number.

19. $16 - 8 =$ _____

$8 +$ _____ $= 16$

20. $14 - 5 =$ _____

$5 +$ _____ $= 14$

Solve.

21.
$$\begin{array}{r} 15 \\ -\ \square \\ \hline 9 \end{array}$$

22.
$$\begin{array}{r} 7 \\ -\ \square \\ \hline 3 \end{array}$$

23.
$$\begin{array}{r} 17 \\ -\ \square \\ \hline 8 \end{array}$$

Circle your estimate.

24.

about 10 about 20 about 30

25.

about 10 about 20 about 30

Round each addend to the nearest ten. Estimate the sum.

26. $31 + 39$

_____ + _____ = _____

27. $53 + 26$

_____ + _____ = _____

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Mike Houghton/StudiOhio

Name _____

Hands-On Activity

Subtract One-Digit Numbers from Two-Digit Numbers

Get Ready

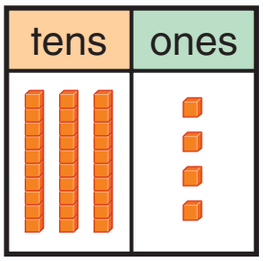
Main Idea

I will subtract one-digit numbers from two-digit numbers.

Find 34 − 6.

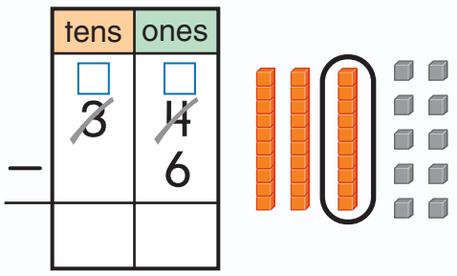
Step 1

Show 34.
Can you subtract 6 ones?



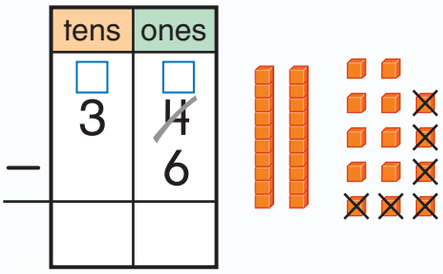
Step 2

Regroup 1 ten as 10 ones.
4 ones + 10 ones = 14 ones.
Now there are 14 ones.



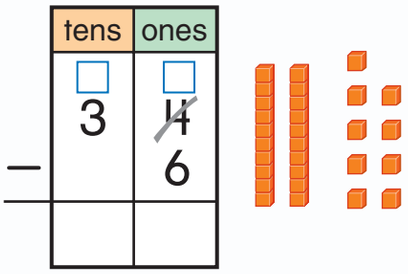
Step 3

Subtract the ones.



Step 4

Then subtract the tens.

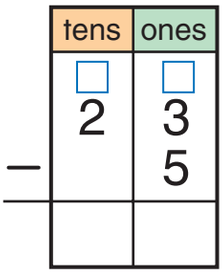


34 − 6 = 28

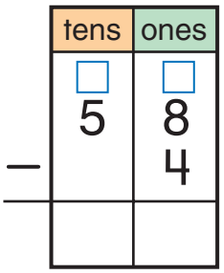
Check

Use WorkMat 6 and and to subtract.

1.



2.



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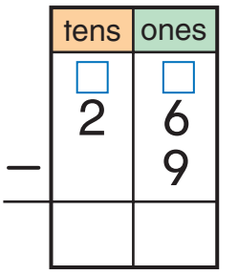

4. Talk About It How do you regroup 1 ten?

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Practice

Subtract.

5.

	tens	ones
	□	□
−	2	7
		8

6.

	tens	ones
	□	□
−	3	2
		7

7.

	tens	ones
	□	□
−	3	6
		5

8.

	tens	ones
	□	□
−	3	4
		7

9.

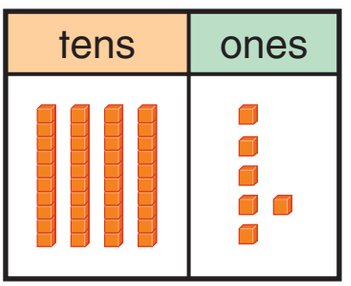
	tens	ones
	□	□
−	7	4
		3

10.

	tens	ones
	□	□
−	5	4
		4

Problem Solving

11. Thinking Math You have 4 tens and 6 ones on a mat. What is the greatest number of ones you can subtract **without** having to regroup? How do you know?



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Math at Home Activity: Ask your child to show you how to subtract 8 from 27.

Name _____

Subtract Two-Digit Numbers

Hands-On Activity

Get Ready

Main Idea

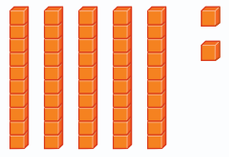
I will subtract two-digit numbers.

Find 52 − 17.

Step 1

Show 52.
Can you subtract 7 ones?

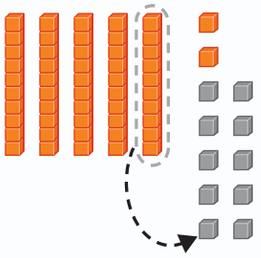
	tens	ones
	□	□
	5	2
−	1	7



Step 2

Regroup 1 ten as 10 ones.
Now there are 12 ones.

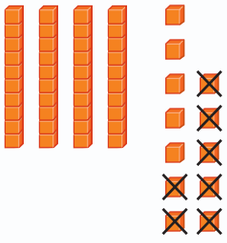
	tens	ones
	□	□
	~~5~~	~~2~~
−	1	7



Step 3

Subtract the ones.

	tens	ones
	□	□
	~~5~~	~~2~~
−	1	7

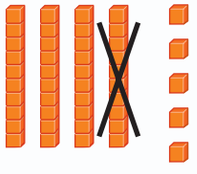


12 ones − 7 ones = 5 ones

Step 4

Then subtract the tens.

	tens	ones
	□	□
	~~5~~	~~2~~
−	1	7



52 − 17 = 35

Check

Use WorkMat 7 and to subtract.

1.

	tens	ones
	□	□
	~~3~~	~~5~~
−	1	7

2.

	tens	ones
	□	□
	4	7
−	2	4

3.

	tens	ones
	□	□
	4	1
−	1	6

4. Talk About It

How is subtracting 41 − 16 different from subtracting 41 − 6?

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Practice

Subtract.

5.

	tens	ones
	□	□
−	5	0
	2	4

6.

	tens	ones
	□	□
−	8	2
	3	7

7.

	tens	ones
	□	□
−	3	7
	2	9

8.

	□	□
	2	6
−	1	9

9.

	□	□
	7	4
−	1	8

10.

	□	□
	4	6
−	2	3

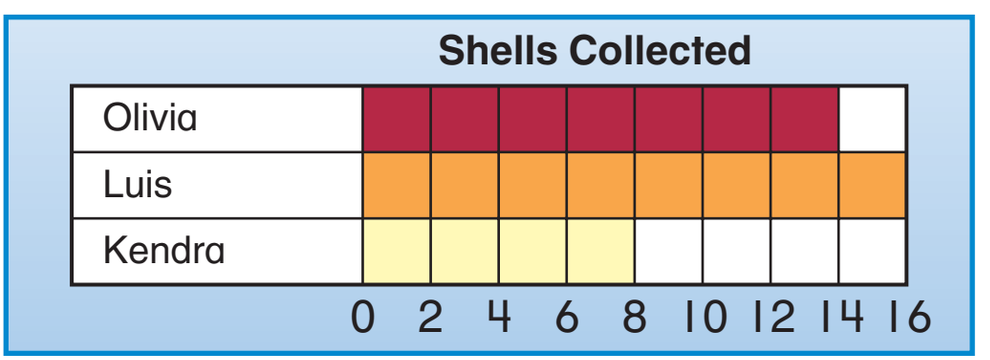
11. 87 − 72 = ____

12. 34 − 26 = ____

13. 47 − 36 = ____

Problem Solving

14. Write a question for the answer.



If the answer is Olivia, the question could be...

_____ ?

If the answer is 24, the question could be...

_____ ?

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Name _____

Find the difference. **Remember** to regroup if you do not have enough ones.

1. 15 − 5	**2.** 59 − 53	**3.** 73 − 70	**4.** 17 − 8
5. 51 − 39	**6.** 32 − 25	**7.** 61 − 59	**8.** 62 − 47
9. 72 − 58	**10.** 32 − 19	**11.** 80 − 79	**12.** 63 − 59
13. 42 − 37	**14.** 27 − 19	**15.** 70 − 57	**16.** 23 − 13

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Game Time

Hit the Target

Subtract

You Will Need

-
- Paper and pencil

How to play:

- Each player puts their on opposite sides of the target.
- Take turns with a partner.
- Think of a subtraction problem that has an answer on the circle. Say it with your partner.
- Move your to the next circle if you are right. Write your number sentence down.
- The first player to the target wins.

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Name _____

Check Subtraction

Get Ready

Main Idea

I will use addition to check subtraction.

Check 25 − 10 = 15.

Subtract

$$\begin{array}{r} 25 \\ -\ 10 \\ \hline 15 \end{array}$$

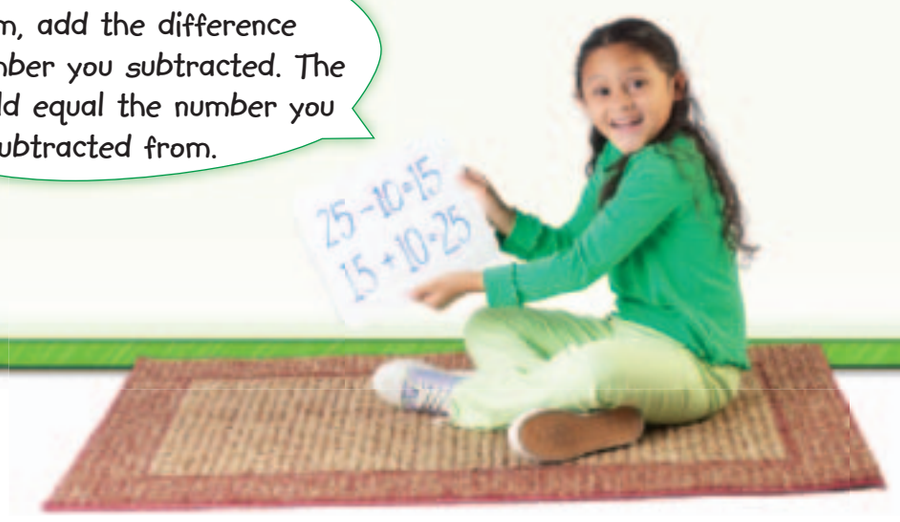
Add these numbers to subtract.

Check by Adding

$$\begin{array}{r} 15 \\ +\ 10 \\ \hline 25 \end{array}$$

If this is the number you subtract from, your answer is correct.

To check a subtraction problem, add the difference to the number you subtracted. The sum should equal the number you subtracted from.



Check

Subtract. Then check by adding.

1. $\begin{array}{r} 36 \\ -\ 20 \\ \hline 16 \end{array}$ $\begin{array}{r} \\ +\ \\ \hline 36 \end{array}$	**2.** $\begin{array}{r} 52 \\ -\ 12 \\ \hline \end{array}$ $\begin{array}{r} \\ +\ \\ \hline \end{array}$	**3.** $\begin{array}{r} 21 \\ -\ 3 \\ \hline \end{array}$ $\begin{array}{r} \\ +\ \\ \hline \end{array}$
4. $\begin{array}{r} 32 \\ -\ 14 \\ \hline \end{array}$ $\begin{array}{r} \\ +\ \\ \hline \end{array}$	**5.** $\begin{array}{r} 85 \\ -\ 48 \\ \hline \end{array}$ $\begin{array}{r} \\ +\ \\ \hline \end{array}$	**6.** $\begin{array}{r} 42 \\ -\ 17 \\ \hline \end{array}$ $\begin{array}{r} \\ +\ \\ \hline \end{array}$

7. Talk About It — Explain the relationship between addition and subtraction.

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Richard Hutchings

Practice

Remember
To check, add the number you subtracted and the difference.

Subtract. Then check by adding.

8. 57 − 30 + ____	**9.** 60 − 10 + ____	
10. 42 − 5 + ____	**11.** 75 − 41 + ____	**12.** 67 − 32 + ____
13. 41 − 26 + ____	**14.** 74 − 28 + ____	**15.** 56 − 28 + ____
16. 56 − 11 + ____	**17.** 34 − 9 + ____	**18.** 47 − 31 + ____

Data File

California is a great place for people who enjoy surfing.

Day	Wave Height	People Surfing
Friday	12 feet	97
Saturday	9 feet	38

How many more people were surfing on Friday than on Saturday? Check your answer.

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Math at Home Activity: Ask your child to solve 23 − 16. Then have your child show you how to check the answer.

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Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve a problem.

Your Mission:
Find the difference between two numbers.

I subtracted two numbers.
The greater number is 14.
The next number is 2 more than 9.
What is the difference between the two numbers?

Understand

What do I know?
Underline what you know.
What do I need to find out?
Circle it.

Plan

How will I solve the problem?

Solve

One way is to act it out.

Check

Look Back
Does my answer make sense?

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Richard Hutchings

Mixed Problem Solving

Problem-Solving Strategies

- Act it out
- Write a number sentence
- Draw a picture

Choose a strategy.
Solve.

1. There are 45 lizards in the pet shop. Each day, 5 lizards are purchased. How many lizards are left after 7 days?

_____ lizards

2. Willy had 2 sets of 10 cubes. He took 2 cubes from each set. How many cubes does he have left?

_____ cubes

3. Janet went fishing with her uncle. They caught 23 fish between the two of them. Her uncle caught 12 fish. How many did Janet catch?

_____ fish

4. John's dog loves dog bones. There are 60 dog bones in a box. He is only allowed to have 2 bones a day. How many bones will he have left after 10 days?

_____ bones

5. If you add two numbers, the sum is 78. One of the numbers is 26. What is the other number?

_____

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Estimate Differences

Get Ready

Main Idea

I will estimate to find the difference.

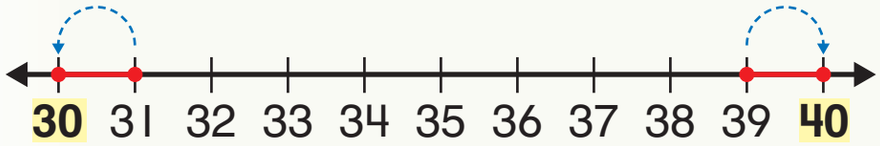
Review Vocabulary

estimate

round

You can estimate when you do not need an exact answer. Estimate 39 − 31.

Step 1 Round each number to the nearest 10.



31 is closer to 30.
39 is closer to 40.

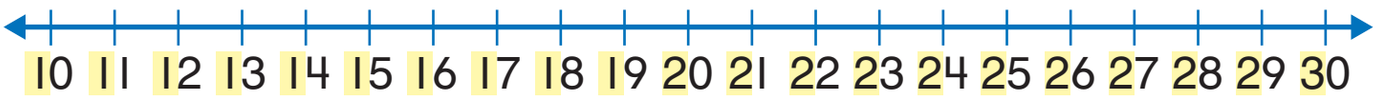
Step 2 Subtract the tens to estimate the difference.

39 rounds to 40
− 31 rounds to − 30

The difference is about 10.

Check

Round each number to the nearest ten.
Estimate the difference.



1. 31 − 18 = 13 → 30 − 10 = 20

2. 22 − 14 = _____ → _____ − _____ = _____

3. 45 − 19 = _____ → _____ − _____ = _____

4. Talk About It — Explain how to estimate the difference of 39 and 21.

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Practice

Remember
0, 1, 2, 3, and 4 round down. 5, 6, 7, 8, and 9 round up.

Round each number to the nearest ten.
Estimate the difference.

5. 38 − 27 = ____	**6.** 29 − 23 = ____	**7.** 36 − 28 = ____
8. 43 − 22 = ____	**9.** 58 − 37 = ____	**10.** 45 − 37 = ____
11. 51 − 39 = ____	**12.** 55 − 26 = ____	**13.** 42 − 23 = ____

H.O.T. Problem

14. Explaining Math Look at the chart. What is the difference between the age of the oldest student and the age of the youngest student? Tell who is the oldest and who is the youngest.

Students' Ages	
Sophia	13
Theo	15
Madison	10
Chen	11

_____

_____

_____

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Math at Home Activity: Ask your child to show you how to estimate and solve 46 − 12.

Problem-Solving in Language Arts

Real-World MATH

Shontaja likes to quilt with her grandmother. They are making a quilt that tells the story of their family.

This book belongs to

_____

A

Help Shontaja finish her quilt.

She has 23 pieces left to sew. 14 of them are squares and the rest are triangles. How many more triangles does she need?

_____ triangles

Look at the picture. The pattern tells her that she needs 2 blue squares. The rest should be yellow. How many yellow squares does she need?

_____ yellow squares

D

FOLD DOWN

How can you tell there are 7 people in her family?

_____

Shontaja's grandmother tells her about the tradition of quilting while they work.

She tells Shontaja that quilts were used to help slaves escape on the Underground Railroad. Certain patterns indicated safety and direction. This one is called "Flying Geese." It gave a direction to follow.

Name a direction this quilt could give you.

_____

Name _____

Vocabulary

Draw lines to match.

1. estimate	to find a number close to an exact amount
2. regroup	to take apart a number

Concepts

Subtract.

3. 80 − 10 = _____ **4.** 90 − 20 = _____ **5.** 40 − 20 = _____

Count back to subtract. Write the difference.

6. 74 − 30 = _____ **7.** 75 − 2 = _____ **8.** 36 − 1 = _____

Subtract.

9. 23 − 5	**10.** 55 − 24	**11.** 26 − 19	**12.** 48 − 29
13. 27 − 8	**14.** 32 − 7	**15.** 36 − 5	**16.** 18 − 8
17. 46 − 5	**18.** 30 − 7	**19.** 22 − 8	**20.** 19 − 9

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Find the difference.

17. 45 − 28

18. 59 − 19

19. 74 − 48

20. 85 − 16

21. 65 − 47

22. 75 − 37

23. 43 − 21

24. 32 − 28

25. Peter solved this subtraction problem. Write the addition problem that checks his answer.

$$\begin{array}{r} 57 \\ -\ 30 \\ \hline 27 \end{array} \qquad + ____$$

Round each number to the nearest ten. Estimate the difference.

26. 38 − 23

____ − ____ = ____

27. 33 − 29

____ − ____ = ____

28. There are 18 alligators around the pool at the zoo. 10 alligators slid into the water to swim. How many alligators are left around the pool?

____ ◯ ____ ◯ ____ alligators

29. Ana baked cookies with her mom.They baked 24 cookies. They dropped 15 of them on the floor. How many cookies are left?

____ ◯ ____ ◯ ____ cookies

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Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A What is the answer to this problem?

13 ○ 19 ○ 23 ○ 69 ○

B Matt sees forty-two planes. Kim sees nine planes. About how many more planes does Matt see than Kim?

40 ○ 30 ○ 20 ○ 10 ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 Look at the chart. How many more books has Ezra read than Li?

Reading Club	
Ezra	92 books
Li	85 books
Mike	71 books

7 ○ 14 ○ 17 ○ 21 ○

2 Which sign makes the number sentence true?

75 ☐ 6 = 69

+ ○ = ○ < ○ − ○

3 Which one can be used to check the answer to the problem in the box?

$$\begin{array}{r} 95 \\ -\ 13 \\ \hline 82 \end{array}$$

13 + 82 ○ 82 + 95 ○

82 − 13 ○ 13 + 95 ○

4 What is the solution to this problem?

13 ○ 14 ○ 16 ○ 20 ○

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5 Look at the tally chart. Sue made this tally chart to show the different colors of bike helmets that her classmates own. How many classmates own blue and silver bike helmets?

Bike Helmets	
Color	Number of Classmates
White	𝍸
Blue	𝍸 𝍸
Silver	𝍸 𝍸 𝍸
Black	𝍸 𝍸

14 ○ 17 ○ 21 ○ 19 ○

6 What is the value of the five in fifty-nine?

60 ○ 50 ○ 9 ○ 5 ○

7 What is another way to write sixty-seven?

6 + 7 ○ 60 + 7 ○

70 + 6 ○ 10 + 3 ○

8 Look at the chart. How many cans did Gina and Amy collect?

Cans Collected	
Gina	44
Amy	38

72 cans ○ 74 cans ○

82 cans ○ 84 cans ○

9 There are forty-seven pink roses. There are three fewer red roses. How many roses are red?

34 ○ 40 ○ 44 ○ 50 ○

10 Students take forty-five books out of the library. Twenty-three books have been returned. How many books have not been returned?

18 ○ 20 ○ 22 ○ 23 ○

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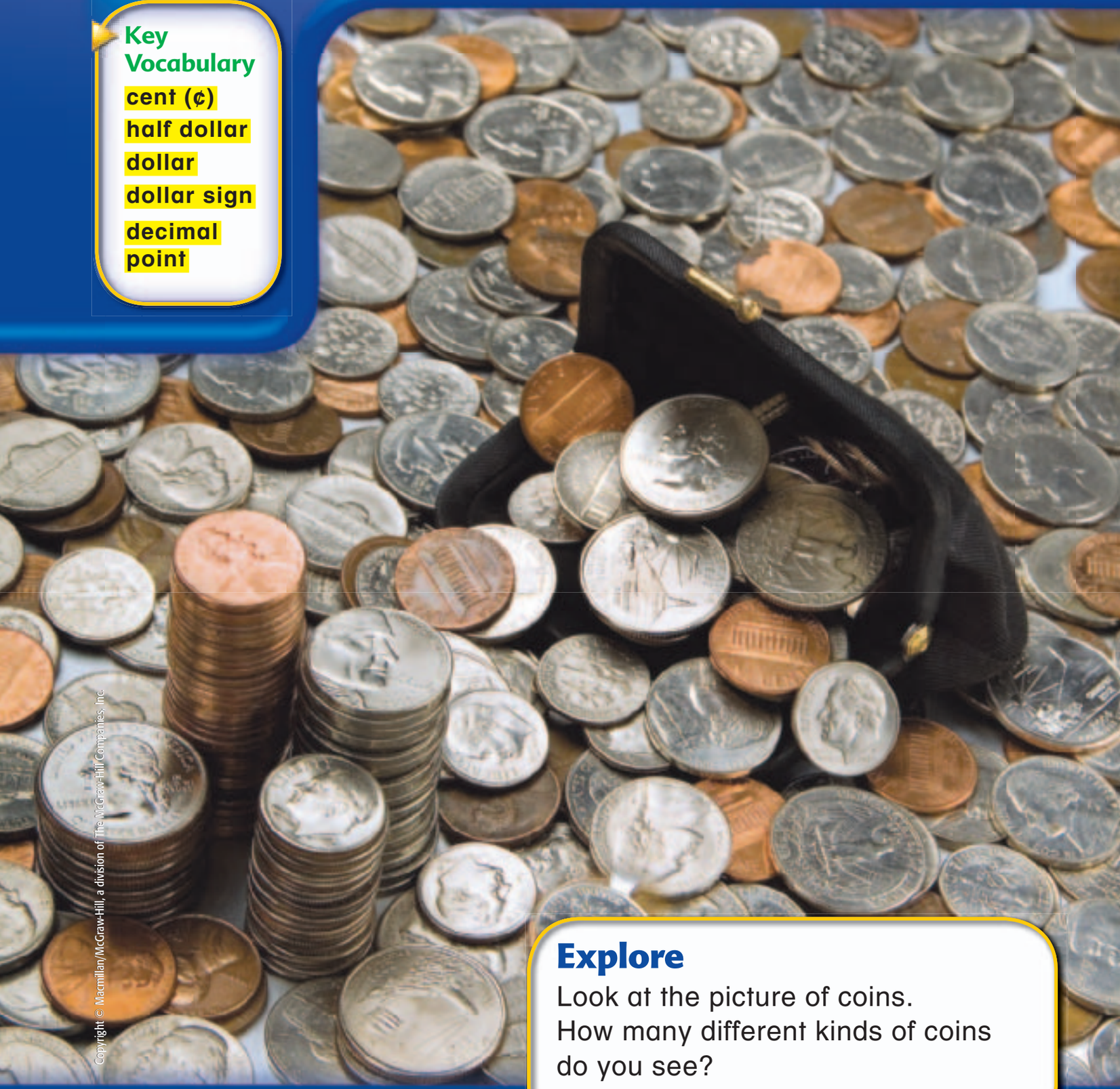
CHAPTER 7

Money

Key Vocabulary

- cent (¢)
- half dollar
- dollar
- dollar sign
- decimal point



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Explore

Look at the picture of coins. How many different kinds of coins do you see?

_____

Mike Houghton/StudiOhio

Name _____

Math Online
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 7?

Match each coin to its value.

1. penny — 10 cents

2. nickel — 5 cents

3. dime — 1 cent

Add or subtract.

4. $\begin{array}{r} 23 \\ +\ 14 \\ \hline \end{array}$

5. $\begin{array}{r} 45 \\ -\ 31 \\ \hline \end{array}$

6. $\begin{array}{r} 76 \\ +\ 15 \\ \hline \end{array}$

7. $\begin{array}{r} 82 \\ -\ 47 \\ \hline \end{array}$

8. $\begin{array}{r} 56 \\ +\ 24 \\ \hline \end{array}$

Skip count by 5s.

9. 5, 10, 15, _____, 25, _____, 35, _____, _____

10. Ellie earns 10 pennies every day this week. How many pennies will Ellie have on Thursday, Friday, and Saturday?

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10 pennies	20 pennies	30 pennies	40 pennies	_____ pennies	_____ pennies	_____ pennies

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This page checks skills needed for Chapter 7.

MATH at HOME

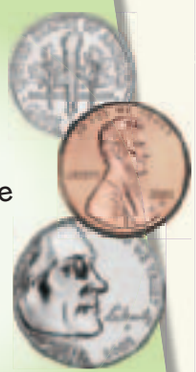
Dear Family,

Today my class started Chapter 7, **Money**. In this chapter, I will learn to add money, subtract money, and make change. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Look at different coins with your child and discuss ways to identify them. Have your child tell one thing about each coin. For example, have them tell its name, value, or what is on the coin.

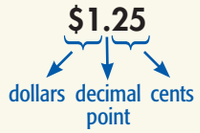


Key Vocabulary

half dollar worth 50 cents, 50¢ or $0.50

dollar worth 100 cents, 100¢ or $1.00

decimal point a point used in a number

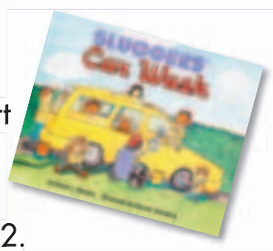


MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

The Go-Around Dollar by Barbara Johnston Adams Simon & Schuster Children's Publishing, 1992.

Sluggers Car Wash by Stuart J. Murphy Harper Collins Publishers, 2002.



Pigs Will Be Pigs by Amy Axelrod, Aladdin, 1997.

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Eclipse Studios

MATEMÁTICAS en CASA

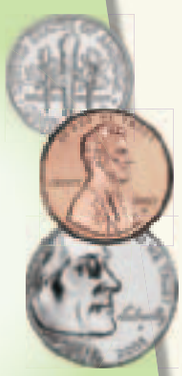
Estimada familia,

Hoy mi clase comenzó el Capítulo 7, **El dinero**. En este capítulo, aprenderé a sumar y a restar dinero y a dar vuelto. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Observen diferentes monedas con su hijo(a) y hablen sobre las formas de identificarlas. Pida a su hijo(a) que le diga algo sobre cada moneda. Por ejemplo, el nombre, el valor o qué muestra la moneda.



Vocabulario clave

medio dólar vale 50 centavos
50¢ ó $0.50

dólar vale 100 centavos
100¢ ó $1.00

punto decimal punto que se usa en un número

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros para leer

El dólar viajero
de Barbara Johnston Adams Simon & Schuster Children's Publishing, 1992.

El lavado de autos de los Sluggers
de Stuart J. Murphy Harper Collins Publishers, 2002.

Max se gana un millón
de Herman Charlotte Holt, 1991.

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Name _____

Pennies, Nickels and Dimes

Get Ready

Main Idea

I will skip count and count on to find the value of a group of coins.

Vocabulary

cent ¢
penny
nickel
dime

You can count to find the value of coins.
Start with the greatest value.

dime = 10¢ **nickel** = 5¢ **penny** = 1¢

Count by 10s. Count by 5s. Count by 1s.

10¢ 20¢ 25¢ 30¢ 31¢ 32¢

32¢ total

Check

Count the value of the coins. Use the coins to help.

1.

____¢, ____¢, ____¢, ____¢, ____¢, ____¢ ____¢

2.

____¢, ____¢, ____¢, ____¢, ____¢, ____¢ ____¢

3. Talk About It — How would you count 3 dimes and 1 nickel?

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Practice

Count to find the value.

4.

10¢, 15¢, _____¢, _____¢, _____¢, _____¢ _____¢ total

5.

_____¢, _____¢, _____¢, _____¢, _____¢, _____¢ _____¢ total

6.

_____¢, _____¢, _____¢, _____¢, _____¢, _____¢ _____¢ total

Problem Solving

7. Explaining Math Jack has 5 dimes and Nick has 10 nickels. Who has more money? Explain.

_____

_____

_____

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Math at Home Activity: Ask your child to count a collection of these coins totaling less than $1.00.

Name _____

Hands-On Activity

Quarters and Half-Dollars

Get Ready

Main Idea

I will count on to find the value of a group of coins.

Vocabulary

quarter

half-dollar

A **quarter** is worth 25 cents. Skip count by 25s.

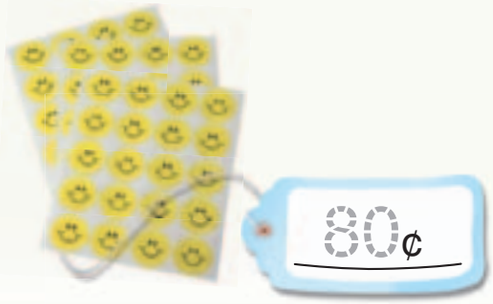
25¢, 50¢

A **half-dollar** is worth 50 cents. Skip count by 50s.

50¢, 100¢

Find the value of these coins. Start with the coin that has the greatest value.

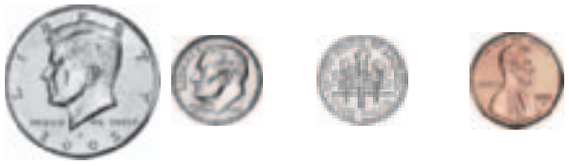
50¢, 75¢, 80¢,



Check

Count the value of the coins. Use coins to help.

1.



____¢, ____¢, ____¢, ____¢

2.

____¢, ____¢, ____¢, ____¢, ____¢

3. Talk About It

How would you show 50¢ using four coins? Explain.

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Practice

Count the value of the coins. Use coins to help.

4.

_____¢, _____¢, _____¢, _____¢, _____¢, _____¢,

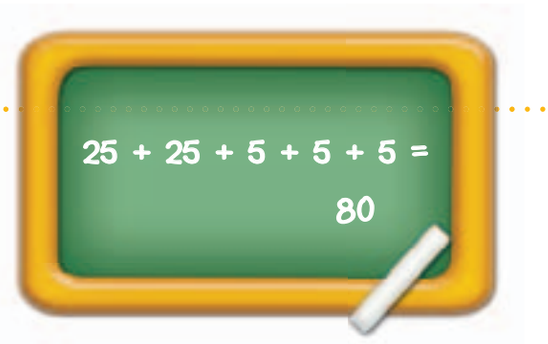
5.

_____¢, _____¢, _____¢, _____¢, _____¢

6.

_____¢, _____¢, _____¢, _____¢, _____¢

H.O.T. Problem



7. Make it Right

Jack counted his money.
He says he has 80¢.

Why is Jack wrong? _____

_____

Make it right. _____

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(cr)Royalty-Free/Corbis, (tr)Squared Studios/Getty Images

Math at Home Activity: Ask your child to find the value of 1 half-dollar, 1 quarter, 1 dime, and 1 nickel.

Name _____

Count Coins

Hands-On Activity

Get Ready

Main Idea

I will count on to the value of a group of coins.

Is there enough money to buy the hat?

Find the total value of the count. Start with the coin with the greatest value.

50¢, 75¢, 85¢, 86¢,

yes

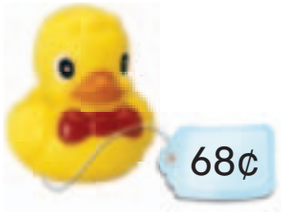
no

Check

Count to find the value. Do you have enough money to buy the item? Circle yes or no.

1.

50¢, 60¢, 65¢, 66¢



yes

no

2.

_____¢, _____¢, _____¢, _____¢, _____¢

yes

no

3. Talk About It

Why is it helpful to put coins in order by their value before you count them?

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IndexOpen

Practice

Count to find the value. Do you have enough money to buy the item? Circle yes or no.

Remember
Put the coins in order. Start with the coin of the greatest value. Count on.

4. _____¢, _____¢, _____¢, _____¢, _____¢		yes no
5. _____¢, _____¢, _____¢, _____¢, _____¢		yes no
6. _____¢, _____¢, _____¢, _____¢, _____¢		yes no

Problem Solving

7. Number Sense Kayla has 1 half-dollar, 2 dimes, and 2 pennies. She wants to buy a hat for 75¢. Does she have enough money? Explain.

_____

_____

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Getty Images

Math at Home Activity: Give your child a group of coins to count. Have our child put the coins in order starting with the greatest value.

Name _____

Problem-Solving Strategy

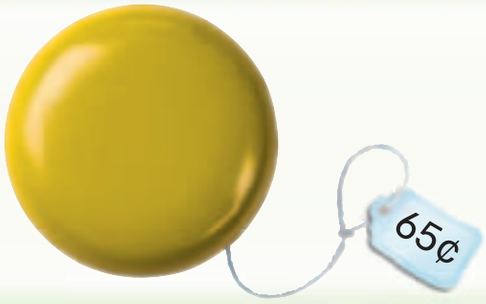
Act It Out

Main Idea

I will act it out to solve the problem.

Art has 1 quarter, 3 dimes, 2 nickels, and 4 pennies.

Does he have enough money to buy this toy?



Understand

What do I know? Underline what you need to know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will use coins to show how much money Art has.
I will count the final total.

Solve

Act out the problem.

Art has 69 ¢. The toy costs 65 ¢.

65 ¢ < 69 ¢

Does Art have enough money to buy the toy? yes

Check

Look Back
Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Use coins to act out and solve the problems.

1. Tina has 1 quarter in her bank. Her mom gives her a nickel. Her dad gives her a dime. How much money does Tina have?

Think
I can count on 25, 30, 40.

_____

2. Mark has 2 quarters, 1 dime, and 1 penny. He wants to buy a toy truck for 55¢. Does he have enough money to buy the toy truck?

_____

Your Turn

Use coins to act out and solve the problems.

3. Ben has 1 dollar, 1 quarter, and 1 dime. Does he have enough to buy a toy dinosaur for $1.45?

_____

4. Kim is at the toy store. She has 1 half-dollar and 1 quarter. What is the most Kim can pay for a toy?

_____

5. Ned has 2 quarters, 3 dimes, and 2 nickels. He has enough money to buy a race car. How much is the race car?

_____

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Dollar

Hands-On Activity

Get Ready

Main Idea

I will use coins to make one dollar.

Vocabulary

dollar

dollar sign

decimal point

A **dollar** has a value of 100 cents or 100¢. When you write one dollar, use a **dollar sign** and a **decimal point**. A decimal point separates dollars from cents.

One-dollar bill

$ 1.00

dollar sign — decimal point

You can use different coins to make 100¢.

100 pennies = 100 cents	20 nickels = 100 cents	10 dimes = 100 cents	4 quarters = 100 cents	2 half dollars = 100 cents

Gin needs $1 to buy a coloring book.
Here are the coins Gin has in her purse.

Does she have enough for the coloring book? yes

(no)

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Check

Use these coins to make one dollar. Write the coins you used.

Amount					
$1.00	1. 2	2. _____	3. _____	4. _____	5. _____

You need exactly $1.00 in change to buy stickers. Count the coins. Write the value. Circle the combinations that equal $1.00.

6.

_____

7.

_____

8.

_____

9.

_____

10. Talk About It Look back at the chart. What other coin combinations make a dollar?

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GO on

Name _____

Practice

Think
Use the dollar sign and a decimal point to write one dollar.

You need exactly $1.00 to buy bottled water.
Count the coins. Write the value.
Circle the combinations that equal $1.00.

11.

_____

12.

_____

13.

_____

14.

_____

15.

_____

16.

_____

17.

_____

18.

_____

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For a bus ticket you need exactly $1.00 in change. Count the coins. Write the value. Circle the combinations that equal $1.00.

19.

_____

20.

_____

21.

_____

22.

_____

Data File

This is California's state quarter. It was released to the public on January 31, 2005.

The quarter has the words "California 1850", which tells the year that California became a state. It has pictures of John Muir, Yosemite Valley, and a flying California condor.

23. James has 4 California state quarters. How much money does he have?

_____

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Math at Home Activity: Ask your child to show you coin combinations that equal $1.00.

Name _____

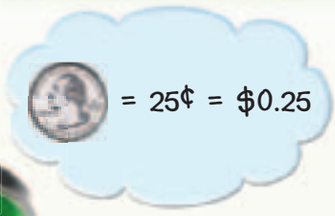
Dollars and Cents

Get Ready

Main Idea

I will use a decimal and dollar sign to show money.

How much money does each wallet have?



$0.25, $0.50, $0.75, $0.85,

$0.95, $1.05, $1.15

This wallet has $1.15 in it.

$1.00, $1.10, $1.20, $1.21

This wallet has $1.21 in it.

dollars cents

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Check

Count the money. Write the amount in dollars and cents.

1.

_____ . _____ total

2.

_____ . _____ total

Draw the bills and coins needed to buy each item.

3. Bottle of glue that costs $2.20.

Draw the bills and coins needed to buy the item.

4. Baseball that costs $4.57.

5. Talk About It Is $0.63 the same as 63¢? Explain.

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GO on

Name _____

Practice

Remember
25¢ = $0.25

Count the money collected on each day.
Write the amount in dollars and cents.

8.

Monday's total: _____

9.

Tuesday's total: _____

10.

Wednesday's total: _____

11.

Thursday's total: _____

12.

Friday's total: _____

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Draw the bills and coins needed to buy each item.

13. Box of crayons that cost $1.05.

14. Scissors that costs $3.35.

15. markers

16. notebook

17. WRITING IN MATH Jenny has 5 coins in her pocket and Michelle has 7 coins in her purse. Jenny has more money than Michelle. Is that possible? Explain.

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Math at Home Activity: Give your child one dollar and several coins. Have your child count the total amount of money.

Name _____

Count to find the value of the coins.

1.

_____¢ _____¢ _____¢ _____¢ _____¢ _____¢ _____

2.

_____¢ _____¢ _____¢ _____¢ _____¢ _____

3.

_____

Draw the bills and coins needed to buy the item.

4. puzzle book that costs $4.67

5. Sylvia wants to buy a marker. The marker costs 85¢. She has 2 quarters, 3 dimes, and 1 nickel. Does she have enough money to buy the marker?

yes

no

How much money does she have? _____

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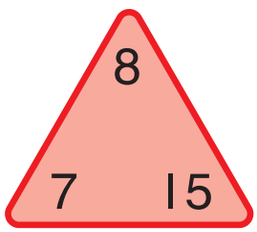
Spiral Review Chapters 1–7

Write <, >, or =

6. 54 ◯ 51
7. 22 ◯ 37
8. 88 ◯ 33
9. 90 ◯ 91
10. 69 ◯ 69
11. 25 ◯ 52

Write the fact family.

12.



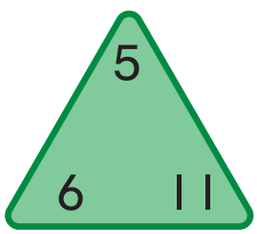
_____ + _____ = _____

_____ + _____ = _____

_____ − _____ = _____

_____ − _____ = _____

13.



_____ + _____ = _____

_____ + _____ = _____

_____ − _____ = _____

_____ − _____ = _____

Find each sum.

9. $\begin{array}{r} 6 \\ 8 \\ +\ 6 \\ \hline \end{array}$

10. $\begin{array}{r} 5 \\ 7 \\ +\ 4 \\ \hline \end{array}$

11. $\begin{array}{r} 8 \\ 9 \\ +\ 9 \\ \hline \end{array}$

12. $\begin{array}{r} 10 \\ 6 \\ +\ 3 \\ \hline \end{array}$

Write the number.

13. 30 tens + 7 ones = _____

14. 90 tens + 1 one = _____

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Name _____

Compare Money Amounts

Get Ready

Main Idea

I will compare money amounts.

Aliyah has this much money.

Does Aliyah have enough money to buy the sticker book?

yes (no)

Check

Remember
50¢ = $0.50

Count. Is there enough money to buy each item? Circle yes or no.

1. _____, _____, _____, _____		yes no
2. _____, _____, _____, _____		yes no

3. Talk About It

Which group has the greatest value? Explain.

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Practice

Count. Is there enough money to buy each item?
Circle yes or no.

5. _____, _____, _____, _____		yes no
6. _____, _____, _____, _____		yes no
7. _____, _____, _____, _____		yes no
8. _____, _____, _____, _____		yes no

H.O.T. Problem

9. Thinking Math Write the value of these coins.
Use >, <, or = to compare the money.

_____ ◯ _____

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Math at Home Activity: Give your child two amounts of money. Ask your child to tell you which amount is more.

Name _____

Is there enough money to buy each item? Circle yes or no.

What I Want to Buy	How Much I Have	Do I have enough?
1.		yes no
2.		yes no
3.		yes no
4.		yes no

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Game Time

Money "Cents"

Add Coins

What you Need

-
- Paper and pencil
-
- Play Money

Take turns with a partner:

- Roll the .
- Move your the number of spaces that you rolled.
- Look at the amount on the space.
- Make that amount using your coins.
- If you land on $1.00, take another turn.
- Play until everyone gets to Finish.
- When you get to Finish, put all of your coins in piles that equal $1.00.
- Who has more money?

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Name _____

Add Money

Get Ready

Main Idea

I will add money.

You add money the same way you add other numbers. Just remember to write either ¢ or $ and a decimal point in your answer.

Find 22¢ + 18¢.

2	1¢	
+ 1	8¢	
3	9¢	

Find $0.34 + $0.10

$0	.	3	4
+ $0	.	1	0
$0	.	4	4

Remember

43¢ + 29¢ is the same as 43 + 29

Check

1.

7	2¢	
+ 1	9¢	
9	1¢	

2.

5	6¢	
+ 2	5¢	

3.

4	3¢	
+ 2	9¢	

4.

$0	.	8	3
+ $0	.	1	7

5.

$0	.	7	9
+ $0	.	3	0

6.

$0	.	3	8
+ $0	.	4	8

7. Talk About It

How is adding money like adding two-digit numbers?
How is it different?

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Practice

Add.

8.
$$\begin{array}{r} 25¢ \\ +\ 50¢ \\ \hline 75¢ \end{array}$$

9.
$$\begin{array}{r} 9\text{ }1¢ \\ +\ \ 3¢ \\ \hline \end{array}$$

Remember
When you add money amounts, write the ¢ or $ and a decimal point in the answer.

10. $0.25 + $0.50

11. $0.49 + $0.29

12. $0.45 + $0.45

13. $0.52 + $0.50

14. 31¢ + 29¢

15. 60¢ + 11¢

16. 85¢ + 5¢

17. 20¢ + 55¢

18. $0.73 + $0.07

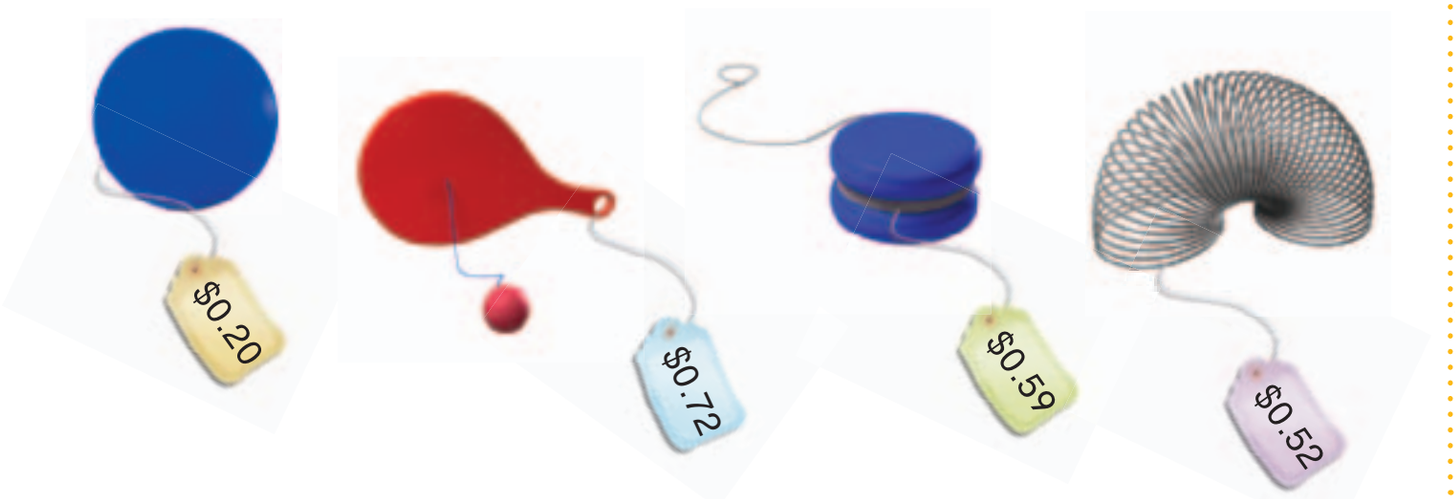
19. $0.48 + $0.16

20. $0.95 + $0.02

21. $0.77 + $0.18

Problem Solving

22. Logical Reasoning You have two quarters, two pennies, and two nickels. Which item could you **not** buy with these coins?



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Math at Home Activity: When at a store, find two items that are priced in cents only. Have your child add up the two items.

Name _____

Subtract Money

Get Ready

Main Idea

I will regroup to subtract money.

You subtract money the same way you subtract other numbers.

Find 87¢ − 22¢.

	8	7¢
−	2	2¢
	6	5¢

Find $0.56 − $0.21.

	$0	.5	6
−	$0	.2	1
	$0	.3	5

Check

Remember
40¢ - 15¢ is the same as 40 - 15.

Subtract.

1.

	5	7¢
−	2	8¢
	2	9¢

2.

	6	6¢
−	3	9¢

3.

	4	0¢
−	1	5¢

4.

	$0	.1	3
−	$0	.0	9

5.

	$0	.3	9
−	$0	.2	8

6.

	$0	.7	8
−	$0	.5	5

7. Talk About It — How is subtracting money different than subtracting other 2-digit numbers?

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Practice

Subtract.

8.
$$\begin{array}{r|l} 5 & 0¢ \\ -\ 2 & 6¢ \\ \hline 2 & 4¢ \end{array}$$

9.
$$\begin{array}{r|l} 6 & 1¢ \\ +\ 1 & 7¢ \\ \hline & \end{array}$$

Remember
If you do not have enough ones, you will have to regroup tens as ones.

10. $\$0.34 - \$0.24$

11. $\$0.45 - \$0.09$

12. $\$0.91 - \$0.75$

13. $\$0.53 - \$0.44$

14. $49¢ - 39¢$

15. $35¢ - 14¢$

16. $85¢ - 19¢$

17. $90¢ - 76¢$

18. $\$0.78 - \$0.77$

19. $\$0.75 - \$0.50$

20. $\$0.82 - \$0.15$

21. $\$0.63 - \$0.47$

Problem Solving

22. Number Sense You give the lunchroom cashier 2 quarters for a pint of milk. The milk costs $0.42. How much money will you get back in change? Solve the problem. $-$ _____

How did you solve the problem?

_____

_____

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Math at Home Activity: Ask your child to subtract the price of two items that cost less than $1.00.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve a problem.

Your Mission:
Find how much money Mario has.

I put 10 pennies in a row. I took out every third penny and put down a nickel. Then I picked up every fifth penny and put down a dime. How much money is in my line of coins?

Understand

What do I know?
Underline what you know.

What do I need to find out?
Circle the question.

Plan

How will I solve the problem?
One way is to use coins to show how much money Mario has. Then count to find the total.

Solve

One way is to act out the problem with coins.
Start counting the coins that have the greatest value.

Mario has 40¢

Draw the coins you counted.

Check

Look Back
Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Act it out
- Draw a picture
- Write a number sentence

Choose a strategy. Solve.

1. Ali has 1 dollar, 1 dime, and 4 pennies to buy a snack. How much money does she have?

2. Riley spends 3 quarters on a drink. Then he buys a pretzel for 6 dimes. How much money does he spend?

3. A cup of lemonade costs 50¢. Jen pays for it with 2 coins. What 2 coins does she use?

4. Tess has 4 quarters. She buys a pencil for $0.75. How much money does she have now?

5. Abby is saving money to buy a watch. She has 1 quarter, 1 nickel, and 2 pennies. The watch costs 75¢. How much more money does she need to save?

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Today there are new designs for nickels and quarters. This table shows you how many designs have been made so far.

Coin	Number of Designs
penny	1
nickel	7
dime	1
quarter	41

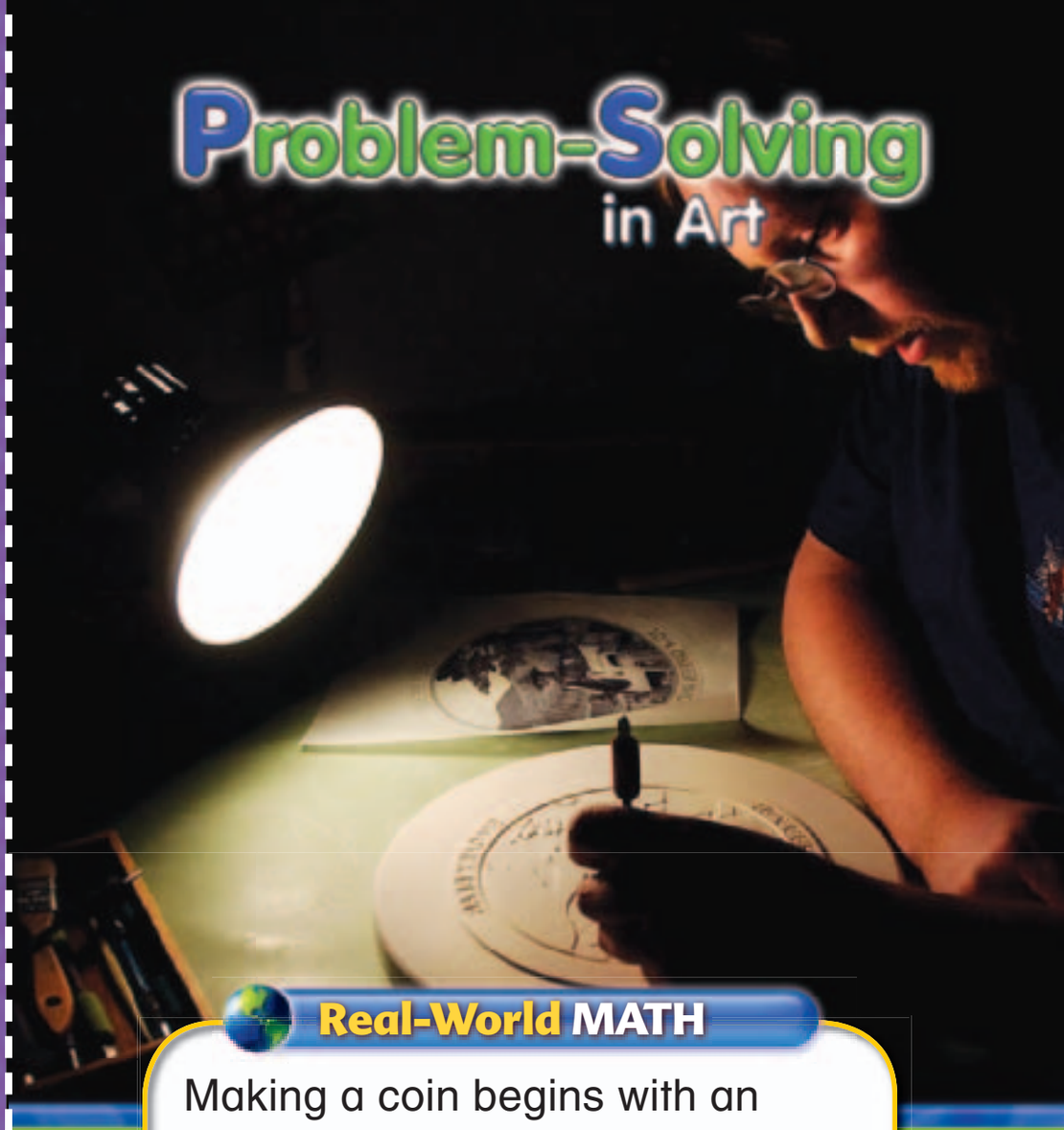
If you had one coin of every nickel design, how much money would you have?

_____ cents

Rich Pedroncelli/Associated Press

FOLD DOWN

Problem-Solving in Art



Real-World MATH

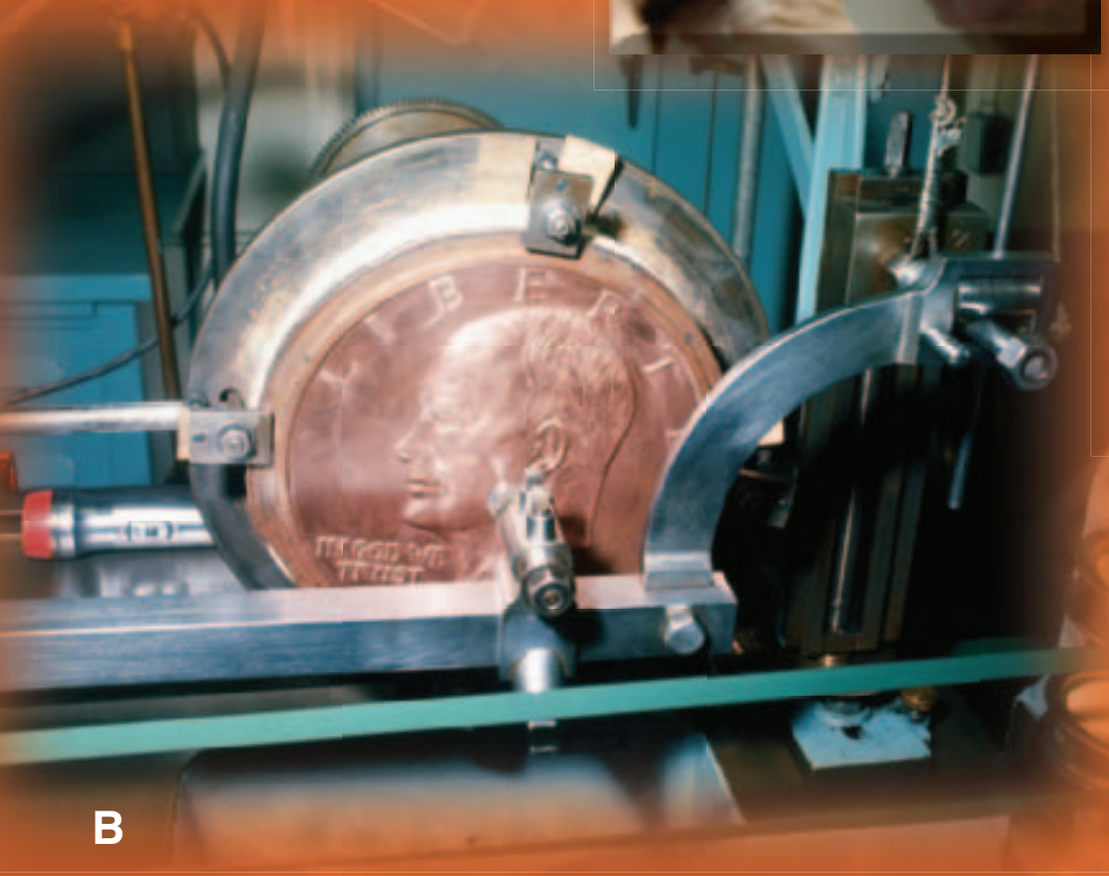
Making a coin begins with an artist. The artist makes drawings of both sides of the coin.

This book belongs to

_____

Jason Hunt/AP

Every detail is checked. Then when everything is perfect, a machine traces the model to make it the real size of the coin.



B

Another machine stamps new, blank coins out of sheets of metal. It is like a cookie cutter and cookies! Finally, a different machine stamps the design onto the coins.

C

(t b)Jacqueline Larma/AP, Bettmann/CORBIS

Getty Images

Name _____

Vocabulary

Draw lines to match.

1. **cent**	a. $1 . 25
2. **dollar sign**	b. 37 ¢
3. **decimal point**	c. $1. 00

Concepts

Count to find the value of the coins.

4.

_____ ¢ _____ ¢ _____ ¢ _____ ¢ _____ ¢ _____ ¢ _____ total

5.

_____ ¢ _____ ¢ _____ ¢ _____ ¢ _____ ¢ _____ total

6.

_____ _____ _____ _____ _____ _____ total

7. The coloring book costs $3.67. Draw the bills and coins needed to buy the book.

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Is there enough money to buy this item?
Circle yes or no.

8.

yes

no

_____ _____ _____ _____ _____

Add or subtract.

9. $0.54 + $0.19	**10.** $0.88 − $0.08	**11.** $0.27 + $0.72	**12.** $0.47 − $0.11
13. $0.99 − $0.03	**14.** $0.99 + $0.05	**15.** $0.75 − $0.25	**16.** $0.35 + $0.36

Problem Solving

17. Trevor wants to write sixty-two cents two different ways. Show him how to write it.

_____ _____

18. Alexa buys a pencil for 35 cents. She gives the clerk 75 cents. How much change should she receive?

Alexa should receive _____.

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Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A Bob has the money you see in the box. How much money is this?

$0.25 ○ $0.35 ○ $0.40 ○ $0.50 ○

B Which of these can be used to check the answer to the problem in the box?

$5 + 4 = 9$

$6 + 3 = 9$ ○ $13 - 4 = 9$ ○

$9 + 4 = 13$ ○ $9 - 5 = 4$ ○

---

1 What is another way to write twenty-five cents?

25¢

$0.25 ○ $2.50 ○ $2.52 ○ $25 ○

2 Amy has the money you see in the box. How much money is this?

$1.27 ○ $1.57 ○ $1.62 ○ $1.77 ○

3 What number goes in the box to make this number sentence true?

$13 + 5 = \square + 13$

0 ○ 3 ○ 5 ○ 8 ○

4 Max has 1 quarter, 2 dimes, 1 nickel, and 3 pennies. How much money does he have?

$0.30 ○ $0.53 ○ $1.28 ○ $1.82 ○

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5 What is the value of the three in ninety-three?

93

3 ○ 13 ○ 30 ○ 300 ○

6 What number goes in the box to make this number sentence true?

$7 + \square = 11$

17 ○ 9 ○ 4 ○ 2 ○

7 It is 5 miles from Ashley's house to the mall. Which number sentence shows how many miles the drive is from Ashley's house to the mall and back home again?

$2 + 5 = 7$ ○ $5 + 1 = 6$ ○

$5 + 2 = 7$ ○ $5 + 5 = 10$ ○

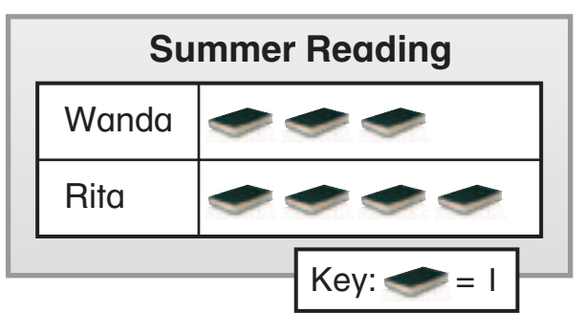
8 Dina has 4 dollar bills and some quarters. She has $5.00 in all. How many quarters does Dina have?

2 ○ 4 ○ 6 ○ 9 ○

9 Fran buys an apple for 60¢. She pays with dimes. How many dimes does Fran use?

1 ○ 3 ○ 6 ○ 10 ○

10 Look at the graph. How many books did Wanda and Rita read altogether?



5 ○ 7 ○ 9 ○ 10 ○

STOP

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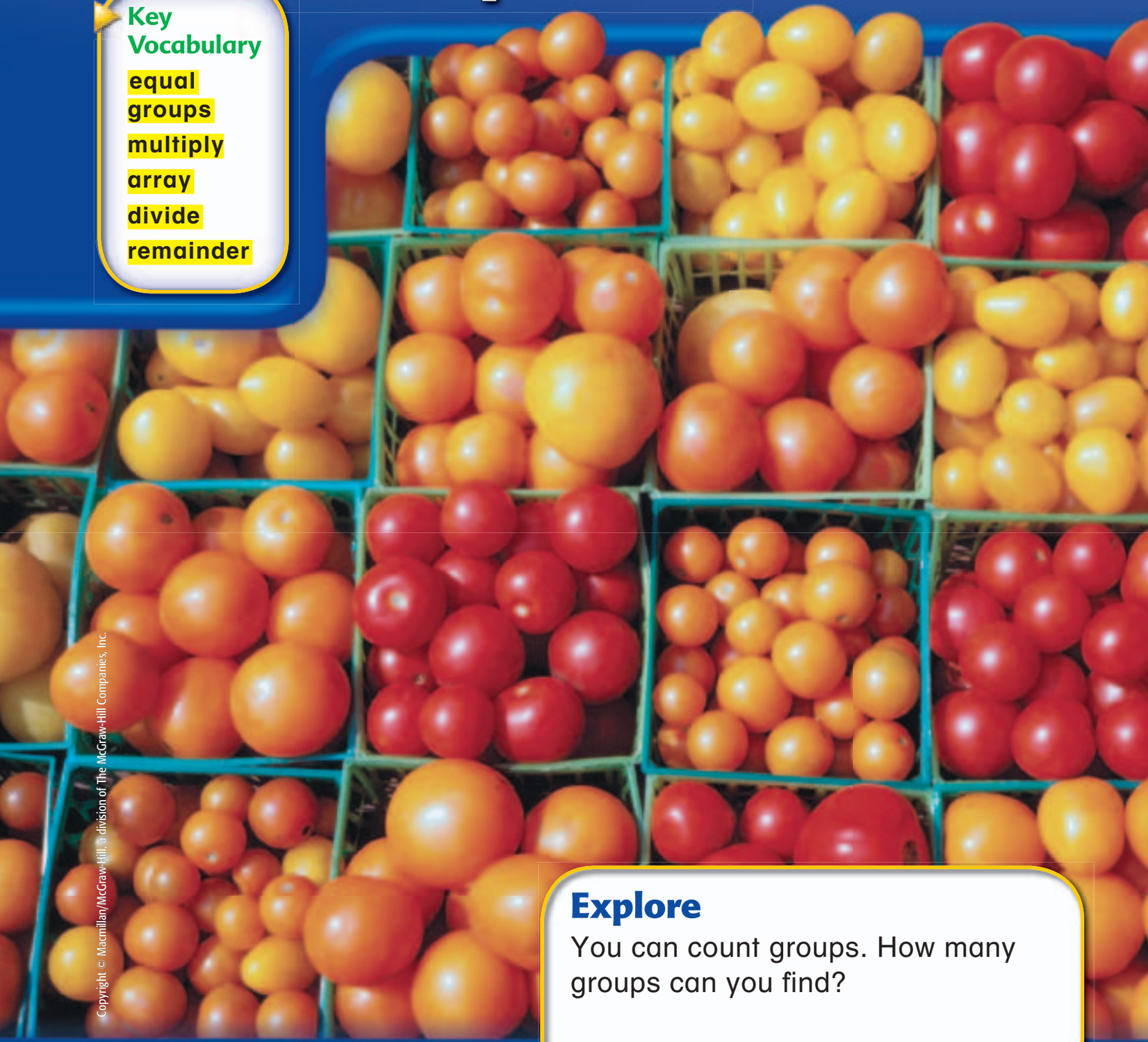
CHAPTER 8

Multiplication and Division Concepts

Key Vocabulary

- equal groups
- multiply
- array
- divide
- remainder



Explore

You can count groups. How many groups can you find?

_____ groups

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Rob Kearney/Getty Images

Name _____

MathOnline
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 8?

Write the missing numbers.

1. 10, 20, _____, 40, _____, _____

2. 2, 4, 6, _____, _____, 12, _____

Write the pattern.

3. 3, 6, 9, 12 ...

   Skip counting by _____.

4. 15, 20, 25, 30

   Skip counting by _____.

Add.

5. 10 + 10 + 10 = _____

6. 4 + 4 + 4 + 4 = _____

7. 5 + 5 + 5 = _____

8. 2 + 2 + 2 + 2 = _____

Subtract.

9. 6 − 2 = _____ 4 − 2 = _____ 2 − 2 = _____

10. 9 − 3 = _____ 6 − 3 = _____ 3 − 3 = _____

11. There are 18 grapes. 4 grapes are eaten. Later 4 more are eaten. How many grapes are there now?

_____ grapes

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This page checks skills needed for Chapter 8.

MATH at HOME

Dear Family,

Today my class started Chapter 8, **Multiplication and Division Concepts.** In this chapter, I will learn to multiply and divide. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Pick up a handful of crayons and share them equally. Write the total number of crayons, the number each person gets, and the number left over.

Key Vocabulary

multiply to find the product; the operation of repeated addition of the same number

divide to separate into equal groups

remainder left over after dividing

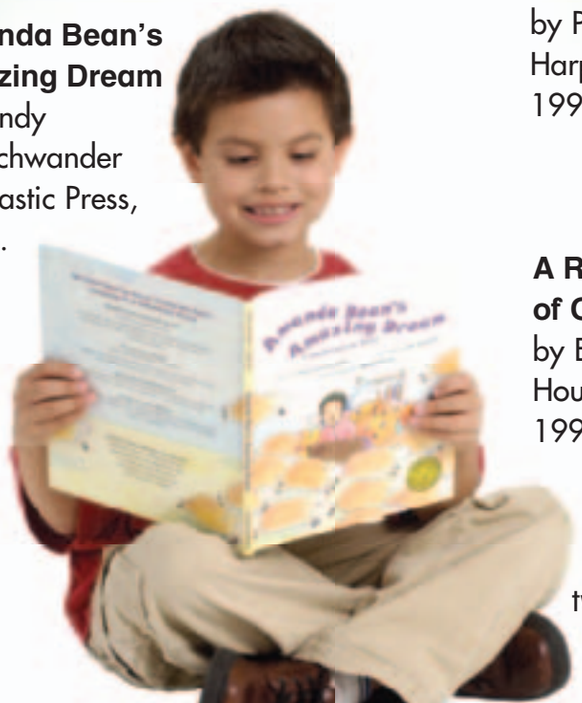
$18 \div 5 = 3$ R3

remainder

MathOnline Click on the eGlossary at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Amanda Bean's Amazing Dream
by Cindy Neuschwander
Scholastic Press, 1998.



Each Orange Had 8 Slices
by Paul Giganti
HarperTrophy, 1999.

A Remainder of One
by Elinor J. Pinczes
Houghton Mifflin, 1995.

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(cr,bc,br)Eclipse Studios, (t)Richard Hutchings

MATEMÁTICAS en CASA

Estimada familia,

Hoy mi clase comenzó el Capítulo 8, **Comprende la multiplicación y la división**. En este capítulo, aprenderé a multiplicar y a dividir. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños,

Actividad

Recojan unos cuantos crayones y compártanlos equitativamente. Escriban el número total de crayones, el número que recibe cada persona y el número que queda. Túrnense para repetir la actividad.

Vocabulario clave

multiplicar hallar el producto; la operación de adición repetida del mismo número

dividir separar en grupos iguales

residuo lo que queda después de dividir

$$18 \div 5 = 3 \text{ R3}$$

(3 R3: residuo)

Math Online Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

El asombroso sueño de Amanda Bean
de Cindy Neuschwander
Scholastic Press, 1998.

Cada naranja tenía 8 gajos de Paul Giganti
HarperTrophy, 1999.

Un residuo de uno
de Elinor J. Pinczes
Houghton Mifflin, 1995.

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Name _____

Equal Groups

Hands-On Activity

Get Ready

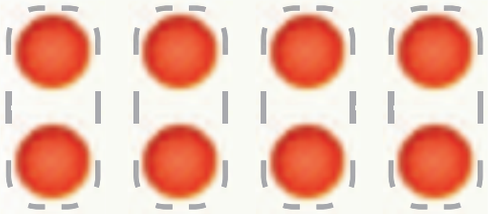
Main Idea

I will skip count to find the total in equal groups.

Vocabulary

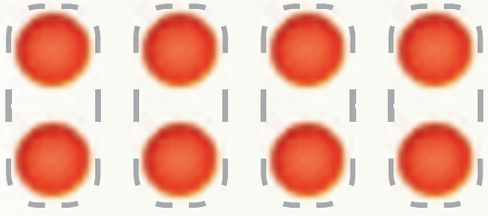
equal groups

You can make equal groups. Put two counters in each group. How many equal groups?



4 equal groups

Skip count to find the total.



2, 4, 6, 8 counters in all.

Check

Use ● to make equal groups. Skip count to find the total.

1. Make 3 groups of 2.

6 in all

2. Make 4 groups of 5.

_____ in all

Skip count. Write how many in all.

3.

_____ in all

4. Talk About It — How does skip-counting help you find how many in all?

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Practice

Use ● to make equal groups. Skip-count to find the total.

5. Make 2 groups of 5.

_____ in all

6. Make 6 groups of 2.

_____ in all

Skip-count. Write how many in all.

7.

_____ in all

8.

_____ in all

9.

_____ in all

Problem Solving

10. Visual Thinking Your class is putting on a play in the gym. You will need to set up seats for 30 people. Draw how you would set the seats up in three equal groups.

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Math at Home Activity: Have your child make equal groups using macaroni, and then skip-count.

Name _____

Repeated Addition

Hands-On Activity

Get Ready

Main Idea

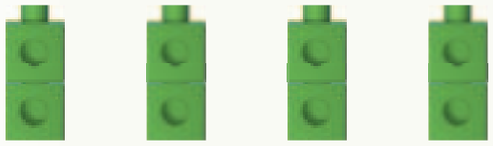
I will add and multiply equal groups.

Vocabulary

multiply

multiplication sentence

When groups are equal, you can use repeated addition to find how many in all.



$2 + 2 + 2 + 2 = \underline{8}$

4 x 2 = 8 is a **multiplication sentence.**

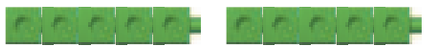
You can also **multiply.**

$4 \times 2 = \underline{8}$

number of groups | number in each group | total number

Check

Use to make equal groups. Add. Then multiply.

1. 

_____ + _____ = _____

_____ × _____ = _____

2.

_____ + _____ + _____ = _____

_____ × _____ = _____

3.

_____ + _____ + _____ + _____ + _____ = _____

_____ × _____ = _____

4. Talk About It

How would you write a multiplication sentence for 2 + 2 + 2 + 2 + 2 + 2? Explain.

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Richard Hutchings

Practice

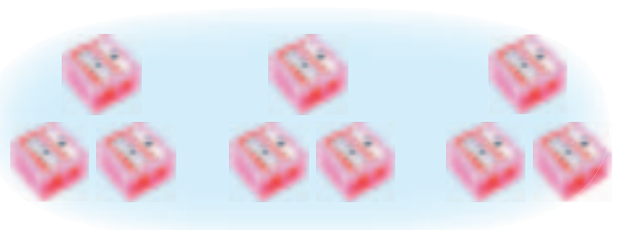
Add. Then multiply.

5.

____ + ____ + ____ = ____

____ × ____ = ____

6.



____ + ____ + ____ = ____

____ × ____ = ____

7.

____ + ____ + ____ = ____

____ × ____ = ____

8.

____ + ____ + ____ + ____ + ____ = ____

____ × ____ = ____

Problem Solving

9. Number Sense Use the addition sentence to complete the multiplication sentence.

5 + 5 + 5 + 5 = 20

☐ × 5 = 20

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Math at Home Activity: Put pennies in 5 groups of 5. Ask your child to give the repeated addition sentence and the multiplication sentence.

Name _____

Hands-On Activity

Arrays

Get Ready

Main Idea

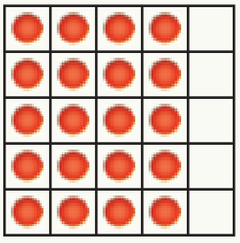
I will use arrays to multiply.

Vocabulary

array

product

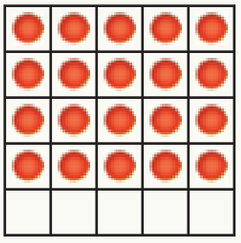
An **array** is a model for multiplication. It is a grid of equal rows and columns.



5 rows of 4

$5 \times 4 = 20$

5 rows; 4 in each row; 20 in all



4 rows with 5

$4 \times 5 = 20$

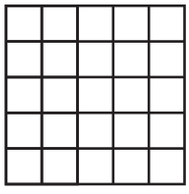
4 rows; 5 in each row; 20 in all

Change the order of the array and the answer will stay the same. The answer is called the **product**.

Check

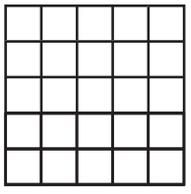
Color the array. Find the product.

1.



5 rows of 2

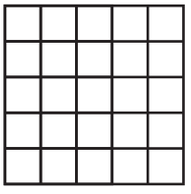
$5 \times 2 =$ ____



2 rows of 5

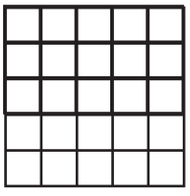
$2 \times 5 =$ ____

2.



3 rows of 5

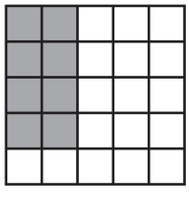
$3 \times 5 =$ ____



5 rows of 3

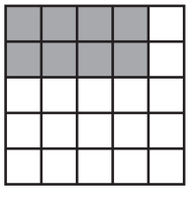
$5 \times 3 =$ ____

3.



4 rows of 2

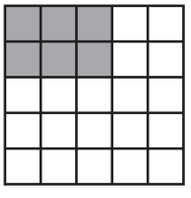
$4 \times 2 =$ ____



2 rows of 4

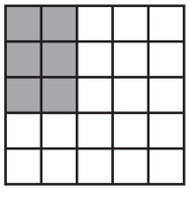
$2 \times 4 =$ ____

4.



2 rows of 3

$2 \times 3 =$ ____



3 rows of 2

$3 \times 2 =$ ____

5. Talk About It How is 2×3 the same as 3×2?

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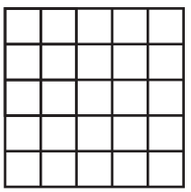
Practice

Color the array. Find the product.

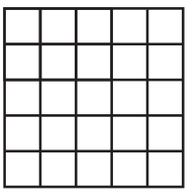
Remember
Use the array to help you multiply.

6.



3 rows of 2

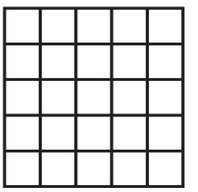
$3 \times 2 = ____$



2 rows of 3

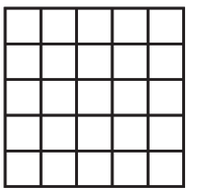
$2 \times 3 = ____$

7.



5 rows of 5

$5 \times 5 = ____$

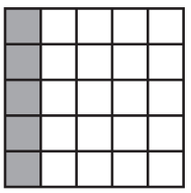


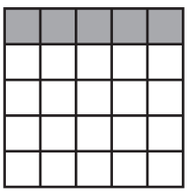
5 rows of 5

$5 \times 5 = ____$

Write the multiplication sentence for each array.

8.

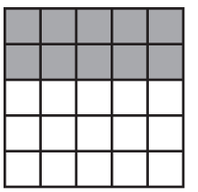


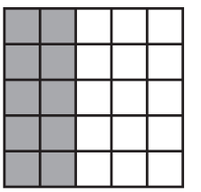


$____ \times ____ = ____$

$____ \times ____ = ____$

9.





$____ \times ____ = ____$

$____ \times ____ = ____$

Multiply.

10. $2 \times 2 = ____$	**11.** $2 \times 4 = ____$	**12.** $2 \times 6 = ____$
13. $5 \times 4 = ____$	**14.** $5 \times 6 = ____$	**15.** $5 \times 7 = ____$

Problem Solving

16. Number Sense Ann's garden has 5 rows of plants. Each row has 10 plants. How many plants are in the garden? Write two multiplication sentences to show the answer.

$____ \times ____ = ____$, $____ \times ____ = ____$

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Math at Home Activity: Draw 5 rows of 2 dots. Have your child write a multiplication sentence to show the array.

Name _____

Add. Then multiply.

1. _____ + _____ + _____ = _____

   _____ × _____ = _____

2. _____ + _____ + _____ + _____ + _____ = _____

   _____ × _____ = _____

3. _____ + _____ + _____ + _____ = _____

   _____ × _____ = _____

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Game Time

Array Around

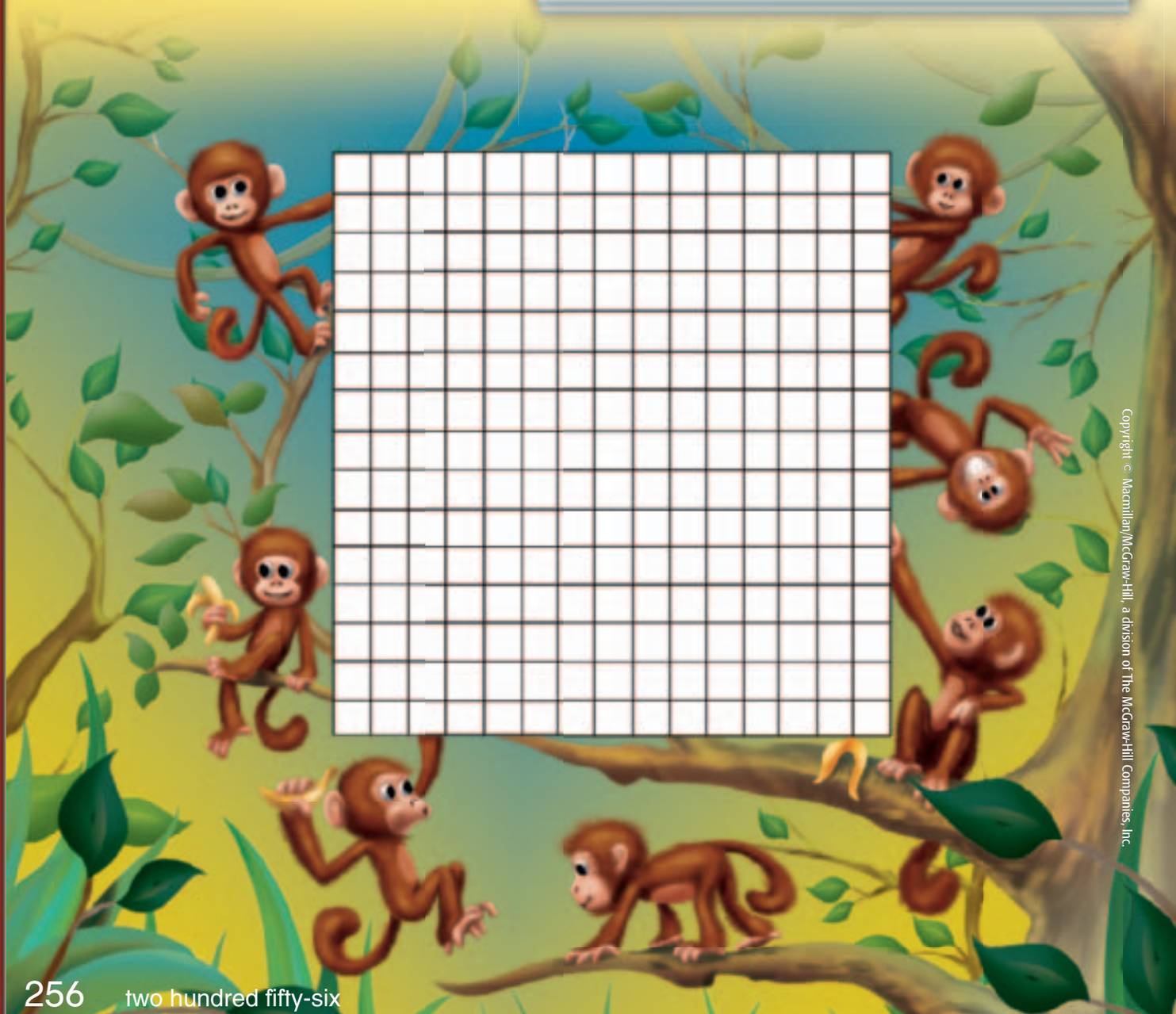
Multiply

What you Need

-
-
- Grid paper
- Paper and pencil

How to play:

- Take turns with a partner. Pick a crayon. Roll the .
- Using each number on the cubes, color an array that shows the multiplication problem on the grid.
- On a sheet of paper, write the multiplication sentence.
- When no more arrays can be colored, add up the products.
- The player with the greater sum wins.



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Name _____

Multiply 2s and 5s

Get Ready

Main Idea

I will multiply by 2s and 5s.

You can use different strategies to help you learn the 2s and 5s multiplication facts.

Solve 9 × 2.

9 groups of 2

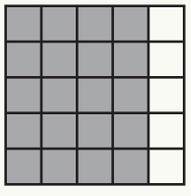
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 18

9 × 2 = 18

Solve 5 × 4.

5 groups of 4

4 + 4 + 4 + 4 + 4 = 20



5 rows of 4

5 × 4 = 20

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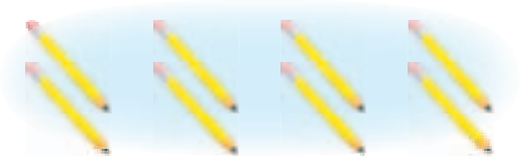
Check

Find the sum. Find the product.

2.



$2 + 2 + 2 + 2 =$ _____

$4 \times 2 =$ _____

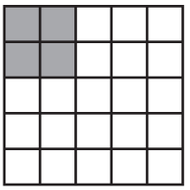
3.

$4 + 4 + 4 + 4 + 4 =$ _____

$5 \times 4 =$ _____

Find the product.

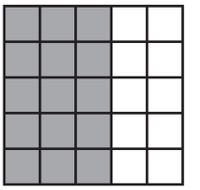
4.



2 rows of 2

$2 \times 2 =$ _____

5.



3 rows of 5

$3 \times 5 =$ _____

Multiply.

6. $2 \times 9 =$ _____ **7.** $5 \times 5 =$ _____ **8.** $2 \times 3 =$ _____

9. $5 \times 1 =$ _____ **10.** $8 \times 2 =$ _____ **11.** $6 \times 5 =$ _____

12. $7 \times 2 =$ _____ **13.** $2 \times 5 =$ _____ **14.** $5 \times 7 =$ _____

15. $8 \times 5 =$ _____ **16.** $4 \times 2 =$ _____ **17.** $9 \times 5 =$ _____

18. _____ $= 2 \times 1$ **19.** _____ $= 6 \times 2$ **20.** _____ $= 4 \times 5$

21. Talk About It — How does making equal groups help you to find the product?

GO on

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Name _____

Practice

Find the sum. Find the product.

22.

$5 + 5 =$ _____

$2 \times 5 =$ _____

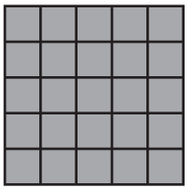
23.

$2 + 2 + 2 =$ _____

$3 \times 2 =$ _____

Find the product.

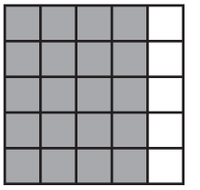
24.



5 rows of 5

$5 \times 5 =$ _____

25.



4 rows of 5

$4 \times 5 =$ _____

Multiply.

26. $5 \times 6 =$ _____ **27.** $5 \times 1 =$ _____ **28.** $2 \times 4 =$ _____

29. $2 \times 8 =$ _____ **30.** $6 \times 5 =$ _____ **31.** $2 \times 1 =$ _____

32. $4 \times 2 =$ _____ **33.** $2 \times 7 =$ _____ **34.** $8 \times 2 =$ _____

35. $8 \times 5 =$ _____ **36.** $7 \times 5 =$ _____ **37.** $9 \times 5 =$ _____

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Multiply. Work as fast as you can.

38. $\begin{array}{r} 8 \\ \times\ 5 \\ \hline \end{array}$ **39.** $\begin{array}{r} 2 \\ \times\ 9 \\ \hline \end{array}$ **40.** $\begin{array}{r} 5 \\ \times\ 5 \\ \hline \end{array}$

41. $\begin{array}{r} 9 \\ \times\ 5 \\ \hline \end{array}$ **42.** $\begin{array}{r} 6 \\ \times\ 2 \\ \hline \end{array}$ **43.** $\begin{array}{r} 1 \\ \times\ 2 \\ \hline \end{array}$

44. $2 \times 6 =$ _____ **45.** $9 \times 2 =$ _____ **46.** $3 \times 5 =$ _____

47. $0 \times 2 =$ _____ **48.** $2 \times 7 =$ _____ **49.** $4 \times 2 =$ _____

50. $5 \times 4 =$ _____ **51.** $5 \times 9 =$ _____ **52.** $0 \times 5 =$ _____

Problem Solving

53. Reasoning There are nine flower pots. Three flowers are in each pot. How many flowers are there in all?

_____ flowers

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C Squared Studios/Getty Images

Math at Home Activity: Have your child recite the 2s and 5s multiplication facts.

Name _____

Problem-Solving Strategy

Draw a Picture

Main Idea

I will draw pictures to solve problems.

The Space Travel Store sells Martian toys. Ian bought 3 groups of 2 toys.

How many toys did he buy?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem? I will draw 3 groups of 2 toys.

Solve

Draw a picture.

Ian bought 6 toys.

Check

Look Back
Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Draw a picture to solve.

1. Sherrie saw 3 flowers. Each flower had 5 petals. How many petals did she see?

_____ petals

2. Marcy has 4 groups of 3 crayons. How many crayons does she have?

_____ crayons

Your Turn

Draw a picture to solve.

3. The River family bought a sack of 8 oranges. There are 4 family members. How many oranges does each person get?

_____ oranges

4. There are 2 seesaws. How many students can

be on the seesaws? _____

on 3 seesaws? _____

on 4 seesaws? _____

Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

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Name _____

Multiply 10s

Get Ready

Main Idea

I will multiply by 10s.

You can skip count when multiplying by 10.

Count the dimes. 1 2 3 ___3___ tens

Count the cents. 10 20 30 ___3___ × 10 = ___30___

Count the dimes. 1 2 3 4 5 ___5___ tens

Count the cents. 10 20 30 40 50 ___5___ × 10 = ___50___

Check

When multiplying by 10s, there is a pattern. The products are counting by tens.

Count by tens. Multiply.

1. _____ tens

4 × 10 = _____

2. _____ tens

3 × 10 = _____

3. 10 × 5 = _____

4. 2 × 10 = _____

5. 10 × 1 = _____

4. Talk About It

Will 10 × 5 be the same product as 5 × 10? How do you know?

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Practice

Multiply.

5. $10 \times 3 =$ _____ **6.** $9 \times 10 =$ _____ **7.** $10 \times 6 =$ _____

8. $1 \times 10 =$ _____ **9.** $8 \times 10 =$ _____ **10.** $10 \times 5 =$ _____

Multiply. Work as fast as you can.

11. $7 \times 10 =$ _____ **12.** $10 \times 10 =$ _____ **13.** $2 \times 10 =$ _____

14. _____ $= 3 \times 10$ **15.** _____ $= 4 \times 10$ **16.** _____ $= 10 \times 8$

17. _____ $= 5 \times 10$ **18.** _____ $= 10 \times 9$ **19.** _____ $= 1 \times 10$

20. $6 \times 10 =$ _____ **21.** $8 \times 10 =$ _____ **22.** $3 \times 10 =$ _____

Data File

The Monterey Bay Aquarium is a great place for kids! The aquarium exhibits about ocean animals.

If a Sunflower Star travels 10 equal lengths 3 times, how far did the star travel?

_____ × _____ = _____ equal lengths

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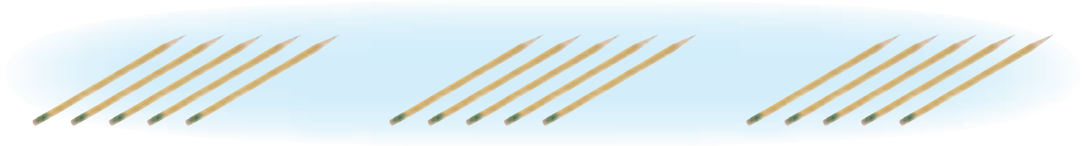
Math at Home Activity: Have your child recite the 10s multiplication facts from memory.

Name _____

Skip count. Write how many in all.

1.



_____ in all.

Add. Then multiply.

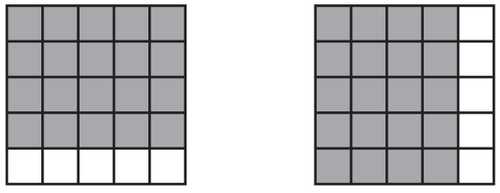
2.

_____ + _____ + _____ + _____ + _____ + _____ + _____ = _____

_____ × _____ = _____

Write the multiplication sentence for each array.

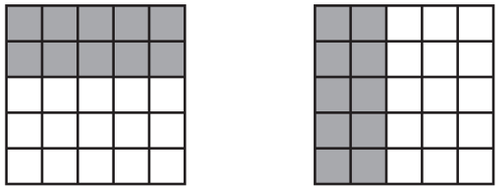
3.



_____ × _____ = _____

_____ × _____ = _____

4.



_____ × _____ = _____

_____ × _____ = _____

Multiply.

5. 2 × 8 = _____ **6.** 6 × 5 = _____ **7.** 2 × 10 = _____

8. There are 5 birds. Each bird has 2 legs.
How many bird legs are there in all?

_____ legs

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Spiral Review Chapters 1–8

Add or subtract.

9. $\begin{array}{r} 29 \\ +\ 11 \\ \hline \end{array}$ **10.** $\begin{array}{r} 62 \\ +\ 16 \\ \hline \end{array}$ **11.** $\begin{array}{r} 48 \\ +\ 23 \\ \hline \end{array}$ **12.** $\begin{array}{r} 82 \\ -\ 17 \\ \hline \end{array}$ **13.** $\begin{array}{r} 37 \\ -\ 21 \\ \hline \end{array}$

14. $\begin{array}{r} \$0.72 \\ +\ \$0.42 \\ \hline \end{array}$ **15.** $\begin{array}{r} \$0.83 \\ +\ \$0.26 \\ \hline \end{array}$ **16.** $\begin{array}{r} \$0.11 \\ +\ \$0.06 \\ \hline \end{array}$ **17.** $\begin{array}{r} \$0.64 \\ -\ \$0.36 \\ \hline \end{array}$ **18.** $\begin{array}{r} \$0.37 \\ -\ \$0.14 \\ \hline \end{array}$

Students collected leaves for a project.

Leaves Collected	
6 leaves	𝍸
7 leaves	𝍸 |
8 leaves	||

19. Put the data in order from least to greatest.

_____, _____, _____, _____, _____, _____, _____, _____, _____

20. Find the mode. _____

21. Find the range. _____ − _____ = _____

22. Matt wants to know how many dishes he has washed. One day he washed 12. The next day he washed 20. The last day he washed 17. How many dishes did Matt wash?

_____ dishes

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Name _____

Hands-On Activity

Repeated Subtraction and Division

Get Ready

Main Idea

I will use repeated subtraction and division to make equal groups.

Vocabulary

divide

You can use repeated subtraction to find the number of equal groups.

Separate 8 cubes into equal groups of 2 .

$8 - 2 - 2 - 2 - 2 = 0$

There are 4 groups of 2.

You can also **divide**.

$8 \div 2 = 4$

8: total number; 2: number in each group; 4: number of groups

Check

Use ○ to make equal groups. Subtract. Then divide.

Remember Subtract the same amount each time.

1. Subtract groups of 2.

$6 - ____ - ____ - ____ = ____$ $\quad 6 \div 3 = ____$

2. Subtract groups of 4.

$12 - ____ - ____ - ____ = ____$ $\quad 12 \div 4 = ____$

3. Subtract groups of 5.

$15 - ____ - ____ - ____ = ____$ $\quad 15 \div 5 = ____$

4. Talk About It How does repeated subtraction help you divide?

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Practice

Use ◯□ to make equal groups. Subtract. Then divide.

5. Subtract groups of 3.

$9 - ___ - ___ - ___ = ___$

$9 \div 3 = ___$

Remember
9 - 3 = 6,
6 - 3 = 3, 3 - 3 = 0

6. Subtract groups of 2.

$16 - ___ - ___ - ___ - ___ - ___ - ___ - ___ - ___ = ___$

$16 \div 2 = ___$

7. Subtract groups of 4.

$20 - ___ - ___ - ___ - ___ - ___ = ___$

$20 \div 4 = ___$

8. Subtract groups of 2.

$14 - ___ - ___ - ___ - ___ - ___ - ___ - ___ = ___$

$14 \div 2 = ___$

Problem Solving

9. **Reasoning** Ten students are divided into two groups. Write a story to show how many in each group. Draw a picture to help.

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Math at Home Activity: Put 20 raisins on a table. Ask your child to divide them equally into two groups. Have them write the division sentence.

Name _____

Hands-On Activity

Find Equal Shares

Get Ready

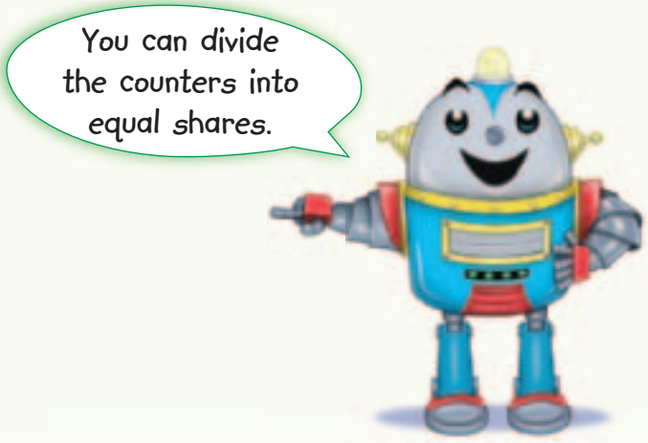
Main Idea

I will divide to make equal shares.

Vocabulary

division sentence

If 2 people share 6 counters, each person gets 3. They each have an equal share.



6 ÷ 2 = 3 is a **division sentence**.

Check

Use ● to make equal shares. How many are in each group? Divide.

1. 6 counters
2 equal groups

3 in each group

6 ÷ 2 = 3

2. 8 counters
4 equal groups

_____ in each group

_____ ÷ _____ = _____

3. 8 counters
4 equal groups

_____ ÷ _____ = _____

4. 15 counters
5 equal groups

_____ ÷ _____ = _____

5. Talk About It

If you have five quarters, can you find equal shares? Explain.

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Practice

Use counters to make equal shares. How many are in each group? Divide.

6. 10 counters
2 equal groups

_____ in each group

10 ÷ 2 = _____

7. 14 counters
7 equal groups

_____ in each group

14 ÷ 7 = _____

8. 6 counters
3 equal groups

_____ ÷ _____ = _____

9. 20 counters
5 equal groups

_____ ÷ _____ = _____

10. 9 counters
3 equal groups

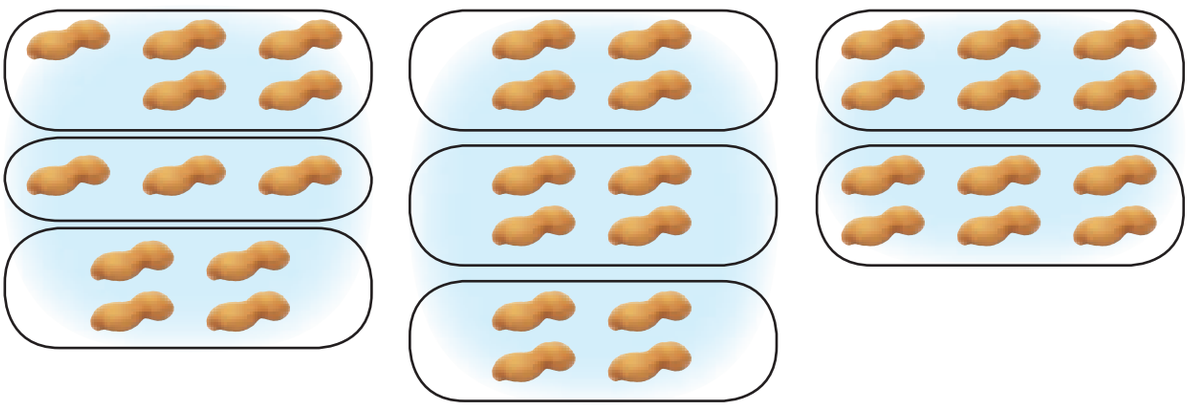
_____ ÷ _____ = _____

11. 12 counters
6 equal groups

_____ ÷ _____ = _____

H.O.T. Problem

12. Which picture shows how three children could share twelve peanuts equally? Circle it.



Write a division sentence to show how many peanuts each child will get.

_____ ÷ _____ = _____

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Math at Home Activity: Ask your child to arrange 14 pennies into equal groups and write a division sentence.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve a problem.

Your Mission: Find how many bracelets.

Understand

What do I know?

Underline what you know.

What do I need to find out?

Circle it.

Plan

How will I solve the problem? I can draw a picture.

Solve

One way is to draw a picture.

Each girl will get _____ bracelets.

Check

Look Back

Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Draw a picture
- Act it out
- Find a pattern

Choose a strategy. Solve.

1. Cathy and her friends are packing cans of food for a food drive. They can fit 4 cans into each box. If they fill 6 boxes, how many cans will they pack?

_____ cans

---

2. At the store, there is a line of 6 tricycles. Each tricycle has 3 wheels. How many wheels are there in all?

_____ wheels

---

3. Greg read 2 books. Brad read 4 books. Ryan read 6 books. If Mike read the most, how many did he read at least?

_____ books

---

4. In a basketball game, each basket shot made is worth 2 points. Reagan made a total of 8 points. How many basket shots did Reagan make?

_____ basket shots

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Equal Groups with Remainders

Hands-On Activity

Get Ready

Main Idea

I will divide with remainders.

Vocabulary

remainder

Sometimes when you divide, the groups are not equal. What is left over is called a **remainder**.

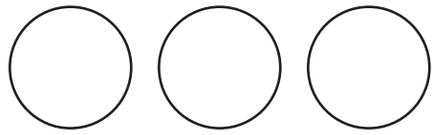
7 ÷ 2 = 3 with a remainder of 1

7 divided into 2 equal groups will make 3 in each group, but one will be left over. So, the remainder is 1.

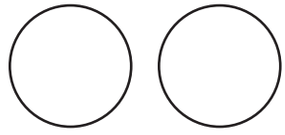
Check

Use cubes to make equal groups. Draw to show your work. Divide. Write the remainder if there is one.

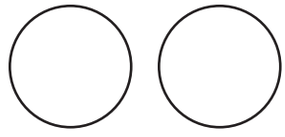
1. 8 ÷ 3 = _____ remainder _____



2. 14 ÷ 2 = _____ remainder _____



3. 9 ÷ 2 = _____ remainder _____



4. Talk About It — When will you have a remainder in a division problem?

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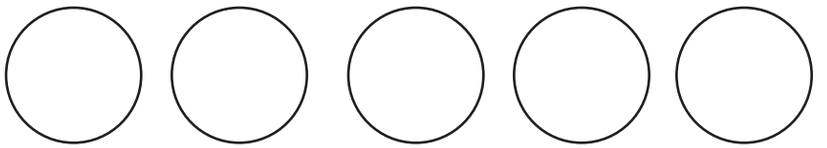
Practice

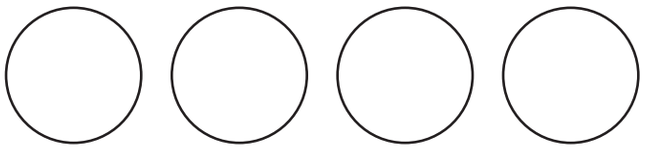
Remember
Remember to divide into the groups.

Use cubes to make equal groups. Draw to show your work. Divide. Write the remainder if there is one.

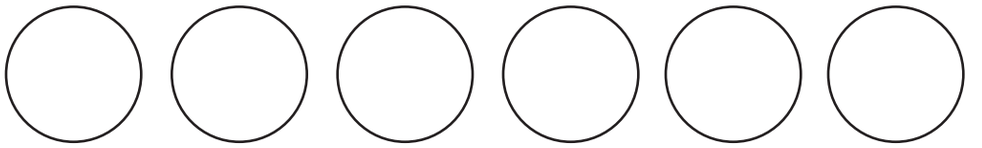
5. 12 ÷ 5 = _____ remainder _____



6. 15 ÷ 4 = _____ remainder _____



7. 13 ÷ 6 = _____ remainder _____



H.O.T. Problems

8. Can you make 2 equal groups from 7 pretzels?
Circle yes or no.
If you can, how? If you can't, why not?

_____

9. Can you make 2 equal groups from 7 puppies?
Circle yes or no.
If you can, how? If you can't, why not?

_____

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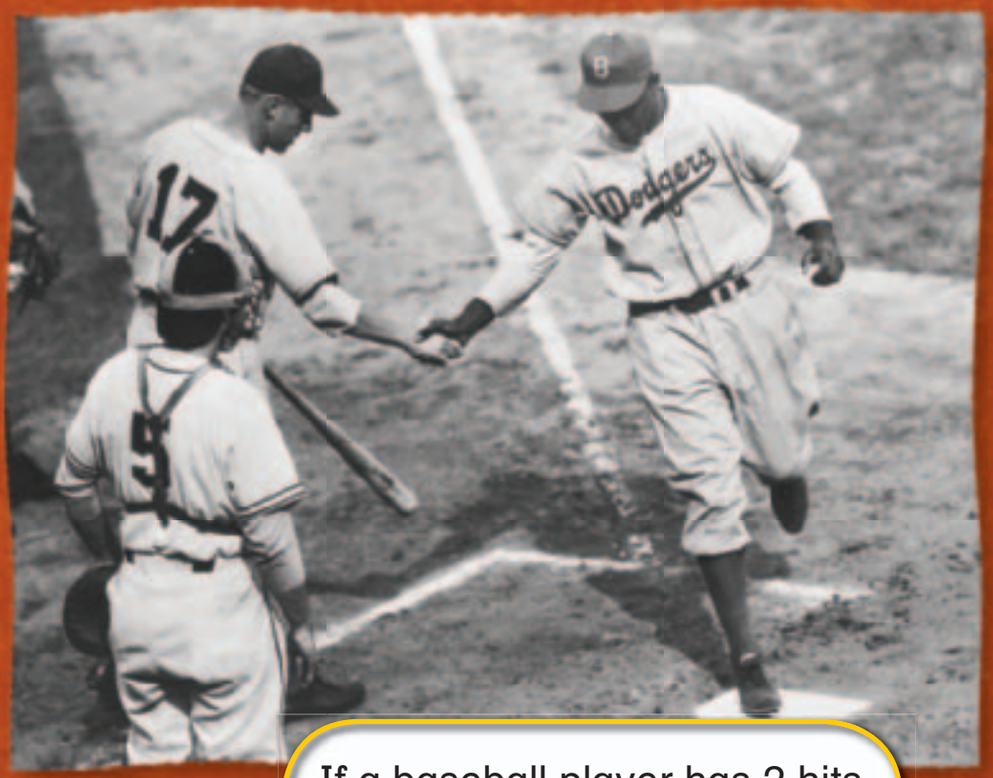
Math at Home Activity: Set out 11 beans. Ask your child to divide them into 2 equal groups. Ask your child to show you the remainder.

Jackie played in the majors for 10 seasons. He hit 137 homeruns! Also, in 1997 his number 42 was retired by all major league teams.



If a baseball player has 2 hits every game. How many hits would he have in 5 games?

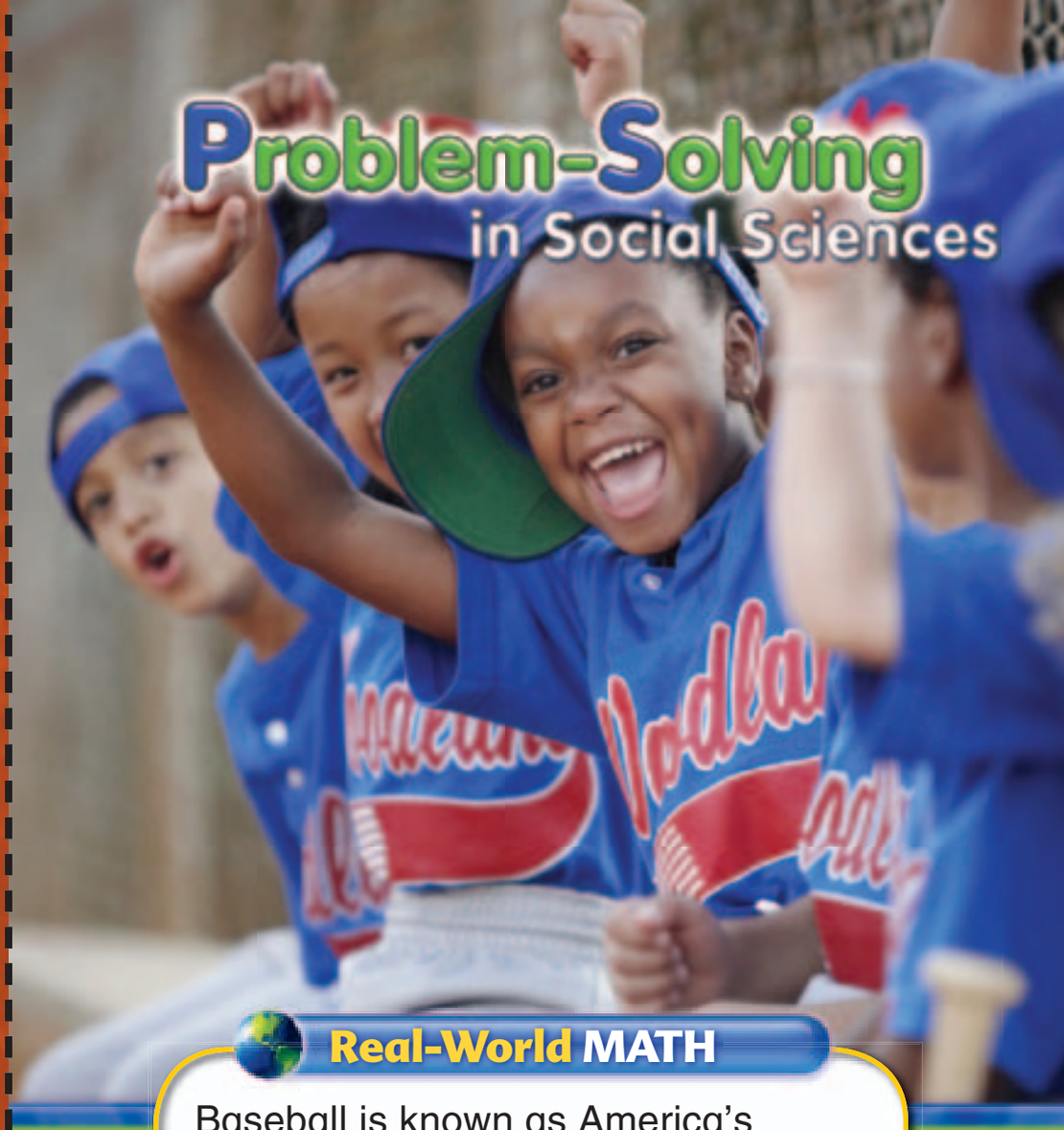
_____ hits

D

Bettmann CORBIS

FOLD DOWN

Problem-Solving in Social Sciences



Real-World MATH

Baseball is known as America's favorite pastime. Have you ever played baseball?

This book belongs to

_____

A

©Blend Images/Getty Images

Jackie Robinson was a famous baseball player. He grew up in California

B

Bettmann CORBIS

He started playing baseball in the major leagues when he was 28 years old. He left the major leagues when he was 37 years old. How long did he play in the major leagues?

_____ years

C

Bettmann CORBIS

Name _____

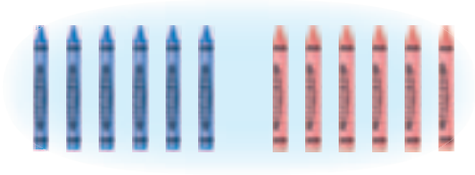
Vocabulary

Draw lines to match.

1. multiplication sentence	a. $4 \div 2 = 2$
2. product	b. $3 \times 4 = 12$
3. division sentence	c. $4 \times 4 = 16$

Concepts

How many in all?

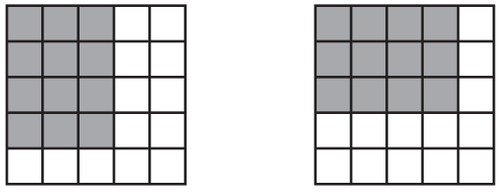
4. 

_____ in all

5.

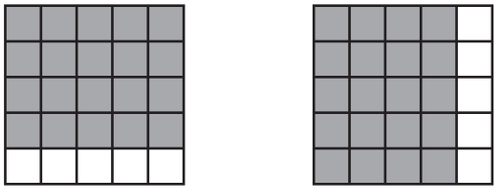
_____ in all

Write the multiplication sentence for the array.

6. 

_____ × _____ = _____

_____ × _____ = _____

7. 

_____ × _____ = _____

_____ × _____ = _____

Multiply.

8. _____ = 2 × 9

9. _____ = 4 × 2

10. 7 × 5 = _____

11. _____ = 6 × 5

12. 3 × 10 = _____

13. 6 × 2 = _____

14. 10 × 8 = _____

15. 8 × 5 = _____

16. 6 × 10 = _____

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Divide.

17. 16 cubes
2 equal groups

16 ÷ 2 = _____

18. 4 cubes
4 equal groups

4 ÷ 4 = _____

19. 10 cubes
5 equal groups

10 ÷ 5 = _____

20. 14 cubes
2 equal groups

14 ÷ 2 = _____

Divide. Write the remainder if there is one.

21. 9 ÷ 3 = _____ remainder _____

22. 13 ÷ 4 = _____ remainder _____

23. 11 ÷ 5 = _____ remainder _____

Problem Solving

24. Kareem is playing basketball. He made 7 shots. Each shot was worth 2 points. How many points does he have?

_____ points

25. Amanda made 12 cookies. She has 6 friends. How many cookies does each person get?

_____ cookies

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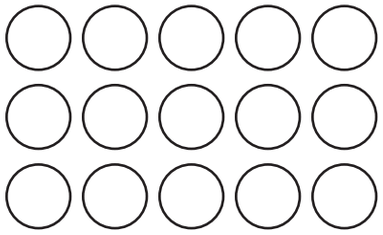
Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A Look at the array of circles below. Which multiplication sentence shows the array of circles?



$3 \times 3 = 9$ ○

$3 \times 5 = 15$ ○

$4 \times 3 = 12$ ○

$5 \times 5 = 25$ ○

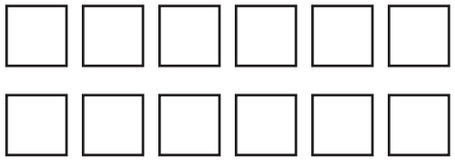
B Meg puts twelve stickers into three groups. How many stickers are in each group?

$12 \div 3 =$ ☐

3 ○ 4 ○ 6 ○ 9 ○

---

1 Look at the groups of squares. Which addition sentence models the groups of squares?



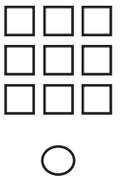
$6 + 6 + 6 = 18$ ○

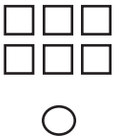
$2 + 2 + 6 = 10$ ○

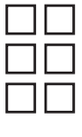
$6 + 6 = 12$ ○

$2 + 2 + 2 + 2 = 10$ ○

2 Which drawing shows two times three?

 ○

 ○

 ○

○

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3 Which multiplication sentence shows 10 + 10 + 10?

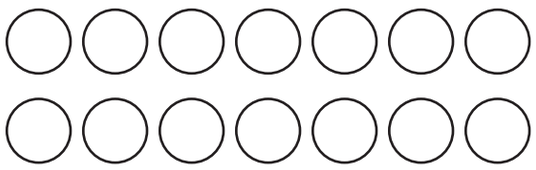
$3 \times 10 = 30$ ○

$4 \times 10 = 40$ ○

$2 \times 10 = 20$ ○

$3 \times 3 = 9$ ○

4 Look at the array of circles below. Which multiplication sentence shows the array of circles?



$2 \times 2 = 4$ ○

$14 \times 1 = 14$ ○

$2 \times 7 = 14$ ○

$5 \times 7 = 35$ ○

5 What is the solution to this problem?

$$\begin{array}{r} 90 \\ -\ 50 \\ \hline \end{array}$$

20 ○ 30 ○ 40 ○ 50 ○

6 Four friends share ten apples. Each friend gets two apples. How many apples are left over?

2 ○ 3 ○ 4 ○ 8 ○

7 Lou has this much money. How much money does he have?

$1.24 ○ $1.54 ○

$1.14 ○ $1.34 ○

8 Which division sentence shows Ty has 8 stickers? He wants to put them on four pages.

$8 \div 4$ ○

$7 \div 4$ ○

$4 \div 2$ ○

$8 \div 2$ ○

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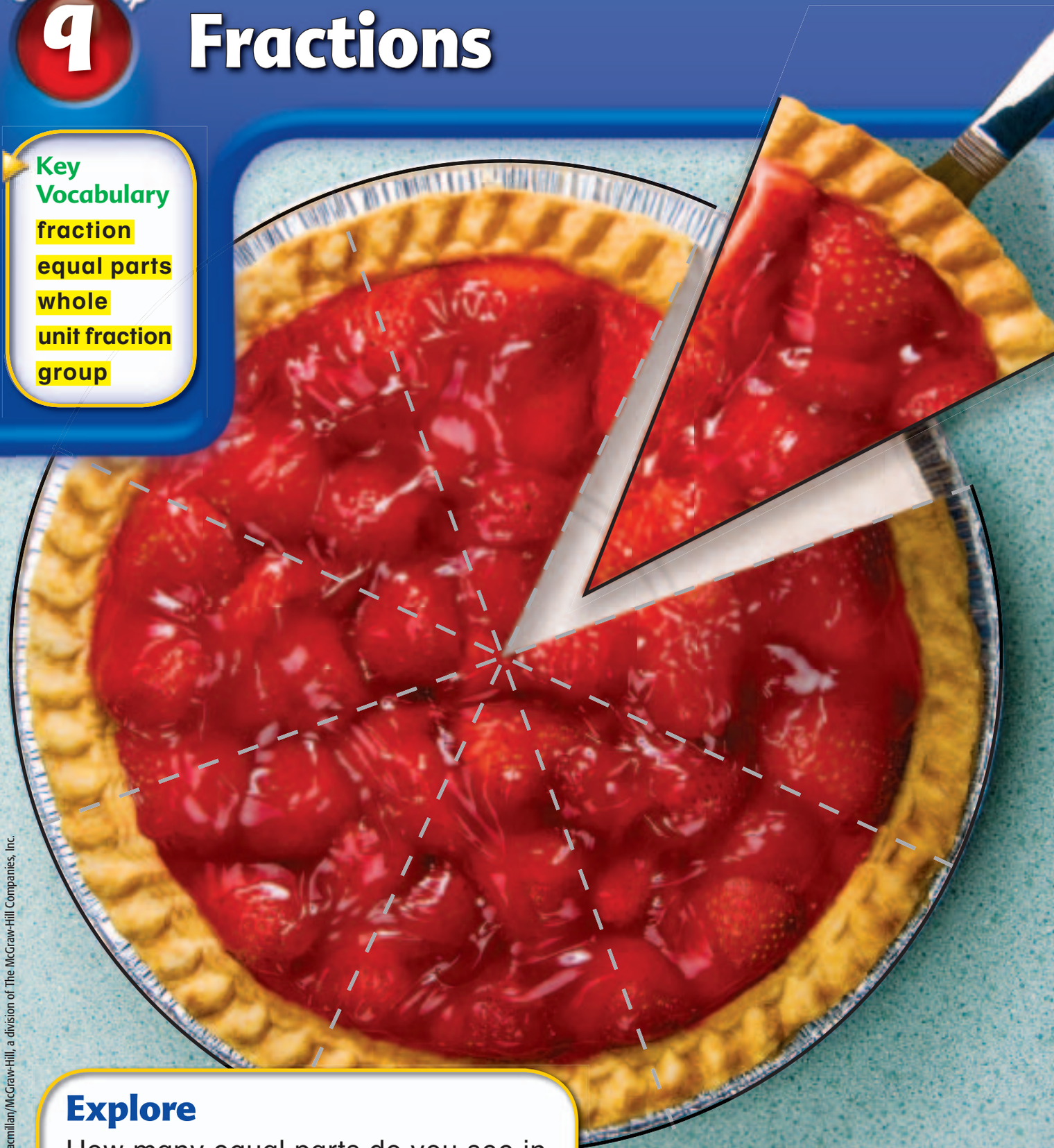
CHAPTER 9

Fractions

Key Vocabulary

- fraction
- equal parts
- whole
- unit fraction
- group



Explore

How many equal parts do you see in this pie?

_____ equal parts

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Mike Houghton/StudiOhio

Name _____

MathOnline
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 9?

Write the number of parts.

1.

_____ pizza slices

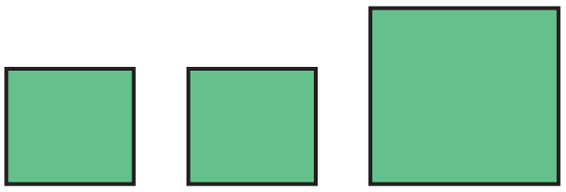
2.

_____ orange slices

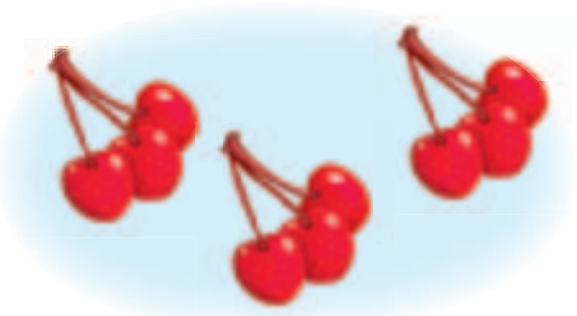
Circle the shapes that are the same size.
Draw an X on the part that is not equal.

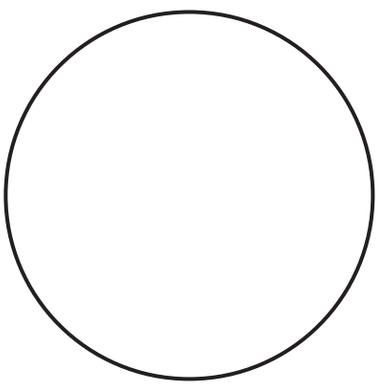
3.

4.



5. Marcia baked a cherry pie. She needs to share the pie with 4 people. Draw lines in the pie so that everyone gets a share of pie that is the same size.





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This page checks skills needed for Chapter 9.

MATH at HOME

Dear Family,

Today my class started Chapter 9, **Fractions**. In this chapter, I will learn about fractions from $\frac{1}{2}$ to $\frac{1}{12}$. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child look around the house to find objects that show equal parts. Count how many equal parts there are.

Key Vocabulary

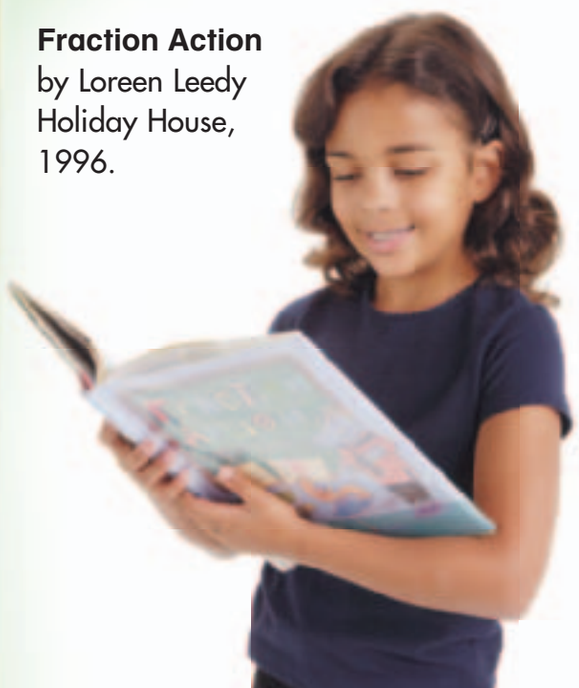
fraction a number that represents part of a whole or part of a set

equal parts each part is the same size

MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 12 languages.

Books to Read

Fraction Action
by Loreen Leedy
Holiday House, 1996.



Apple Fractions
by Jerry Pallotta
Cartwheel, 2003.

Fraction Fun
by David A. Adler
Holiday House, 1997.

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Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 9, **Las fracciones**. En este capítulo, aprenderé sobre fracciones desde $\frac{1}{2}$ hasta $\frac{1}{12}$. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Pídale a su hijo(a) que busque por la casa objetos que muestren partes iguales. Cuenten cuántas partes iguales hay.

Vocabulario clave

fracción número que representa parte de un todo o parte de un conjunto

partes iguales cada parte es del mismo tamaño

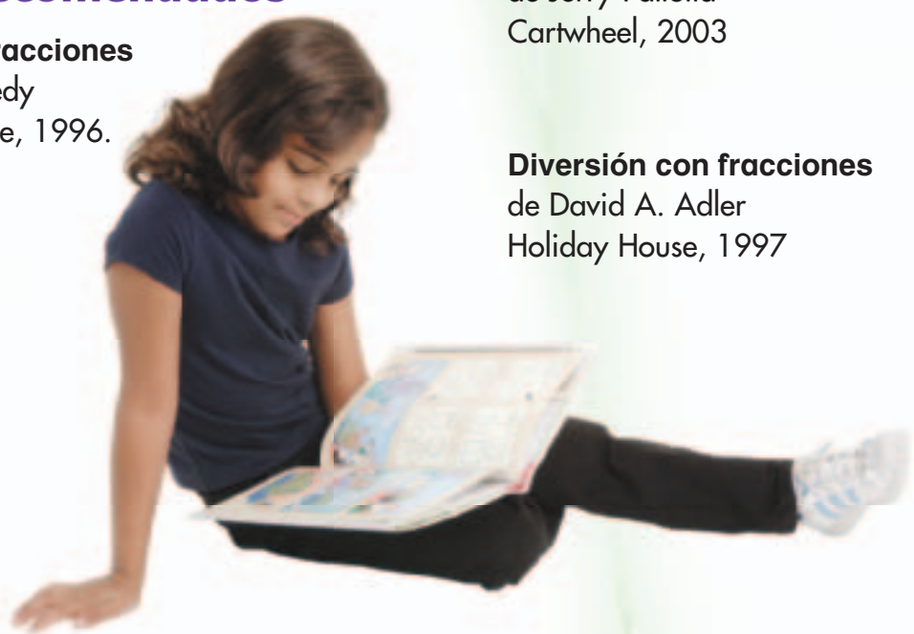
Math Online Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Acción de fracciones
de Loreen Leedy
Holiday House, 1996.

Fracciones de manzanas
de Jerry Pallotta
Cartwheel, 2003

Diversión con fracciones
de David A. Adler
Holiday House, 1997



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Name _____

Hands-On Activity

Unit Fractions

Get Ready

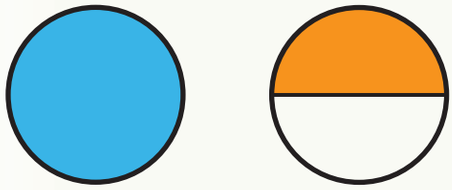
Main Idea

I will make and identify unit fractions.

Vocabulary

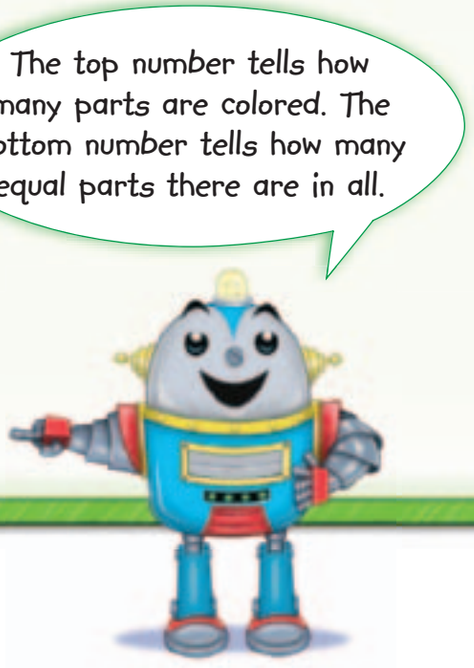
fractions
equal parts
whole
unit fraction

A **fraction** is a number that names **equal parts** of a **whole**. A **unit fraction** names one of the parts.



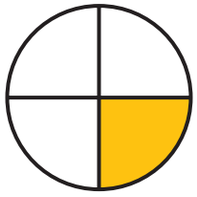
1 of 2 equal parts is brown.
One of the halves is brown.

$$\frac{1 \text{ brown part}}{2 \text{ equal parts}} \rightarrow \frac{1}{2}$$

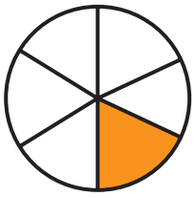


Check

Use your fraction circles to build each fraction.
Write the fraction.

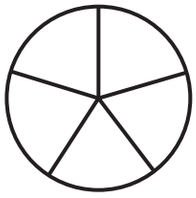
1. 

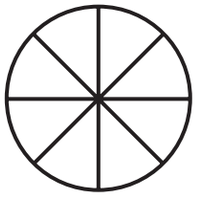
$$\frac{\text{number of colored parts}}{\text{total number of parts}} = \frac{\square}{\square}$$

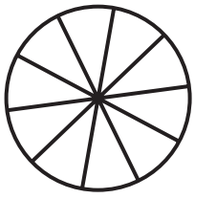
2. 

$$\frac{\text{number of colored parts}}{\text{total number of parts}} = \frac{\square}{\square}$$

Color the fraction.

3. $\frac{1}{5}$ 

4. $\frac{1}{8}$ 

5. $\frac{1}{10}$ 

6. Talk About It — What do all unit fractions have in common? How do you know?

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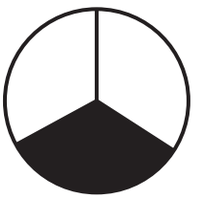
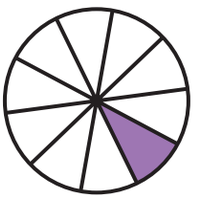
Practice

Use your fraction circles to build each fraction. Write the fraction.

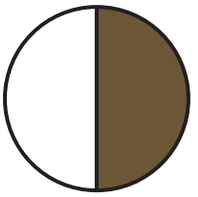
Remember
The top number tells how many parts are colored. The bottom number tells how many equal parts in all.

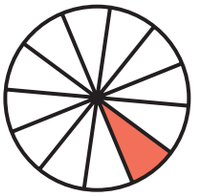
7. 

number of colored parts / total number of parts = $\frac{\square}{\square}$

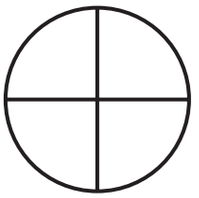
8. 

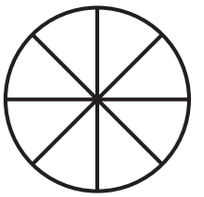
number of colored parts / total number of parts = $\frac{\square}{\square}$

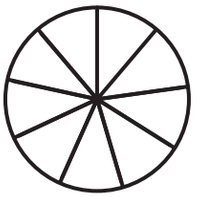
9.  $\frac{\square}{\square}$

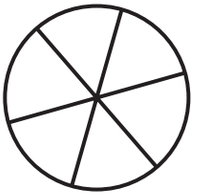
10.  $\frac{\square}{\square}$

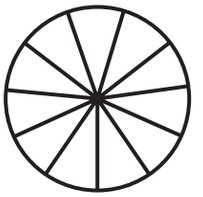
Color the fraction.

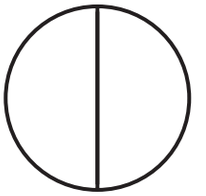
11. $\frac{1}{4}$ 

12. $\frac{1}{8}$ 

13. $\frac{1}{9}$ 

14. $\frac{1}{6}$ 

15. $\frac{1}{11}$ 

16. $\frac{1}{2}$ 

17. WRITING IN MATH Explain what $\frac{1}{8}$ means.

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Tim Fuller

Math at Home Activity: Draw pictures of shapes that are split into equal parts. Ask your child to color one of the equal parts and tell you the fraction.

Name _____

Hands-On Activity

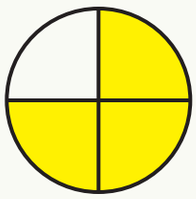
Other Fractions

Get Ready

Main Idea

I will make and identify more than one equal part of a whole.

These fractions name more than one equal part of the whole.



3 of 4 parts are yellow.

$$\frac{\text{3 yellow parts}}{\text{4 total parts}} \rightarrow \frac{3}{4}$$

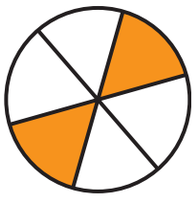
5 of 6 parts are orange.

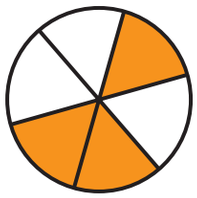
$$\frac{\text{5 orange parts}}{\text{6 total parts}} \rightarrow \frac{5}{6}$$

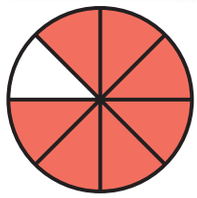
Check

Remember
There are 8 total parts. Seven eighths are shaded.

Use your fraction circles to build each fraction. Write the fraction.

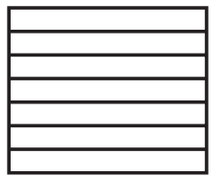
1.  $\frac{\square}{\square}$

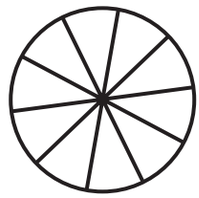
2.  _____

3.  _____

Color the fraction.

4. $\frac{2}{3}$

5. $\frac{4}{7}$ 

6. $\frac{7}{10}$ 

7. Talk About It

What does the top number of a fraction tell you? What does the bottom number of a fraction tell you?

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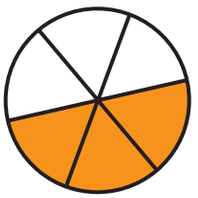
Tim Fuller

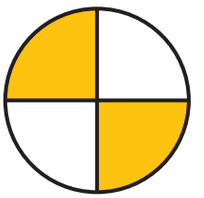
Practice

Remember
Fractions name equal parts of a whole.

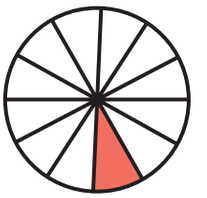
Use your fraction circles to build each fraction.
Write the fraction.

8. 

_____

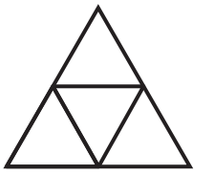
9. 

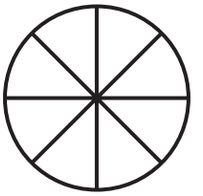
_____

10. 

_____

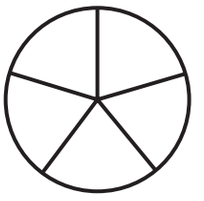
Color the fraction.

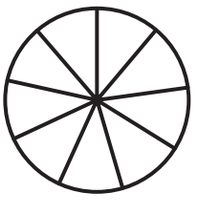
11. $\frac{2}{4}$ 

12. $\frac{3}{8}$ 

13. $\frac{2}{10}$

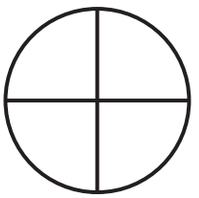
14. $\frac{7}{8}$

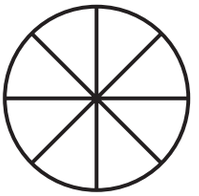
15. $\frac{2}{5}$ 

16. $\frac{3}{9}$ 

H.O.T. Problem

17. Look at each fraction.

$\frac{1}{4}$ 

$\frac{2}{8}$ 

What do you notice?

_____

_____

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Math at Home Activity: Draw a shape and divide it into 8 equal parts. Ask your child to show you $\frac{3}{8}$.

Name _____

Problem-Solving Strategy

Draw a Picture

Main Idea

I will draw a picture to solve problems.

Ted ate two parts of an orange. The orange had ten equal parts.

What fraction of the orange did he eat?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will draw a picture of the orange.

Solve

Draw a picture.

Remember
to divide your drawing into 10 parts.

Ted ate _____ of the orange.

Check

Look Back
Does my answer make sense?

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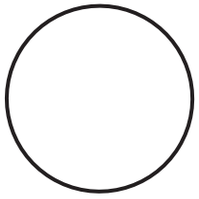
Remember
Understand
Plan
Solve
Check

Try It

Draw a picture to solve.

1. Steve needs to cut a pizza so that 6 people would each have the same amount. How should Steve divide the pizza equally?



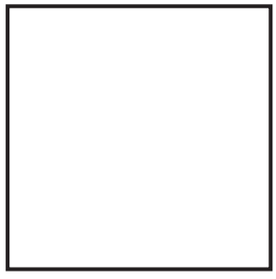
2. There are 8 pieces of a sandwich. Charlie eats three of those pieces. What fraction of the sandwich does he eat?

_____ of the sandwich

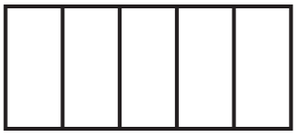
Your Turn

Draw a picture to solve.

3. Trish is making a 4-square for the playground. How should she divide the square into 4 equal parts?



4. Courtney's garden has 5 equal parts. She planted beans and corn. She planted beans in only 2 parts. What part of the garden did she plant corn?



_____ of the garden

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, putting away groceries, planning schedules, and so on.

Name _____

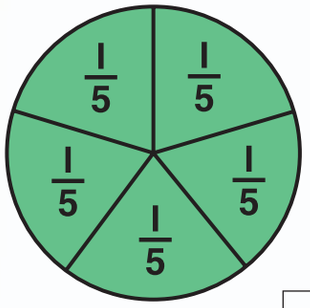
Fractions Equal to 1

Get Ready

Main Idea

I will write a fraction to show a whole.

You can write a fraction for the whole.

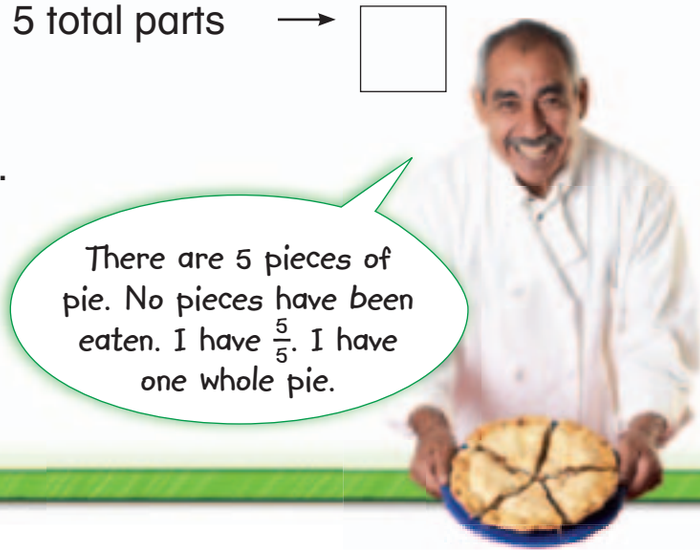


There are 5 green parts.
There are 5 total parts.

$$\frac{\text{5 green parts}}{\text{5 total parts}} \rightarrow \frac{\square}{\square}$$

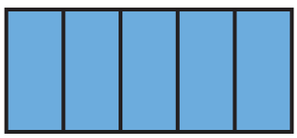
The fraction for the whole is $\frac{\square}{\square}$.

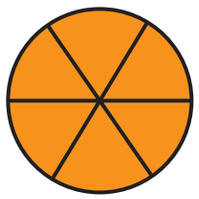
The fraction for the whole always equals 1. $\frac{5}{5} =$ _____



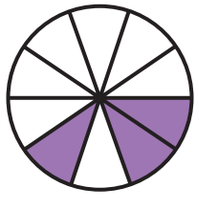
Check

Count the parts. Write the fraction.
Circle the fractions that equal 1.

1.  _____

2.  _____

3. _____

4.  _____

5. Talk About It

Why does a fraction for a whole have the same number on the top and the bottom?

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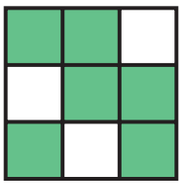
Richard Hutchings

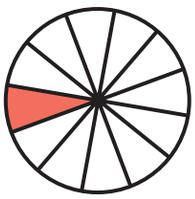
Practice

Count the parts. Write the fraction.
Circle the fractions that equal 1.

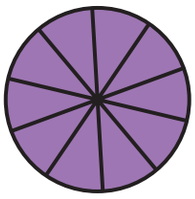
Remember
Write the number of colored parts on top. Write the total number of equal parts on the bottom.

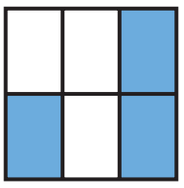
6. _____

7.  _____

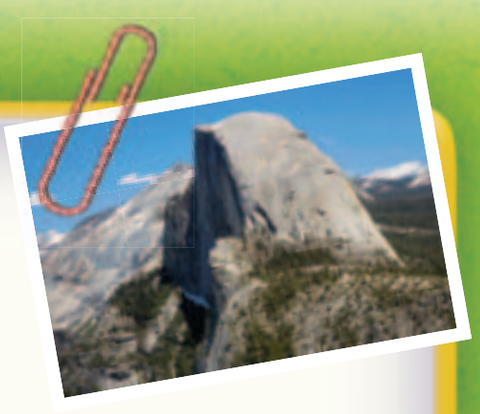
8.  _____

9. _____

10.  _____

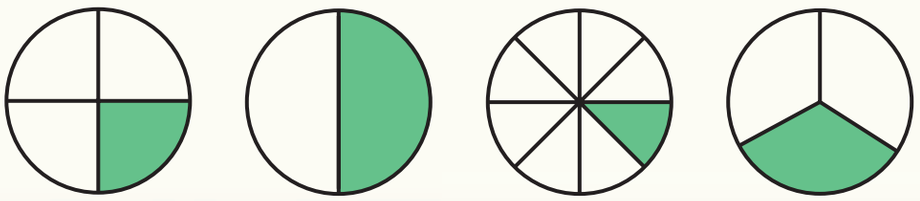
11.  _____

Data File 7



Half Dome is a huge rock landform in Yosemite National Park. It is half of what was once a giant rock dome. The missing half fell off a long, long time ago.

12. Circle the fraction that shows the half dome.



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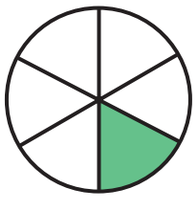
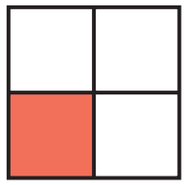
Math at Home Activity: Cut a sandwich or pizza into equal parts. Ask your child to name the fraction for the whole.

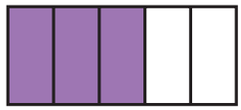
Penny Adams/SuperStock

Name _____

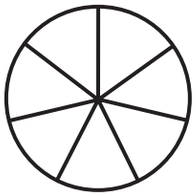
Write the fraction for the shaded part.

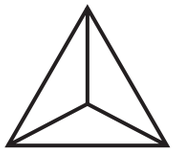
1.  $\frac{\square}{\square}$

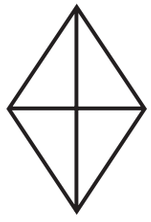
2.  $\frac{\square}{\square}$

3.  $\frac{\square}{\square}$

Color to show the fraction.

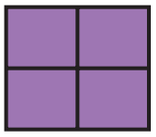
4. $\frac{1}{7}$ 

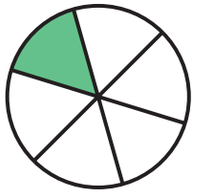
5. $\frac{2}{3}$ 

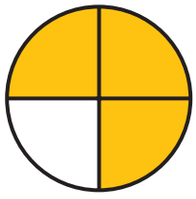
6. $\frac{3}{4}$ 

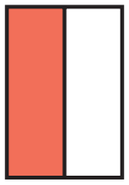
Write the fraction. Circle the fractions that equal 1.

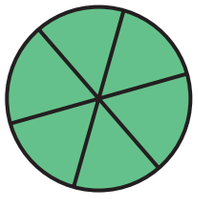
7.

8. 

9. 

10.  _____

11.  _____

12.  _____

13. Drew cut a sandwich into 4 equal pieces.
Draw the lines on the sandwich. Write the fraction.

_____

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Spiral Review Chapters 1–9

Complete the fact family.

14. $3 + 9 =$ _____ $12 - 3 =$ _____

$9 + 3 =$ _____ $12 - 9 =$ _____

Subtract.

15. $\begin{array}{r} 76¢ \\ -\ 12¢ \\ \hline \end{array}$ **16.** $\begin{array}{r} 44¢ \\ -\ 38¢ \\ \hline \end{array}$ **17.** $\begin{array}{r} 35¢ \\ -\ 27¢ \\ \hline \end{array}$ **18.** $\begin{array}{r} 68¢ \\ -\ 19¢ \\ \hline \end{array}$

Multiply.

19. $6 \times 10 =$ _____ **20.** $5 \times 7 =$ _____ **21.** $2 \times 3 =$ _____

Subtract. Then divide.

22.

$18 -$ _____ $-$ _____ $-$ _____ $-$ _____ $-$ _____ $-$ _____ $=$ _____

$18 \div 3 =$ _____

Find the total using skip-counting.

23. Ken put four hamburgers into 5 groups.
How many hamburgers are there?

_____ hamburgers

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Name _____

Hands-On Activity

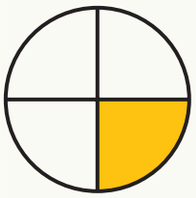
Compare Fractions

Get Ready

Main Idea

I will compare unit fractions.

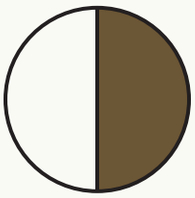
You can compare unit fractions using greater than > and less than <.



$\frac{1}{4}$ is shaded.

$\frac{1}{4}$ is less than $\frac{1}{2}$.

$\frac{1}{4} \bigcirc \frac{1}{2}$



$\frac{1}{2}$ is shaded.

$\frac{1}{2}$ is greater than $\frac{1}{4}$.

$\frac{1}{2} \bigcirc \frac{1}{4}$

Check

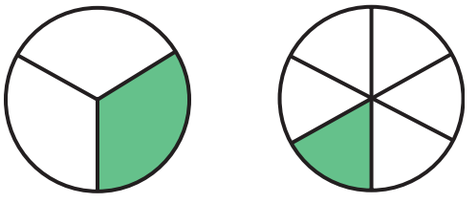
Use your fraction circles to build each fraction.
Compare the shaded parts. Write < or >.

1.

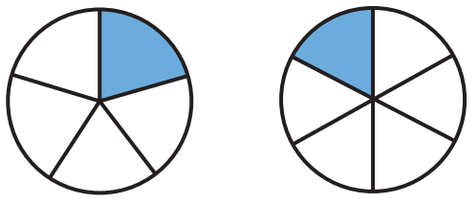
$\frac{1}{4} \bigcirc \frac{1}{8}$

2.

$\frac{1}{6} \bigcirc \frac{1}{12}$

3. 

$\frac{1}{3} \bigcirc \frac{1}{6}$

4. 

$\frac{1}{5} \bigcirc \frac{1}{6}$

5. Talk About It Is this statement true or false: 1/8 < 1/10? Explain.

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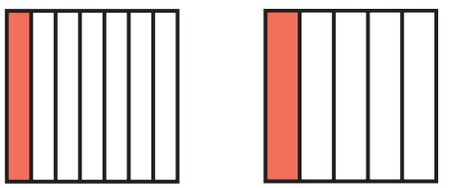
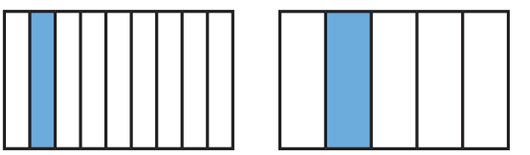
Practice

Remember
> is greater than and < is less than.

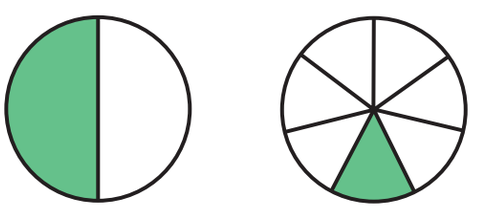
Use your fraction circles to build each fraction. Compare the shaded parts. Write < or >.

6. 

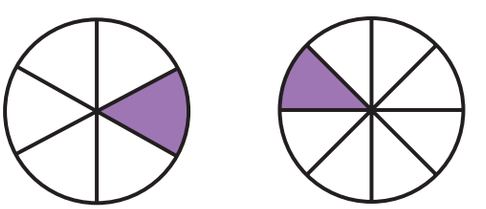
$\frac{1}{7}$ ◯ $\frac{1}{5}$

7. 

$\frac{1}{9}$ ◯ $\frac{1}{5}$

8. 

$\frac{1}{2}$ ◯ $\frac{1}{7}$

9. 

$\frac{1}{6}$ ◯ $\frac{1}{8}$

Draw each fraction. Compare. Write < or >.

10. $\frac{1}{2}$ ◯ $\frac{1}{3}$

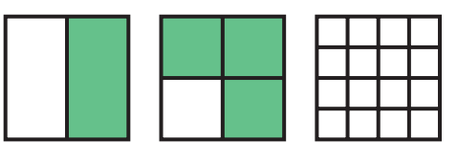
11. $\frac{1}{5}$ ◯ $\frac{1}{10}$

12. $\frac{1}{3}$ ◯ $\frac{1}{4}$

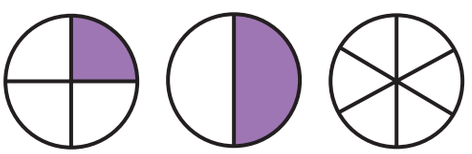
Problem Solving

Visual Thinking Circle the fraction that matches the statement.

13. greater than $\frac{1}{2}$



14. less than $\frac{1}{2}$



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Math at Home Activity: Fold a piece of paper into 4 equal parts. Fold another piece in half. Ask your child what fraction each shows. Have your child tell you which fraction is less.

Name _____

Circle the fraction that tells how much of each pie has been eaten.

1.

$\frac{1}{12}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{8}$

2.

$\frac{1}{12}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{8}$

3.

$\frac{1}{12}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{8}$

4.

$\frac{1}{12}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{8}$

5.

$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{12}$

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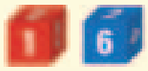
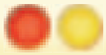
Game Time

Fraction Puzzles

Recognize Fractions

You Will Need

- Cubes
- 
- 

Play with a partner:

- Roll a or
- Move to that number.
- Show the fraction with your cubes.
- If you are right put your on the number.
- When all the numbers are covered the player with the most counters wins.

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Name _____

Fractions of a Group

Get Ready

Main Idea

I will write fractions to show one part of a group.

Vocabulary

group

A fraction can name one equal part of a **group**.

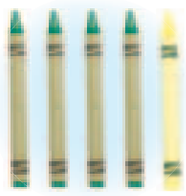
The top number tells how many equal parts you are talking about. The bottom number tells how many total parts are in the group.

1 of 4 equal parts is blue.
One-fourth is blue.

$$\frac{1 \text{ blue part}}{4 \text{ total parts}} \quad \frac{1}{4}$$

Check

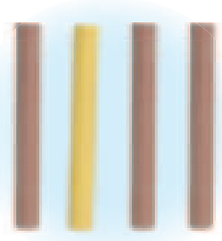
Write the fraction for the yellow part of the group.

1. 

$$\frac{\square \text{ yellow part}}{\square \text{ total parts}}$$

2.

$$\frac{\square \text{ yellow part}}{\square \text{ total parts}}$$

3. 

$$\frac{\square \text{ yellow part}}{\square \text{ total parts}}$$

4.

$$\frac{\square \text{ yellow part}}{\square \text{ total parts}}$$

5. Talk About It — What does the fraction $\frac{1}{4}$ of a group mean?

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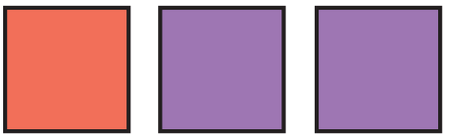
(l,r,br)Richard Hutchings, (cr) StudiOhio

Practice

Remember
The bottomnumber tells how many total parts.

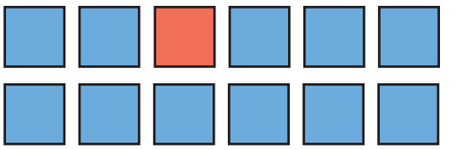
Write the fraction for the red part of the group.

6.



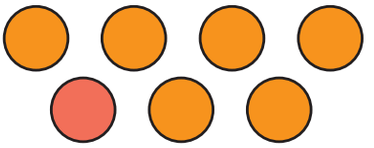
_____ of 3 squares

7.



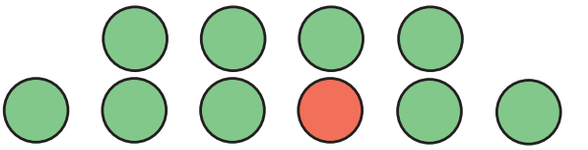
_____ of 12 squares

8.



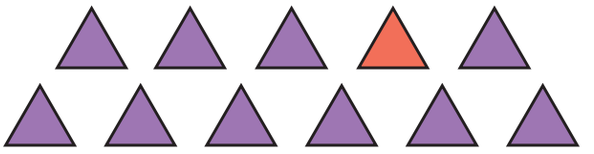
_____ of 7 circles

9.



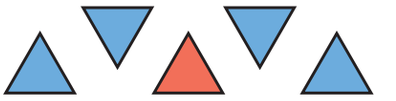
_____ of 10 circles

10.



_____ of 11 triangles

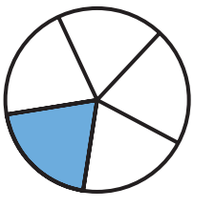
11.



_____ of 5 triangles

H.O.T. Problems

12. Circle the pictures or words that show the same fraction.



one fifth $\frac{1}{5}$

13. How did you know which pictures or words show the same fraction?

_____

_____

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Math at Home Activity: Make groups of white socks and 1 black sock. Ask your child to tell what fraction of the group shows black.

Name _____

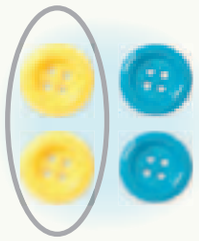
Other Fractions of a Group

Get Ready

Main Idea

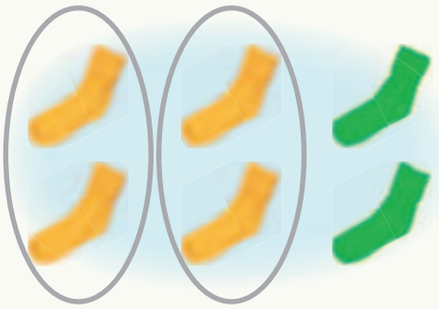
I will identify fractions of more than one part of a group.

A fraction can name more than one part of a group.



There are 2 equal parts.
1 of the 2 parts is yellow.

The yellow part is $\frac{1}{2}$ of 4 buttons.

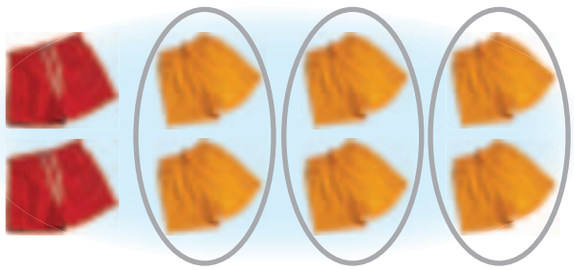


There are 3 equal parts.
2 of the 3 parts are yellow.

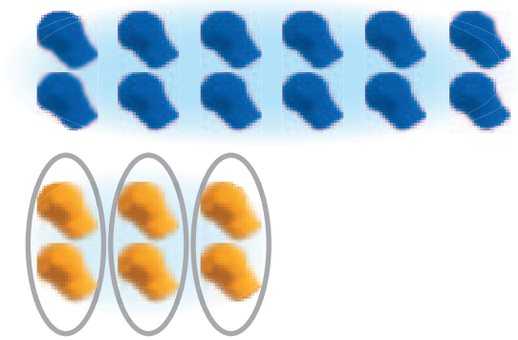
The yellow part is $\frac{2}{3}$ of 6 socks.

Check

Write the fraction for the yellow parts.

1. 

$\frac{\square}{\square}$ of 8 shorts

2. 

$\frac{\square}{\square}$ of 18 caps

3. Talk About It

How would you use a picture to show $\frac{2}{3}$ of 15 baseballs?

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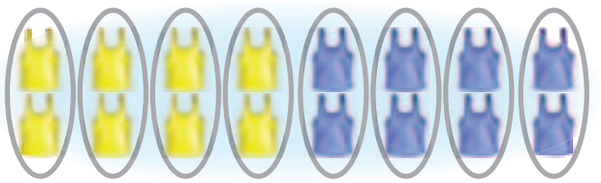
(t,tr,cl,cr,br)McGraw-Hill Companies, (l)StudiOhio

Practice

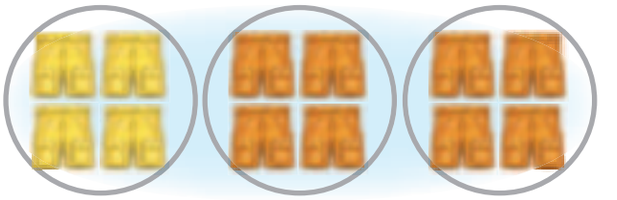
Write the fraction for the yellow part.

6.



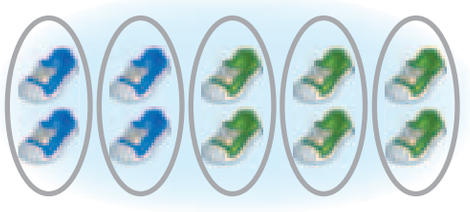
$\frac{\square}{\square}$ of 16 tank tops

7.



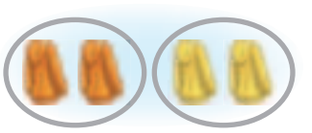
$\frac{\square}{\square}$ of 12 shorts

8.



$\frac{\square}{\square}$ of 20 shoes

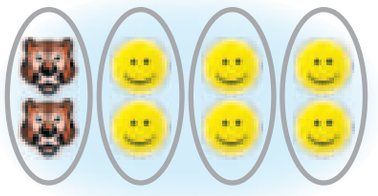
9.



$\frac{\square}{\square}$ of 4 hoodies

Problem Solving

10. Number Sense What fraction of the stickers are tigers? Explain how you found your answer.



$\frac{\square}{\square}$ of 8 stickers are tigers

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Math at Home Activity: Ask your child to divide a group of pennies into $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$.

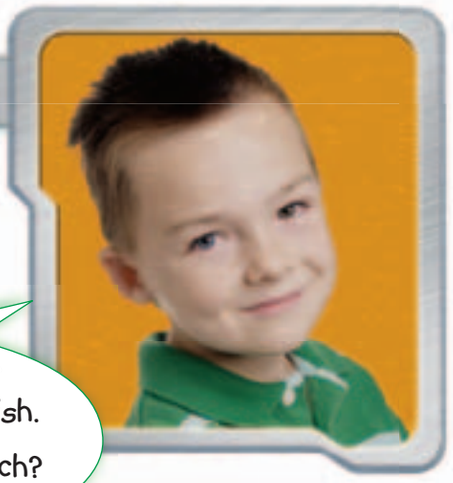
Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve the problem.

Your Mission:
Find what part was caught.



My dad and I went fishing. We caught 12 fish. I caught 3 of the fish.

What part of the 12 fish did I catch? Show your answer as a fraction.

Understand

What do I know? Underline what you know.
What do I need to find out? Circle it.

Plan

How will I solve the problem?
One way is to draw a picture.

Solve

Draw a picture.

Remember
to start with 12 fish.

Jerry caught $\frac{3}{12}$ of the fish.

Check

Look Back
Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Draw a picture
- Logical reasoning
- Act it out

Choose a strategy. Solve.

1. There were 16 people at the park. 4 were on the swings. What fraction of people were on the swings?

_____

2. Jim's mom cut the watermelon in half. Jim and his sister shared half. His mom and dad shared the other half. How much of the watermelon did Jim eat?

_____

3. There were seven birds in the tree. 3 of the birds were robins, and the others were blue jays. What fraction of the birds were blue jays?

_____

4. Erin has 6 buttons.

What fraction of them are yellow? _____ of 6 buttons

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, putting away groceries, planning schedules, and so on.

I take good care of my fish.
I feed them just enough and
I make sure the tank is clean.

Fish need care just like dogs
and cats!

D

FOLD DOWN

Problem-Solving in Science

Real-World MATH

I have twelve fish in my tank.
There are lots of cool places for
my fish to hide.

This book belongs to

_____

A

Six of my fish are almost always behind the plants. That means I can only see six fish at a time.

What fraction of my fish can I see?

$\frac{\square}{\square}$

Wait and watch closely! Two more of my fish will come out of hiding.Then I can see eight of my fish.

What fraction of my fish are still hiding?

$\frac{\square}{\square}$

Name _____

Vocabulary

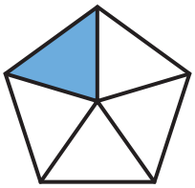
Circle the word that best completes the sentence.

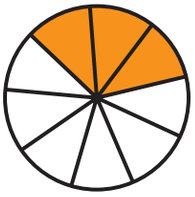
1. A _____ is a part of a whole. fraction number

2. A _____ is made up of equal parts. fraction whole unit

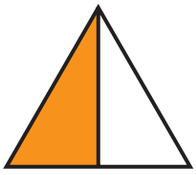
Concepts

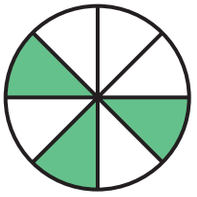
Write the fraction for the shaded part.

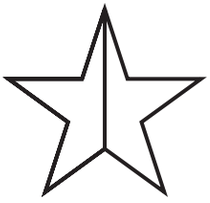
3.  _____

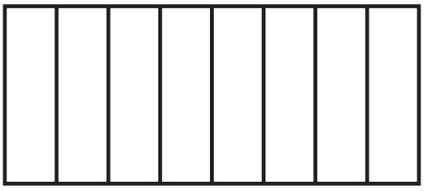
4.  _____

Color the fraction.

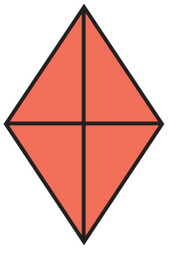
5.  _____

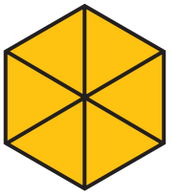
6.  _____

7. $\frac{1}{2}$ 

8. $\frac{7}{8}$ 

Write the fraction. Circle the fractions that equal 1.

9.  _____

10.  _____

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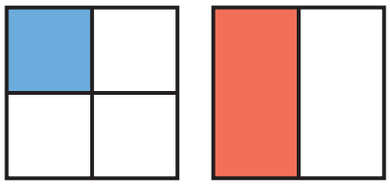
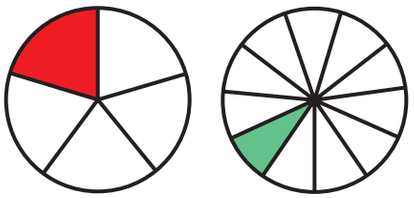
Compare the fractions. Write < or >.

11.



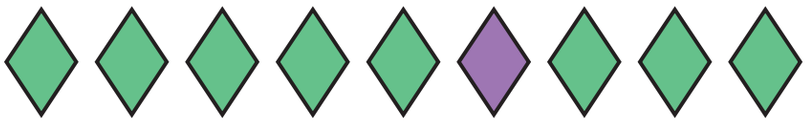
$\frac{1}{4}$ ◯ $\frac{1}{2}$

12.



$\frac{1}{5}$ ◯ $\frac{1}{11}$

13. Write a fraction for the purple part of the group.



_____

14. What fraction of the group of stickers are heart stickers?

_____

15. Write the fraction for the blue parts.

_____ of 10 mittens

16. A pizza has 8 slices. How many slices would you color to show that the whole pizza has been eaten?

_____ slices

17. Is $\frac{7}{8} > \frac{1}{8}$ true or false? Explain.

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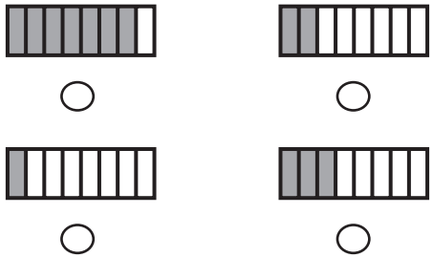
Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A Look at the fraction bars. Which fraction bar shows one-eighth shaded?

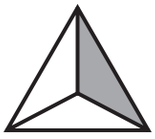


B What fraction of the group of shapes is hearts?

$\frac{3}{6}$ $\frac{6}{3}$ $\frac{3}{5}$ $\frac{3}{4}$

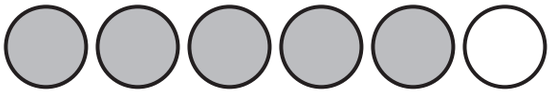
Listen as your teacher reads each problem.
Choose the correct answer.

1 What fraction of this shape is shaded?



$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$ $\frac{3}{2}$

2 Look at the group of circles. What fraction names the shaded part of the group?



$\frac{1}{6}$ $\frac{5}{6}$ $\frac{4}{6}$ $\frac{5}{5}$

3 Which fraction is equal to one whole?

$\frac{1}{4}$ $\frac{8}{8}$ $\frac{5}{8}$ $\frac{1}{2}$

4 Mrs. Wong divided the class into groups. Each group has one-fourth of all the students in the class. How many groups are there?

2 4 6 12

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5 Which of the following fractions is the greatest?

$\frac{1}{12}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{7}$
○	○	○	○

6 Sara has this money. How much money is this?

89¢	98¢	78¢	95¢
○	○	○	○

7 Bart has saved forty-three bottle tops. Frank has saved twenty-nine bottle tops. About how many more bottle tops does Bart have?

10	20	40	70
○	○	○	○

8 What is the solution to this problem?

$$\begin{array}{r} 23 \\ +\ 8 \\ \hline \end{array}$$

28	31	29	33
○	○	○	○

9 Beth ate one half of her sandwich. Karen ate one-fourth of her sandwich. Which fraction shows the greatest amount that was eaten?

$\frac{1}{10}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{2}$
○	○	○	○

10 There are twelve cats at the farm. Each cat has four legs. How many cat legs are there altogether?

12	48	49	55
○	○	○	○

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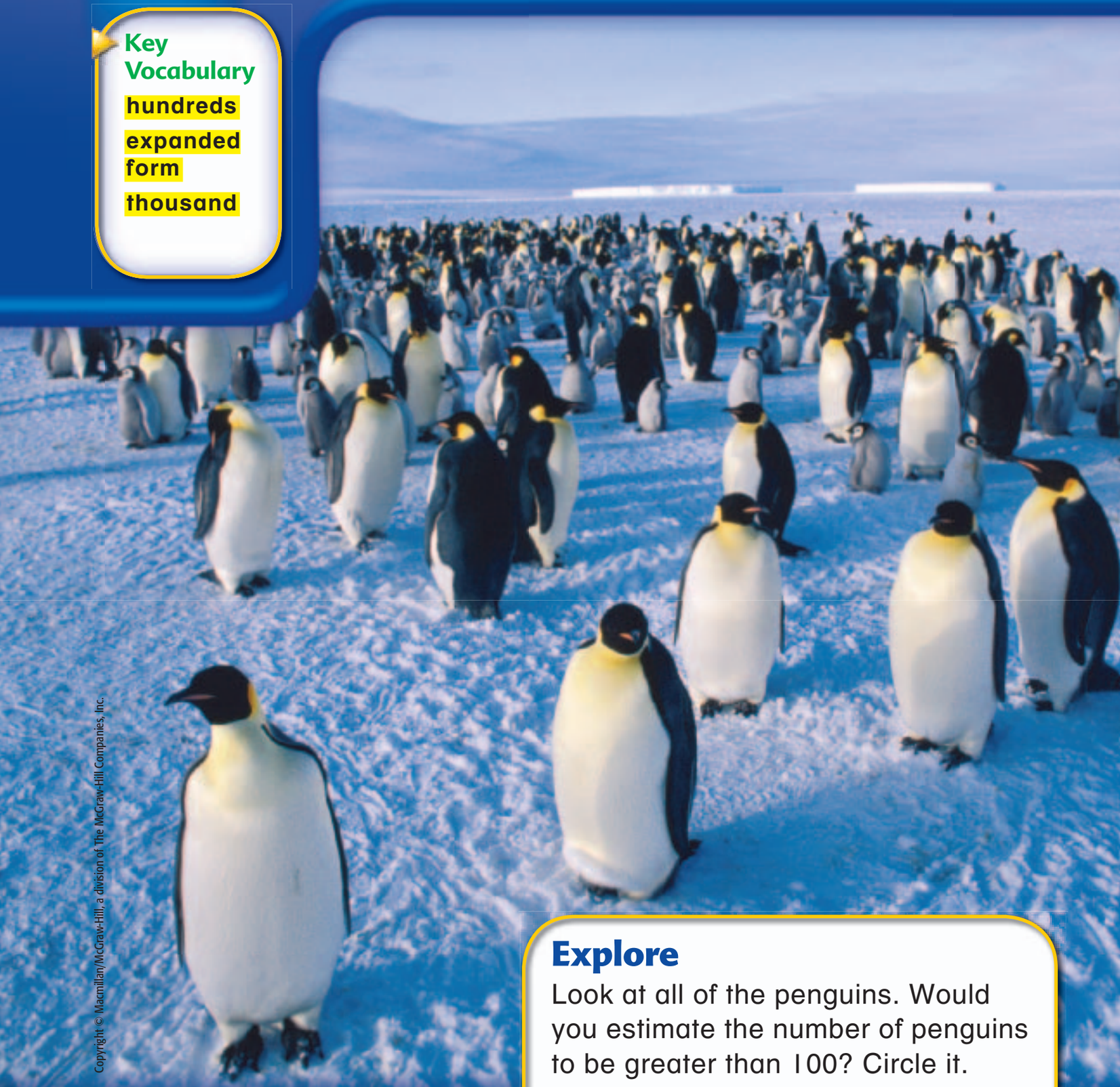
CHAPTER 10

Numbers to 1,000

Key Vocabulary

- hundreds
- expanded form
- thousand



Explore

Look at all of the penguins. Would you estimate the number of penguins to be greater than 100? Circle it.

Yes No

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David Tipling/Getty Images

Name _____

Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 10?

Write the numbers in order.

1. 13, 65, 8, 90 _____, _____, _____, _____

2. 100, 44, 23, 89 _____, _____, _____, _____

3. 35, 53, 92, 29 _____, _____, _____, _____

Write the number.

4. An 8 is in the tens place and a 3 is in the ones place; _____

5. A 7 is in the tens place and a 2 is in the ones place; _____

6. A 3 is in the tens place and a 0 is in the ones place; _____

Compare using <, >, or =.

7. 27 ◯ 36

8. 15 ◯ 15

9. 45 ◯ 29

10. 12 ◯ 20

11. Rosa skip-counts by twos to count the shoes in her closet. Show how she counts.

2, 4, _____, _____, _____

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This page checks skills needed for Chapter 10.

MATH at HOME

Dear Family,

Today my class started Chapter 10, **Numbers to 1,000.** In this chapter, I will learn to compare and order numbers to 1,000. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Visit your local library with your child. Write out 000–099, 100–199, 200–299, etc. up to 999 on separate pieces of paper. Walk through the non-fiction children's area and find the subject of the books within each range of numbers. Find an interesting book in each section and write down its name and number.

Key Vocabulary

hundreds the numbers 100-999. Also a number place

thousand a place value of a number

expanded form the representation of a number as a sum that shows the value of each digit Ex: is 800 + 20 + 6

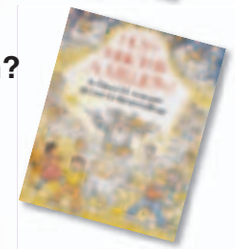
MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Fun with 9umbers
by Massin
Creative Editions, 1995.

The History of Counting
by Denise Schmandt-Besserat
HarperCollins, 1999.

How Much Is a Million?
by David M. Schwartz
HarperTrophy, 2004.



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(cr,r)Eclipse Studios

MATEMÁTICAS en CASA

Estimada Familia,

Hoy mi clase comenzó el Capítulo 10, **Los números hasta 1,000.** En este capítulo, aprenderé a comparar y a ordenar los números hasta 1,000. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Visiten la biblioteca local con su hijo(a). En trozos de papel separados, escriban 000-099, 100-199, 200-299, etc. hasta 999. Caminen por la sección infantil de no ficción y busquen los temas de los libros dentro de cada rango de números. Busquen un libro interesante en cada sección y anoten su título y número

Vocabulario clave

centenas el valor de posición que representa 10 grupos de 10 los números 100–999. También un valor de posición.

millares el valor de posición que representa 10 grupos de 100 el valor de posición de un número

forma desarrollada separar los valores de posición de los números para mostrar los números menores que componen el número original la representación de un número como una suma que muestra el valor de cada dígito Ej.: 826 is 800 + 20 + 6

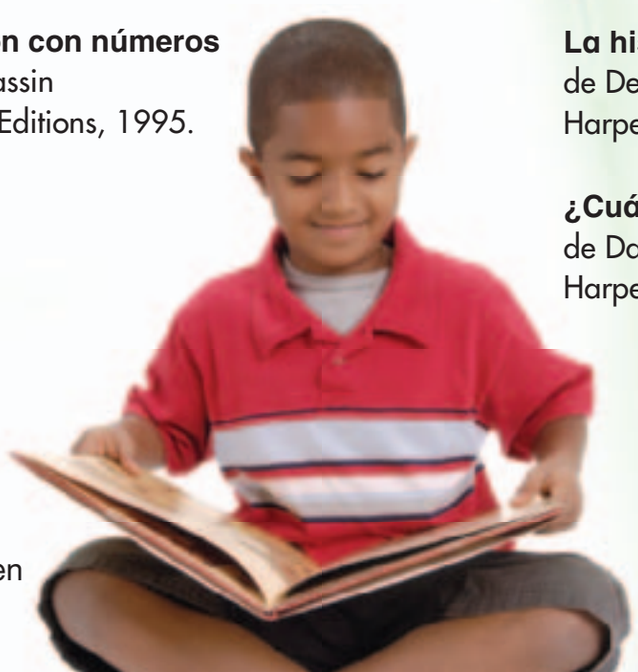
MathOnline Haz click en ca.gr2math.com para aprender más sobre estas palabras. Hay 13 idiomas.

Libros recomendados

Diversión con números
de by Massin
Creative Editions, 1995.

La historia del conteo
de Denise Schmandt-Besserat
HarperCollins, 1999.

¿Cuánto es un millón?
de David M. Schwartz
HarperTrophy, 2004.



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Name _____

Hands-On Activity

Hundreds

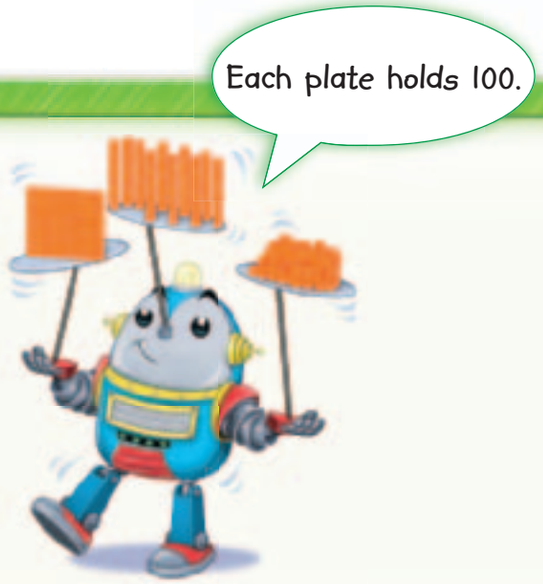
Get Ready

Main Idea

I will write numbers as hundreds, tens, and ones.

Vocabulary

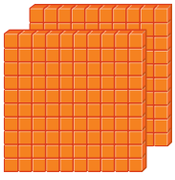
hundreds



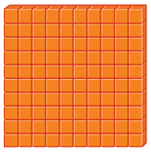
1 **hundred** = 10 tens = 100 ones

Check

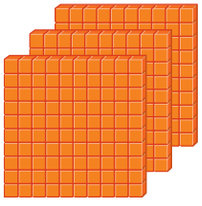
Use models to make groups of hundreds.
Write how many hundreds, tens, and ones.

1. 

2 hundreds = 20 tens = 200 ones = 200

2. 

1 hundred = _____ tens = _____ ones = _____

3. 

3 hundreds = _____ tens = _____ ones = _____

4. Talk About It

How many ones are in 1 hundred?
How do you know?

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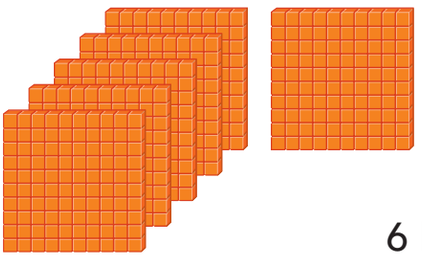
Practice

Remember
10 tens is the same as 1 hundred.

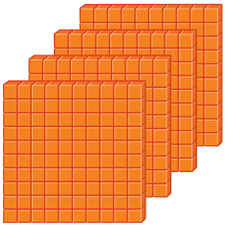
Use models to make groups of hundreds.
Write how many hundreds, tens, and ones.

5.



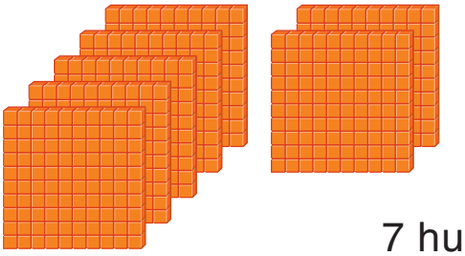
6 hundreds = _____ tens = _____ ones = _____

6.



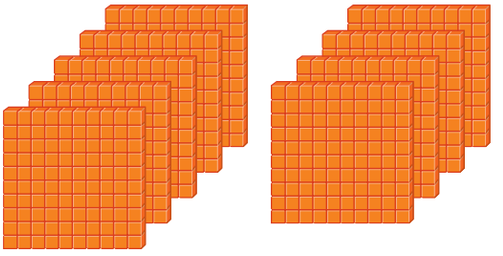
4 hundreds = _____ tens = 400 ones = _____

7.



7 hundreds = _____ tens = _____ ones = _____

8.



9 hundreds = _____ tens = _____ ones _____

9. WRITING IN MATH Explain how 20 tens is the same as 200.

_____

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Math at Home Activity: Ask your child to count by hundreds to 900.

Name _____

Hundreds, Tens, and Ones

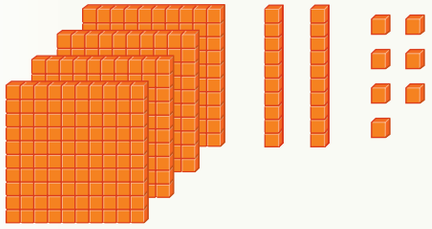
Hands-On Activity

Get Ready

Main Idea

I will use hundreds, tens, and ones to show numbers.

There are 427 pennies in this jar. Use hundreds, tens and ones to show 427.

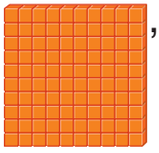


hundreds	tens	ones
4	2	7

is the same as 427.

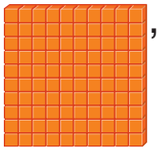
Check

Use models to show each number. Write how many hundreds, tens, and ones. Then write the number.

1. Show 2  , 6 , and 3 .

hundreds	tens	ones

_____

2. Show 5  , 1 , and 8 .

hundreds	tens	ones

_____

3. Talk About It

What is the value of the 1 in 712, 165, and 381?

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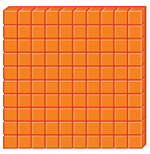
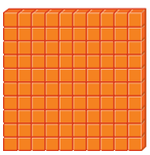
Practice

Use models to show each number. Write how many hundreds, tens, and ones. Then write the number.

4. Show 3  , 8 , and 2 .

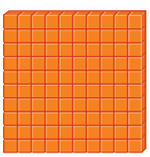
hundreds	tens	ones

_____

5. Show 6  , 4 , and 3 .

hundreds	tens	ones

_____

6. Show 7  , 0, and 9 .

hundreds	tens	ones

_____

Data File

The Transamerica Pyramid is an office building in San Francisco. The building measures 853 feet high from base to top. It is 152 feet wide at the bottom, but only 45 feet wide at the top!

7. What number has an 8 in the hundreds place? _____

8. What number has a 5 in the ones place? _____

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©Craig Lovell/CORBIS

Math at Home Activity: Write the number 647. Ask your child to tell you how many hundreds, tens, and ones.

Name _____

Problem-Solving Strategy
Make a List

Main Idea

I will make a list to solve problems.

The number of Amanda's house is a 3-digit number. The sum of the digits is 6. None of the digits are 0.

How many different house numbers could there be?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will make a list of all possible house numbers.

Solve

Make a list of the possible addresses.

123	213	321
132	231	312

There are 6 possible addresses.

Check

Look Back
Does my answer make sense?

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Remember
Understand
Plan
Solve
Check

Try It

Make a list to solve.

1. Mario, Kay, and Martin are sitting for a class picture. List all the ways they can sit.

   There are _____ ways.

2. Loretta is putting the letters RES for Richardson Elementary School on the bulletin board. She forgot what order to put them in. How many different ways could she have arranged the letters?

   The letters can be arranged in _____ ways.

Your Turn

Make a list to solve.

3. You are going to make a model of a dinosaur. There are red heads, red bodies, green heads, and green bodies. How many different models can you make?

   You can make _____ different models.

4. Quinn, Roger, and Heather are playing a game. They each want a chance to be first. How many times will they have to play?

   They will have to play _____ times.

Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

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Name _____

Place Value to 1,000

Hands-On Activity

Get Ready

Main Idea

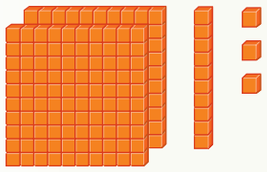
I will use expanded form to write numbers up to 1,000.

Vocabulary

expanded form

Place value tells the value of a digit in a number.

Remember
You can write a number in expanded form.



hundreds	tens	ones
2	1	3

2 hundreds 1 ten 3 ones

200 + 10 + 3

213

Check

Write the number in expanded form.
Then write the number.

1. 1 hundred 4 tens 9 ones

_____ + _____ + _____

_____

2. 1 hundred 2 tens 5 ones

_____ + _____ + _____

_____

Write the number.

3. 300 + 70 + 6 = _____

4. 200 + 30 + 1 = _____

Circle the value of the blue digit.

5. 931

300 30 3

6. 277

200 20 2

7. Talk About It

How are 562 and 265 the same?
How are they different?

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Practice

Write the number in expanded form.
Then write the number.

8. 8 hundreds 7 tens 0 ones

_____ + _____ + _____

_____

9. 9 hundreds 9 tens 9 ones

_____ + _____ + _____

_____

Write the number.

10. 600 + 30 + 8 = _____

11. 700 + 60 + 8 = _____

12 500 + 20 + 4 = _____

13. 200 + 70 + 2 = _____

Circle the value of the blue digit.

14. 965

900 90 9

15. 673

300 30 3

16. 468

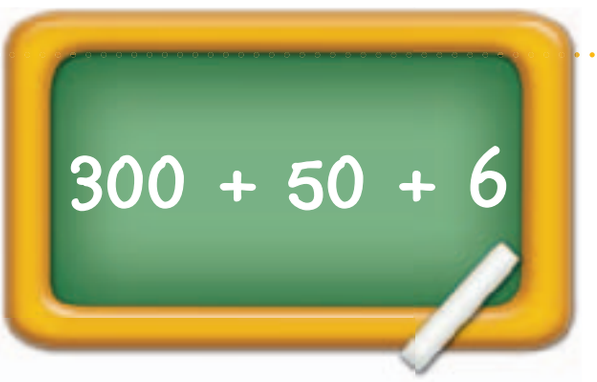
600 60 6

17. 890

800 80 8

H.O.T. Problem

18. **Make it Right**
Julio wrote 365 in expanded form like this: 300 + 50 + 6
Tell why Julio is wrong.
Then make it right.



_____

_____ + _____ + _____

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Math at Home Activity: Have your child tell you a three digit number. Then ask your child to tell you the value of the first digit.

Name _____

Write each number in expanded form.

1. 42 = _____ + _____
2. 665 = _____ + _____ + _____
3. 982 = _____ + _____ + _____
4. 570 = _____ + _____
5. 308 = _____ + _____
6. 255 = _____ + _____ + _____

Write the number. Color all of the butterflies that are greater than 500 yellow. Color all of the butterflies that are less than 500 purple.

7. 50 + 3 = _____
8. 300 + 20 + 5 = _____
9. 600 + 70 + 4 = _____
10. 400 + 6 = _____
11. 900 + 10 = _____
12. 800 + 1 = _____

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Game Time

Butterfly Fun

Place Value

What You Need

-
-
-
- Paper and pencil

How To Play:

- Take turns.
- Roll the three times.
- Roll 1 is the hundreds place, roll 2 is the tens place, roll 3 is the ones place.
- Write the number and say it out loud.
- Have your partner check your work.
- If correct, color a butterfly in your sunflower.
- The first person to color all the butterflies in their sunflower wins!

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Name _____

Read and Write Numbers to 1,000

Get Ready

Main Idea

I will read and write numbers to 1,000.

You can read and write numbers with symbols and words.

Write 538.

Number name: five hundred thirty-eight

1 one	11 eleven	10 ten	100 one hundred
2 two	12 twelve	20 twenty	200 two hundred
3 three	13 thirteen	30 thirty	300 three hundred
4 four	14 fourteen	40 forty	400 four hundred
5 five	15 fifteen	50 fifty	500 five hundred
6 six	16 sixteen	60 sixty	600 six hundred
7 seven	17 seventeen	70 seventy	700 seven hundred
8 eight	18 eighteen	80 eighty	800 eight hundred
9 nine	19 nineteen	90 ninety	900 nine hundred
			1,000 one thousand

Check

Write the number names.

1. 710

_____

2. 900

_____

Write the number.

3. thirty-eight

_____

4. one hundred twenty-one

_____

5. Talk About It — Explain how you would write 62 and 602.

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Practice

Write the number names.

6. 226

_____

7. 306

_____

8. 1,000

_____

9. 186

_____

10. 720

_____

11. 620

_____

Write the number.

12. one thousand

_____

13. seven hundred eighteen

_____

14. six hundred fourteen

_____

15. nine hundred one

_____

16. three hundred sixty

_____

17. six hundred fifty-one

_____

Problem Solving

18. **Critical Thinking** Chico shows 999 with s. He adds 1 more . What number is he showing now? _____.

How do you know?

_____

_____

Remember
Look back at the chart for help.

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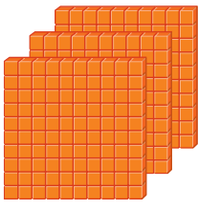
Math at Home Activity: Say three hundred forty-seven and have your child write the number.

Name _____

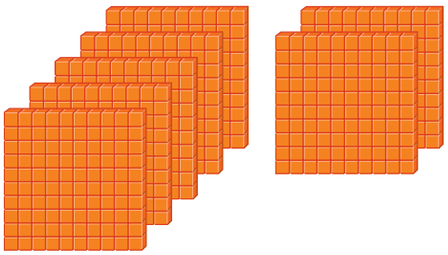
Write how many hundreds, tens, and ones.

1.



_____ hundreds = _____ tens = _____ ones

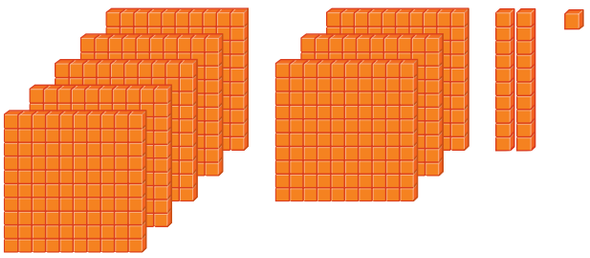
2.



_____ hundreds = _____ tens = _____ ones

Write how many hundreds, tens, and ones.
Then write the number.

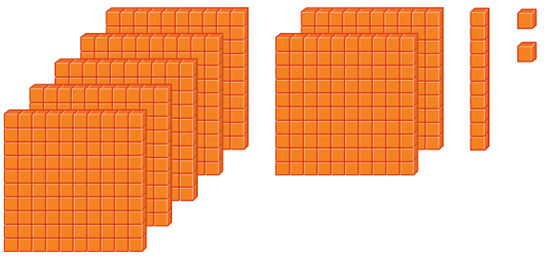
3.



hundreds	tens	ones

_____

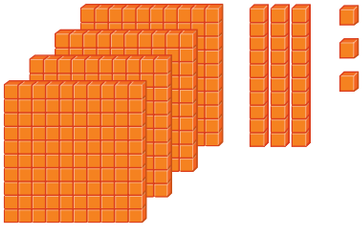
4.



hundreds	tens	ones

_____

5.



hundreds	tens	ones

_____

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Write the number.

6. five hundred sixty-six

_____ + _____ + _____

_____

7. nine hundred ten

_____ + _____ + _____

_____

8. 700 + 20 + 6 = _____

9. 1,000 + 0 + 0 = _____

Circle the value of the blue digit.

10. 157

500 50 5

11. 963

900 90 9

12. 505

500 50 5

Write the number names.

13. 998

_____

14. 501

_____

15. 637

_____

16. 211

_____

Write the number.

17. two hundred

_____

18. seven hundred eleven

_____

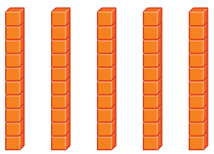
Solve.

19. Monica has 3 ones.
She has 9 hundreds.
She also has 2 tens.
What number does she have? _____

Spiral Review Chapters 1–10

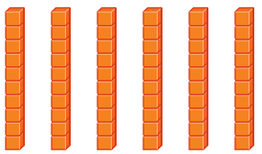
Write how many ones. Then write how many tens.

19.



_____ ones = _____ tens

20.



_____ ones = _____ tens

Estimate about how many? Use the picture of 10 to estimate. Circle your answer.

21.

about 20 about 40 about 10

22.

about 70 about 50 about 90

Use the tally chart to complete the pictograph. Answer the questions.

Favorite School Subject		
	Tally	Total
Reading	||	
Science	𝍸	
Math	𝍸 |	
Art	||	

Favorite School Subject

Reading	
Science	
Math	
Art	

Key: = 2

23. How many students chose math as their favorite? _____

24. How many students were surveyed in all? _____

25. How many students like Art and Reading? _____

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Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve a problem.

Your Mission:
Find out how many people are at the park.

How many people are in the park? Amy guessed 10 tens. How many people is that?

Understand

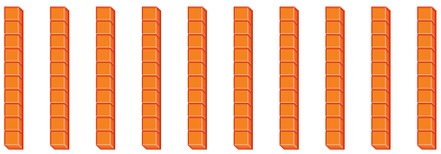
What do I know? Underline what you know.
What do I need to find out? Circle it.

Plan

How will I solve the problem?
One way is to act it out.

Solve

Act it Out.
I can use models to show the number.



Then count.

There are _____ people in the park.

Check

Look Back
Does my answer make sense?

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Mixed Problem Solving

Problem-Solving Strategies

- Act it Out
- Guess and Check
- Draw a picture

Choose a strategy. Solve.

1. Stevie has pennies. He put the pennies into groups to count them. He had 5 hundreds, 8 tens, and 3 ones. How many pennies does he have?

_____ pennies

---

2. Mr. Snyder asks the class to guess a number. The number can be written as 0 + 60 + 400. What is the number?

_____

---

3. Mario wanted to write the number 981. He wrote 900 + 10 + 8. Is this right? If not, make it right.

_____ + _____ + _____

_____

---

4. Mrs. Blue is thinking of a number.
The value of the ones digit is 7.
The value of the tens digit is 0.
The value of the hundreds digit is 800.
What is the number?

_____

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Compare Numbers

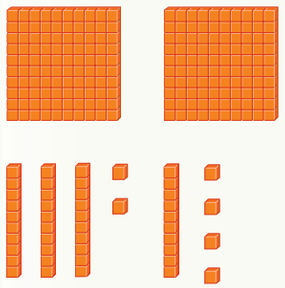
Get Ready

Main Idea

I will compare numbers using words and symbols.

To compare larger numbers first compare the hundreds. If hundreds are equal, compare the tens. If tens are equal, compare the ones.

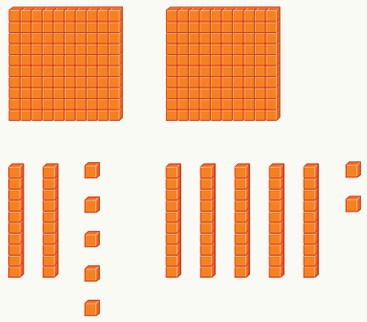
Greater than >



132 **is greater than** 114.

132 > 114

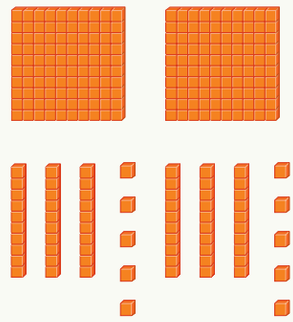
Less than <



125 **is less than** 152.

125 < 152

Equal to =



135 **is equal to** 135.

135 = 135

Check

Compare. Write >, <, or =.

1. 142 ◯ 124
2. 253 ◯ 257
3. 313 ◯ 313
4. 842 ◯ 795
5. 694 ◯ 694
6. 203 ◯ 153
7. 100 ◯ 1,000
8. 999 ◯ 99
9. 133 ◯ 133

10. Talk About It Explain how you compare 567 and 576.

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Practice

Compare. Write >, <, or =.

11. 150 ◯ 150

12. 132 ◯ 213

13. 689 ◯ 627

14. 425 ◯ 425

15. 907 ◯ 899

16. 533 ◯ 533

17. 207 ◯ 210

18. 697 ◯ 667

19. 108 ◯ 801

20. 411 ◯ 421

21. 619 ◯ 621

22. 290 ◯ 280

23. 729 ◯ 729

24. 325 ◯ 300

25. 565 ◯ 569

26. 332 ◯ 335

27. 984 ◯ 894

28. 239 ◯ 239

Problem Solving

29. **Logical Reasoning.** What number am I? I am greater than 3 hundreds, 2 tens, and 2 ones. I am less than 3 hundreds, 2 tens, 4 ones.

_____

Make up your own problem. Ask a friend to solve it.

_____

_____

_____

_____

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Math at Home Activity: Ask your child to name numbers that are greater than, less than, and equal to 807.

Name _____

Order Numbers

Get Ready

Main Idea

I will use place value to put numbers in order.

Use place value to order numbers from least to greatest.

316, 298, and 314

First, compare the hundreds.

316 298 314

316 and 314 have the same hundreds. **Next,** compare the tens.

298 316 314

Since the hundreds and tens are the same compare the ones.

298 314 316

298, 314, 316

298 is the least.

The hundreds and tens are the same.

316 is greater than 314.

Check

Remember
Compare the hundreds, tens and then ones to order the numbers.

Write the numbers from **least** to **greatest**.

1. 592, 600, 589

589, 592, 600

2. 601, 585, 590

_____, _____, _____

Write the numbers from **greatest** to **least**.

3. 492, 325, 530

530, 492, 325

4. 765, 762, 627

_____, _____, _____

5. Talk About It

What is the order of the place value you need to look at to order numbers?

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Practice

Remember
Look at the hundreds first. Then the tens and at last ones.

Write the numbers from **least** to **greatest**.

6. 798, 805, 801

_____, _____, _____.

7. 800, 795, 799

_____, _____, _____

8. 802, 799, 813

_____, _____, _____

9. 795, 815, 807, 1,000

_____, _____, _____, _____

10. 808, 812, 801, 821

_____, _____, _____, _____

11. 172, 236, 242, 221

_____, _____, _____, _____

Write the numbers from **greatest** to **least**.

12. 427, 522, 431

_____, _____, _____

13. 676, 629, 668

_____, _____, _____

14. 602, 599, 610

_____, _____, _____

15. 574, 598, 580

_____, _____, _____

16. 871, 718, 817, 781

_____, _____, _____, _____

17. 400, 397, 411, 409

_____, _____, _____, _____

H.O.T. Problem

18. Make It Right

Maria put numbers in order from greatest to least.

545 505 550

Tell why Maria is wrong. Then make it right.

_____

_____ _____ _____

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Math at Home Activity: Name 3 three-digit numbers and ask your child to write them down and put them in order from least to greatest.

Name _____

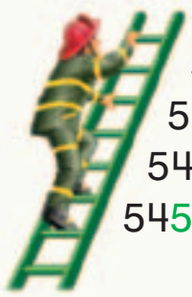
Number Patterns

Get Ready

Main Idea

I will find number patterns.

Number patterns can help you count. In some patterns, each number is **more**.



548
547
546
545

Count by ones. Each number is 1 more.

575
565
555
545

Count by tens. Each number is 10 more.

845
745
645
545

Count by hundreds. Each number is 100 more.

Check

Remember
Patterns can also be 100 less, 10 less, or 1 less.

Write the missing numbers.
Then write the counting pattern.

1. 340, 350, 360, _____, 380

   The pattern is _____.

2. 578, 579, _____, 581, _____

   The pattern is _____.

3. 941, 841, _____, 641, 541

   The pattern is _____.

4. 679, 678, _____, _____, 675

   The pattern is _____.

5. Talk About It — How can you tell if a number pattern is counting by hundreds?

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Practice

Write the missing numbers.
Then write the counting pattern.

6. 500, 510, _____, 530, _____

The pattern is _____.

7. 312, _____, 314, _____, 316

The pattern is _____.

8. 800, 790, 780, _____, 760

The pattern is _____.

9. 655, _____, 455, 355, _____

The pattern is _____.

10. _____, 486, 586, 686, _____

The pattern is _____.

11. 700, _____, 900

The pattern is _____.

12. 234, _____, _____, 264, 274

The pattern is _____.

13. _____, 510, 500, 490, _____

The pattern is _____.

Problem Solving

14. **Critical Thinking** Each week, the cafeteria orders 200 pizzas. The pizza will be sold at lunch every Friday in January. There are 4 Fridays. How many total pizzas does the cafeteria order in January?

_____ pizzas

Friday	Pizza
1	200
2	400
3	600
4	?

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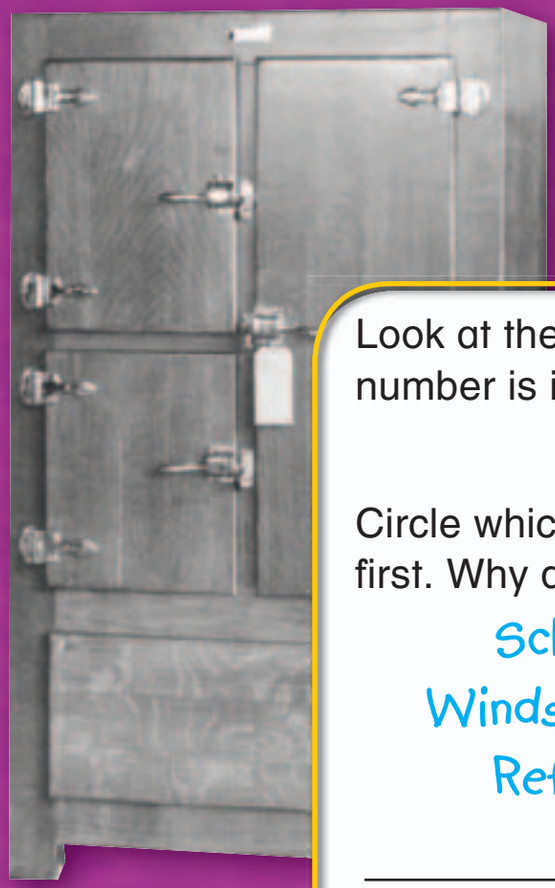
Math at Home Activity: Pick a 3-digit number. Ask your child to count by ones, tens, or hundreds.

Florence Parpart invented the refrigerator over 94 years ago. It was hard to keep food cold before that!



Look at the number 94. What number is in the ones place?

_____

Circle which invention was first. Why do you think so?

School desk

Windshield wipers

Refrigerator

_____

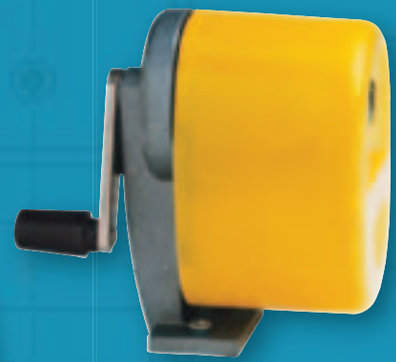
_____

_____

Bettmann/CORBIS

FOLD DOWN

Problem-Solving in Social Studies

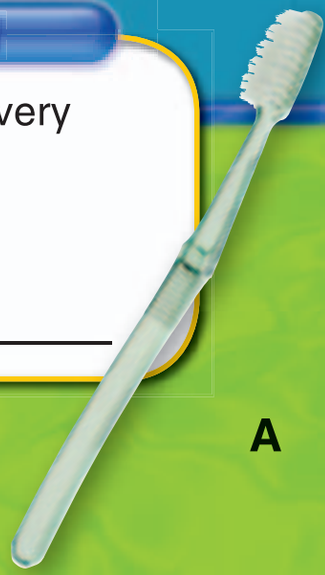


Real-World MATH

Women have invented some very useful things.

This book belongs to

_____

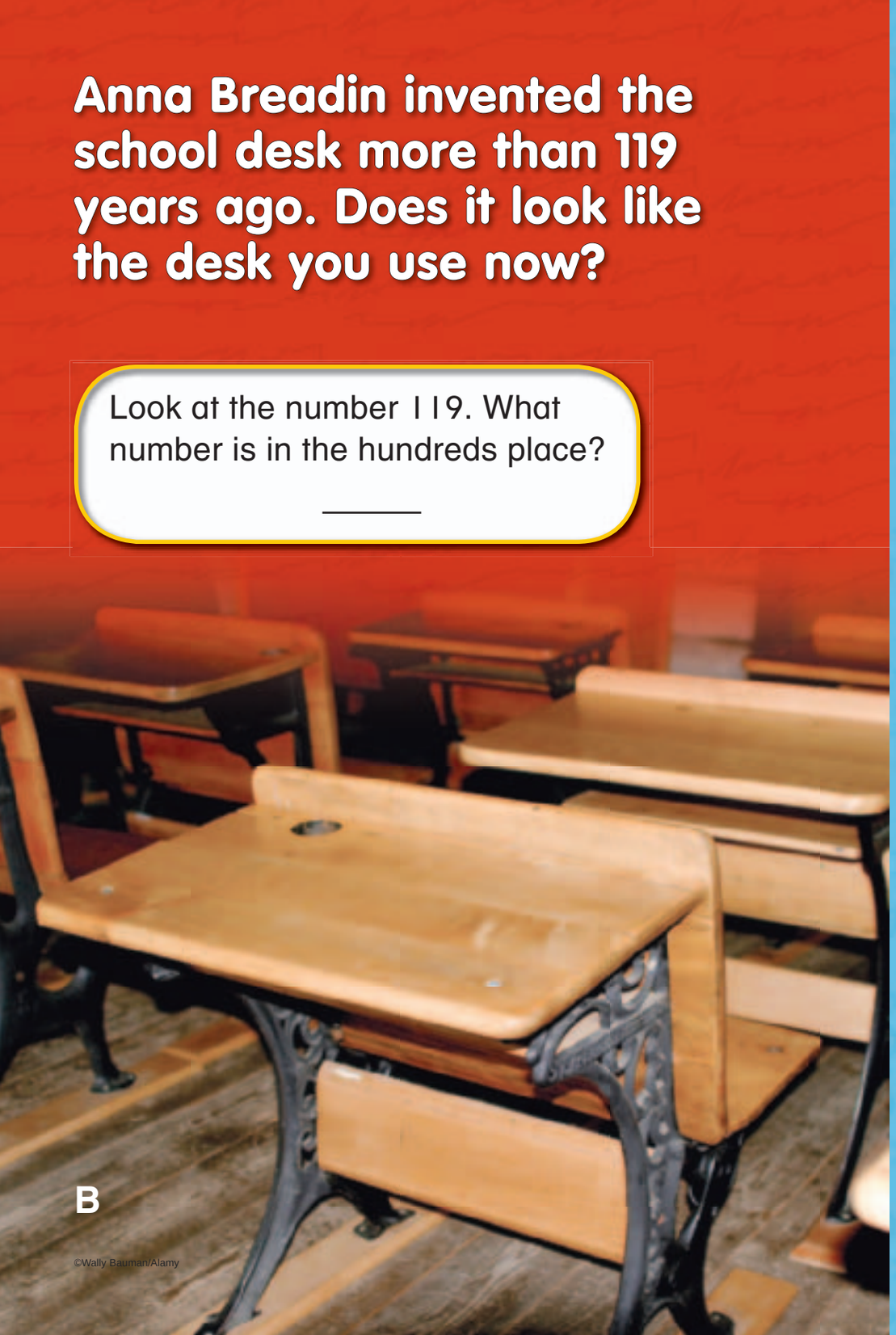


(tl r b)©Siede Preis/Getty Images, C Squared Studios/Getty Images, TRBfoto/Getty Images

Anna Breadin invented the school desk more than 119 years ago. Does it look like the desk you use now?

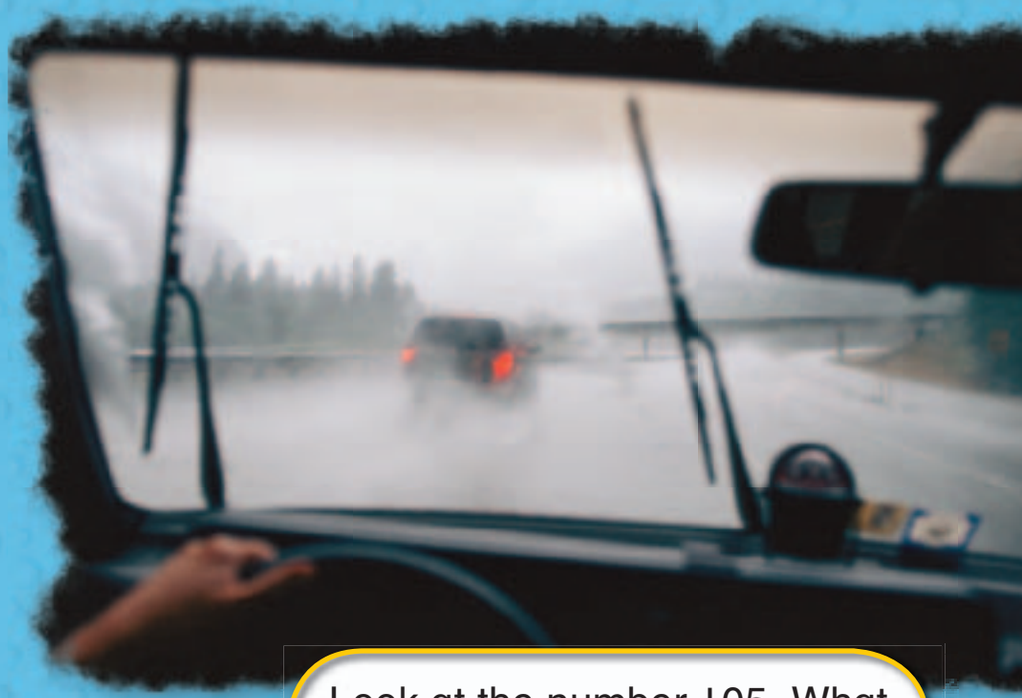
Look at the number 119. What number is in the hundreds place?

_____



©Wally Bauman/Alamy

Mary Anderson came up with the idea for windshield wipers over 105 years ago. Just think how hard it would be to drive if it were not for Mary!



Look at the number 105. What number is in the tens place?

_____

©Bruce Dale/Getty Images

Name _____

Vocabulary

Fill in the blank. Use the word bank.

Word Bank
expanded form
hundreds

1. I always have three digits. What am I?

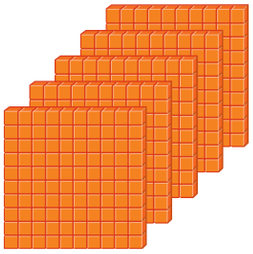
   _____

2. You can use me to write a number in a different way.

   What am I? _____

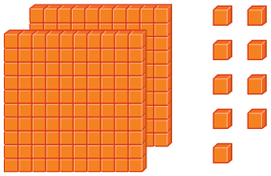
Concepts

Write how many hundreds, tens, and ones.

3. 

   5 hundreds = _____ tens = _____ ones

Write how many hundreds, tens, and ones.
Then write the number.

4. 

hundreds	tens	ones

_____

Write the number in expanded form.
Then write the number.

5. 5 hundred 6 tens 0 ones

   _____ + _____ + _____

   _____

6. 8 hundreds 7 tens 8 ones

   _____ + _____ + _____

   _____

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Write the number.

7. 5 + 50 + 500 _____

8. 200 + 90 + 7 _____

Circle the value of the blue digit.

9. 8**1**6

600 60 6

10. **1**59

100 10 1

11. **9**11

900 90 9

Write the number.

12. six hundred twenty-nine

_____

13. five hundred one

_____

Compare. Write >, <, or =.

14. 100 ◯ 1,000

15. 599 ◯ 600

16. 101 ◯ 101

Write the numbers from **greatest** to **least**.

17. 745, 457, 700

_____, _____, _____

18. 111, 100, 1,000

_____, _____, _____

19. Natalie dropped these 4 cards:

660, 670, _____, 690

She is missing one.

Write it here _____

20. David and Allison are counting like this:
500, 400, 300.

They are counting by _____

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Name _____

Listen as your teacher reads each problem.
Choose the correct number.

A A number has six hundreds, four tens, and seven ones. What is the number?

746 ○ 647 ○ 467 ○ 776 ○

B What is another way to write eight hundred twenty-nine?

800 + 22 + 2 ○ 720 + 22 ○

800 + 20 + 9 ○ 700 + 20 + 4 ○

Listen as your teacher reads each problem.
Choose the correct number.

1 What is the value of the three in three hundred ninety-one?

3 ○ 300 ○ 33 ○ 30 ○

2 What is another name for two hundred plus forty plus seven?

247 ○ 472 ○ 704 ○ 374 ○

3 Which number sentence is true?

632 < 623 ○ 632 > 623 ○

632 = 623 ○ 326 > 632 ○

4 What is another way to write five hundred eighty-three?

538 ○ 358 ○ 583 ○ 853 ○

5 Which number goes in the box?

427 < ☐

274 ○ 478 ○ 372 ○ 470 ○

6 Which of the following fractions is the greatest?

$\frac{1}{12}$ ○ $\frac{1}{3}$ ○ $\frac{1}{8}$ ○ $\frac{1}{2}$ ○

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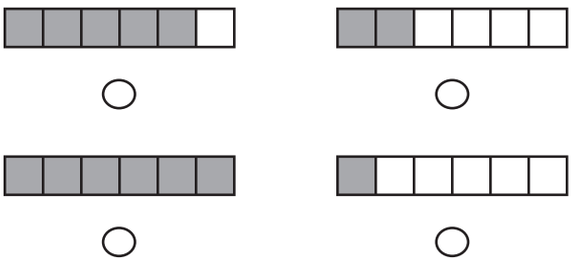
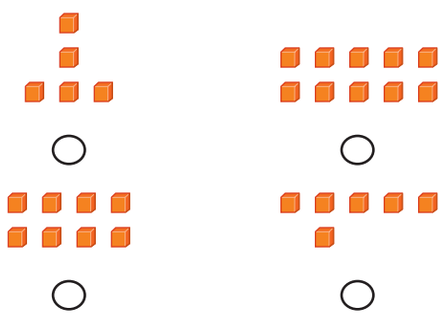
7 Look at the fraction bars. Which fraction bar shows five-sixths shaded?



8 Which drawing shows five times two?

5×2



9 Which number goes in the box?

$101 < \square < 103$

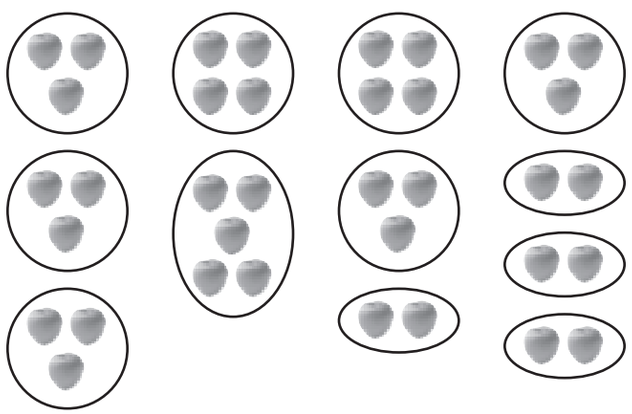
100 301 102 123

10 What is the solution to this problem?

$$\begin{array}{r} 80 \\ -\ 10 \\ \hline \end{array}$$

9 7 5 6

11 Which picture shows how three children should share nine apples equally?



12 What fractional part of this figure is shaded?

$\frac{1}{6}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{5}$

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CHAPTER 11

Geometry

Key Vocabulary

- solid shapes
- face
- vertex
- edge
- plane shapes

Explore

There are many shapes in this picture. Name two that you see.

_____ _____

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Alan Schein Photography/CORBIS

Name _____

Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 11?

Draw an X over the shape that is different.

1.

2.

Draw a line to match objects that have the same shape.

3.

4.

5.

Name the shape.

6. Li got a picture for her birthday. What shape is it? Circle the word.

triangle circle rectangle

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This page checks skills needed for Chapter 11.

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MATH at HOME

Dear Family,

Today my class started Chapter 11, **Geometry**. In this chapter, I will learn about solid and plane shapes. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child find at least two objects around your home that matches one of these shapes. Place the objects in a bag. Take turns closing your eyes, picking an object, and identifying the figure with your eyes closed.

sphere

pyramid

cube

rectangular prism

cylinder

cone

Key Vocabulary

face the flat part of a solid shape

vertex a point on a solid or plane shape where two or more edges meet

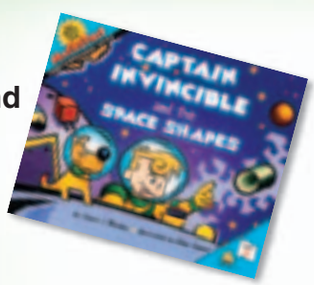
edge the line where two sides or faces meet

MathOnline Click on the eGlossary at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

The Village of Round and Square Houses
by Ann Grifalconi
Little, Brown, 1986.

Captain Invincible and the Space Shapes
by Stuart J. Murphy
Harper Collins Publishers, 2001.



The Greedy Triangle
by Marilyn Burns
Scholastic Press, 1995.

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Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 11, **La geometría**. En este capítulo, aprenderé sobre formas sólidas y planas. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Pídanle a su hijo(a) que consiga alrededor de la casa por lo menos dos objetos que concuerden con algunas de estas formas. Coloquen los objetos en una bolsa. Con los ojos cerrados, túrnense para escoger un objeto e identificar la figura.

esfera

pirámide

cubo

prisma rectangular

cilindro

cono

Vocabulario clave

cara la parte plana de una forma sólida

vértice un punto en una forma sólida o plana en donde se juntan dos o más caras

arista línea donde se juntan dos caras o lados

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

El pueblo de casas redondas y cuadradas
de Ann Grifalconi
Little, Brown, 1986.

El capitán invencible y las formas espaciales
de Stuart J. Murphy
Harper Collins Publishers, 2001.

El triángulo codicioso
de Marilyn Burns
Scholastic Press, 1995.

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Name _____

Solid Shapes

Get Ready

Main Idea

I will identify solid shapes.

Vocabulary

- solid shapes
- sphere
- cube
- pyramid
- cone
- cylinder
- rectangular prism

These are **solid shapes**. A solid shape is a 3-dimensional figure with length, width, and height.

sphere

cube

pyramid

cone

cylinder

rectangular prism

Check

Write the name of the shape.
Circle the objects that have the same shape.

1. _____

2. _____

3. _____

4. _____

5. Talk About It

Name some objects that have the same shape as a cylinder.

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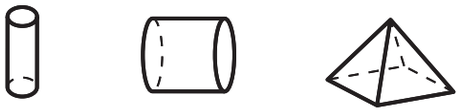
Practice

Write the name of the shape.
Color the shapes that match.

6. _____



7. _____

8. _____

9. _____

10. _____

11. _____

Problem Solving

12. Visual Thinking Jose's apartment building is shaped like a rectangular prism. Draw what the building might look like.

13. There are 64 windows on each side of the building. If 2 window washers each wash the same number of windows, how many will each wash?

_____ windows

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Math at Home Activity: Find objects in the house that are the same 3-dimensional shapes as those shown above. Ask your child to name the shape.

Name _____

Hands-On Activity

Faces, Edges, and Vertices

Get Ready

Main Idea

I will describe and classify solid shapes using faces, edges, and vertices.

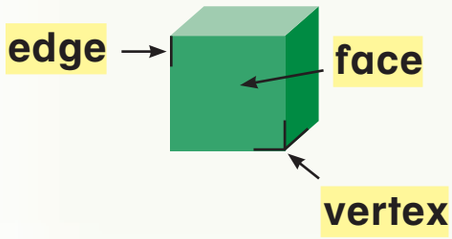
Vocabulary

face

vertex (vertices)

edge

You can describe solid shapes by the number of **faces**, **edges**, and **vertices**.



A **face** is a flat surface.

An **edge** is where 2 faces meet.

A **vertex** is where 3 or more faces meet.

Check

Use solid shapes to count the faces, edges, and vertices.

Shape	Faces	Edges	Vertices
1. cube	_____	_____	_____
2. rectangular prism	_____	_____	_____
3. pyramid	_____	_____	_____
4. cylinder	_____	_____	_____
5. cone	_____	_____	_____
6. sphere	_____	_____	_____

7. Talk About It — How are a rectangular prism and a cube alike? Explain.

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Practice

Circle the objects that match the description.

Remember
Count the faces, edges, and vertices you cannot see.

8. 6 faces, 12 edges, 8 vertices

9. 0 faces, 0 edges, 0 vertices

10. 1 face, 0 edges, 1 vertex

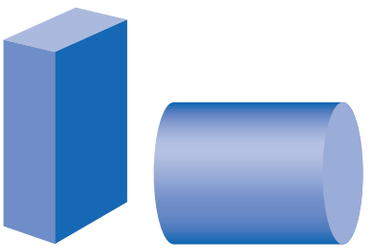
11. 2 faces, 0 edges, 0 vertices

12. 5 faces, 8 edges, 5 vertices

13. 6 faces, 12 edges, 8 vertices

14. WRITING IN MATH

Look at the two shapes. How are they alike?



_____

_____

How are they different?

_____

_____

Name each shape. _____ and _____

Math at Home Activity: Have your child identify and describe 3-dimensional figures that are in your home.

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(t)The McGraw-Hill Companies

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Name _____

Match the spiders to the correct shapes.
Be careful, some match to more than one shape!

6 FACES

0 VERTICES

8 EDGES

1 VERTEX

5 FACES

12 EDGES

5 VERTICES

2 FACES

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Game Time

Geometry Ball

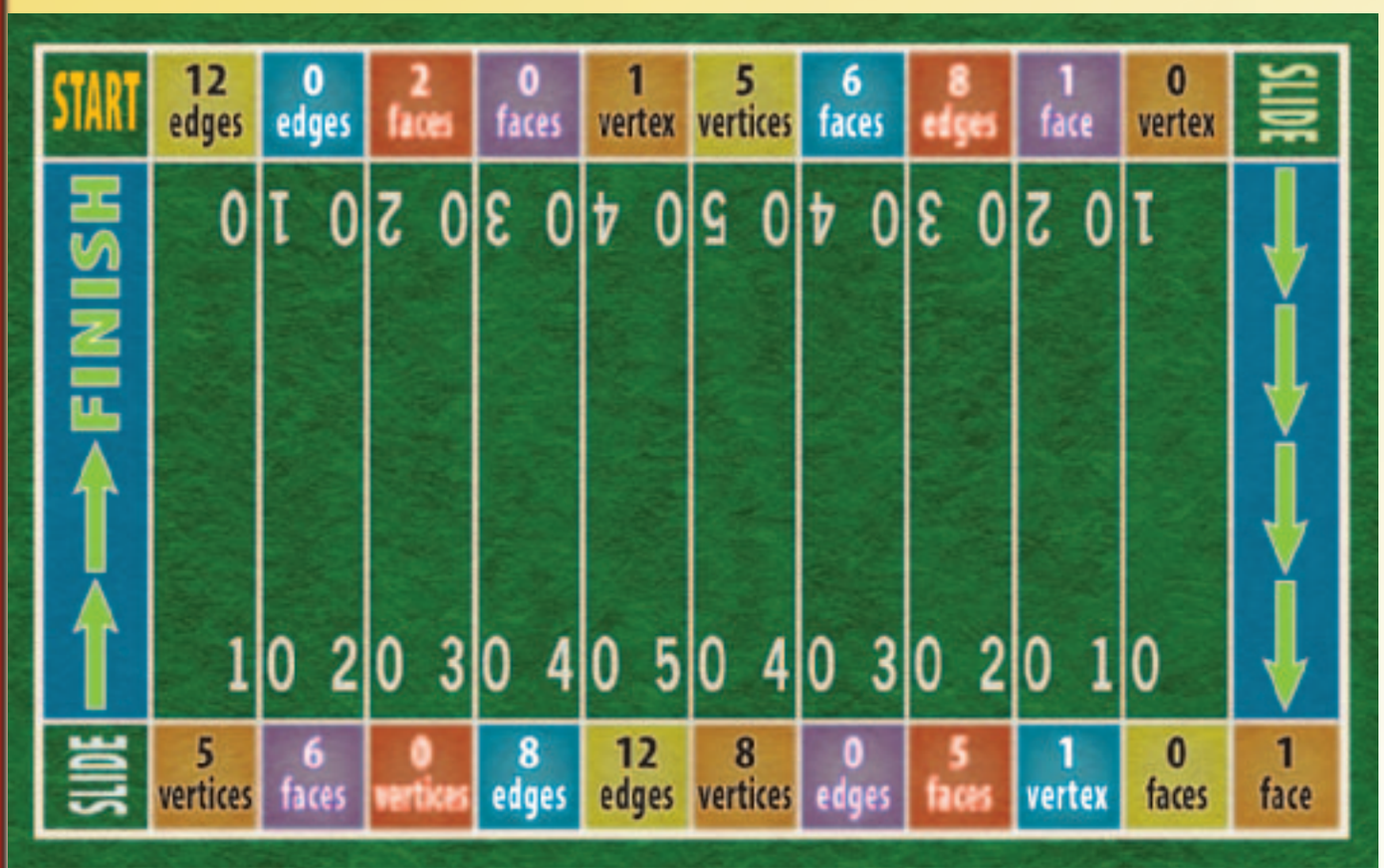
Faces, Edges, and Vertices

You Will Need

-
-
-

Play with a partner:

- Roll the .
- Take turns. Move your that many spaces.
- Read the description. Name the shape.
- Use geometric solids to check each other's answers.
- If you are incorrect, go back.
- Slide through the end zones.
- The first one to the Finish wins.



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Name _____

Plane Shapes

Get Ready

Main Idea

I will identify plane shapes.

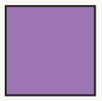
Vocabulary

parallelogram
plane shapes
hexagon
trapezoid

These are **plane shapes**. A plane shape is a 2-dimensional figure with only length and width.

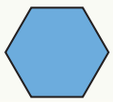
circle

triangle


square

rectangle

parallelogram

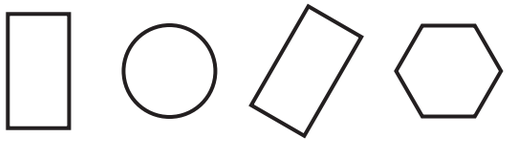

hexagon

trapezoid

Check

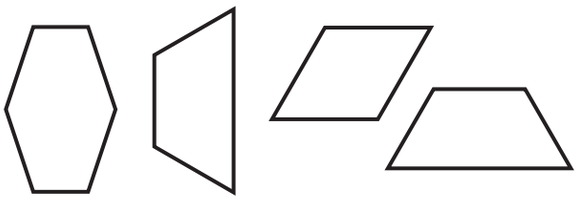
Circle the shapes that match the name.

1. rectangle

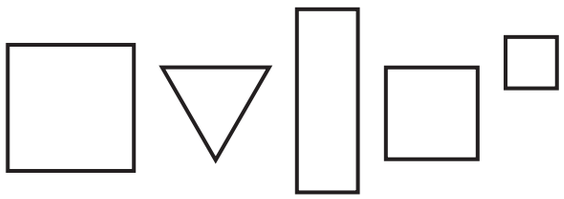


2. triangle

3. trapezoid



4. square



5. Talk About It

How are squares and trapezoids alike? How are they different?

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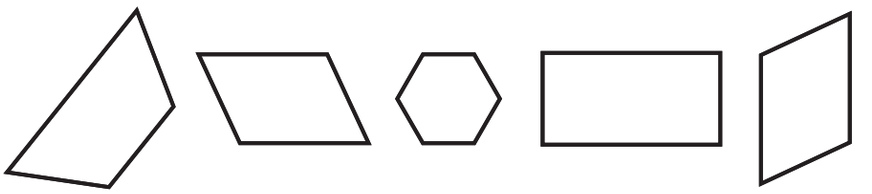
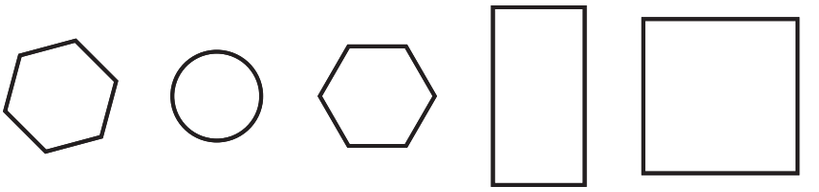
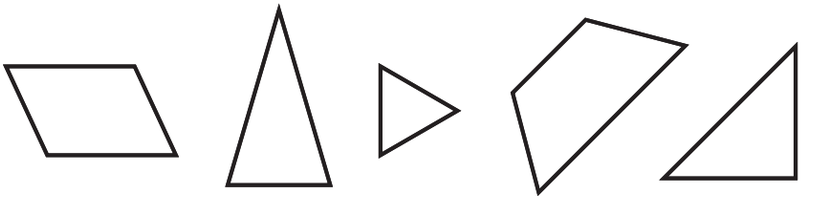
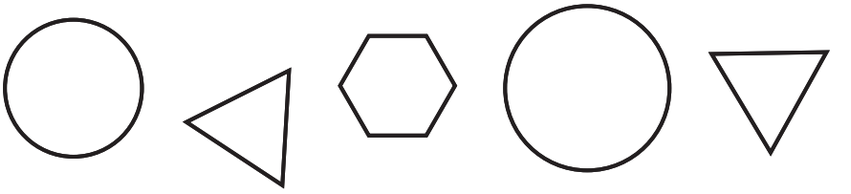
Practice

Color the shapes that match the name.

Name	Shape
6. parallelogram	
7. hexagon	
8. triangle	
9. circle	

H.O.T. Problem

10. **Thinking Math** Which one does *not* belong? Circle it. Explain why it does not belong.

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Math at Home Activity: Ask your child to draw a picture using as many of these shapes as possible.

Name _____

Hands-On Activity

Problem-Solving Strategy
Find a Pattern

Main Idea

I will find a pattern to solve a problem.

Joanna is making a pattern that repeats 2 cubes and 3 spheres. She wants to use 30 shapes.

How many cubes will she need? How many spheres?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will find a pattern.

Solve

She will make _____ cubes and _____ spheres.

Check

Look Back.
How can I check my answer?

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Remember
Understand
Plan
Solve
Check

Try It

Find a pattern to solve.

1. Sarah's flower garden has 10 rows of flowers. There are 4 flowers in the first row, 8 in the second, and 12 in the third. How many flowers are in the last row?

_____ flowers

2. One horse has two ears.
Two horses have four ears.
How many ears do four horses have?

_____ ears

Your Turn

Find a pattern to solve.

3. One frog has four legs.
Two frogs have eight legs.
How many legs do three frogs have?

_____ legs

4. Rob makes a pattern that repeats 1 hexagon and 5 trapezoids. What is the 13th shape in the pattern?

_____

5. For five days in a row, Jesse earned $9 and Kyle earned $3. How much money had the two earned after the fifth day?

_____

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, putting away groceries, planning schedules, and so on.

Name _____

Write the name of the shape.
Circle the objects that match the shape.

1. _____

2. _____

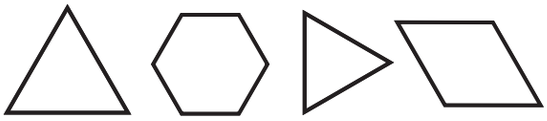
Circle the objects that match the description.

3. 1 face, 0 edges, 1 vertex

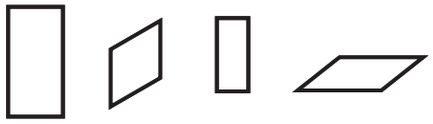
4. 6 faces, 12 edges, 8 vertices

Color the shapes that match the name.

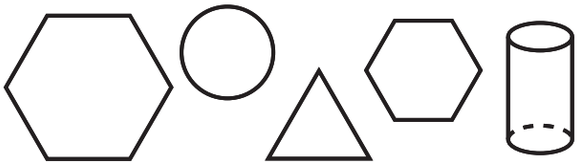
5. triangle



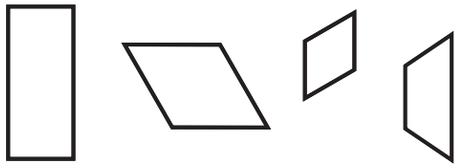
6. rectangle



7. hexagon



8. parallelogram



9. Jill and Alex each have a shape. Both shapes have 6 faces, 12 edges, and 8 vertices. Their shapes are not the same. Name the two shapes.

_____ and _____

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Spiral Review Chapters 1–11

Skip count to find the value.

10.

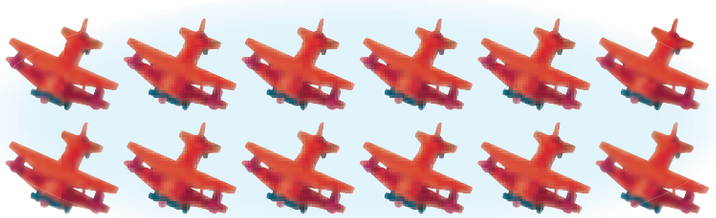
_____ _____ _____ _____ _____ _____ _____ _____ _____ total

Find the value of these coins.

11.

_____ _____ _____ _____ _____ _____ _____ total

Add. Then multiply.

12. 

_____ + _____ = _____

_____ × _____ = _____

Divide. Draw a picture. Use counters if needed.

13. 8 ducks swim in 2 groups.

8 ÷ 2 = _____

Each group has _____ ducks.

14. 12 toys are shared by 4 girls.

12 ÷ 4 = _____

Each girl gets _____ toys.

15. Your teacher asks you to count the students in your class by 5s. There are 20 students in your class. Show how you would count.

_____

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Name _____

Sides and Vertices

Get Ready

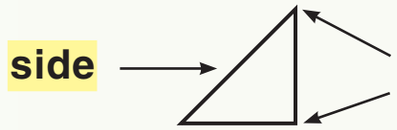
Main Idea

I will descibe plane shapes.

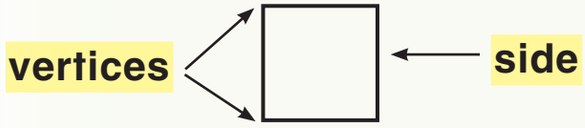
Vocabulary

side

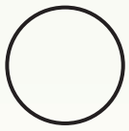
You can describe plane shapes by the number of sides and vertices.



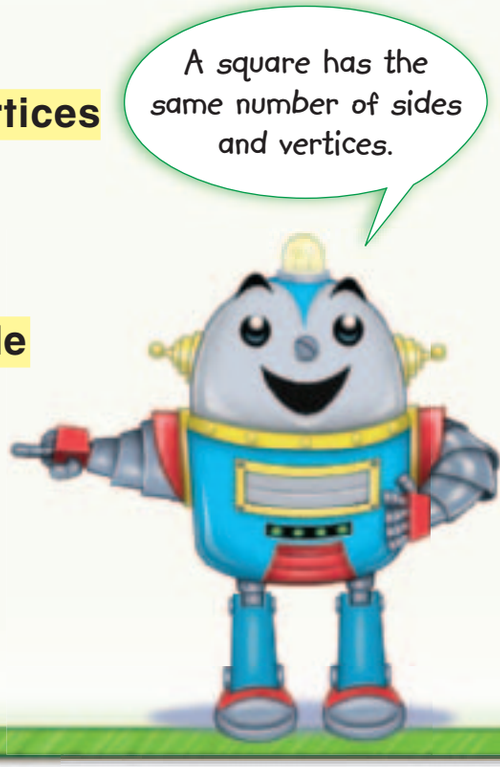
3 sides and 3 vertices



4 sides and 4 vertices

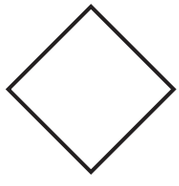


0 sides and 0 vertices



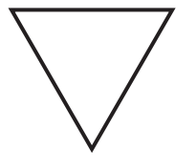
Check

Write how many sides and vertices.

1. 

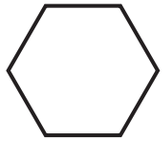
_____ side

_____ vertices

3. 

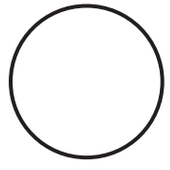
_____ side

_____ vertices

2. 

_____ side

_____ vertices

4. 

_____ side

_____ vertices

5. Talk About It

How are a square and a hexagon alike? How are they different?

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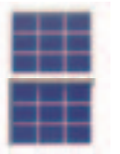
Practice

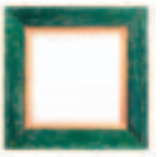
Remember
A shape has the same number of sides as it does vertices.

Circle the shapes that match the description.

6. 4 sides and 4 vertices



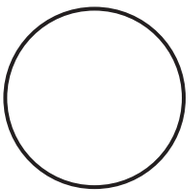
7. 3 sides and 3 vertices



8. 0 sides and 0 vertices

Write the name of the shape. Tell two things about it.

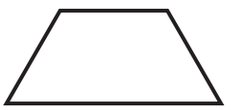
9.



_____ _____

_____

10.



_____ _____

_____

Problem Solving

11. Logical Reasoning Are all squares rectangles? Are all rectangles squares? Explain.

_____

_____

(t)Sarah Murray/Masterfile

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(tl)Arthur S. Aubry/Getty Images, (c tc tl tr)Getty Images, (t)McGraw-Hill Companies

Math at Home Activity: While driving, look at road signs together. Ask your child to name and describe the shapes they see.

Name _____

Hands-On Activity

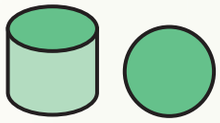
Relate Plane Shapes to Solid Shapes

Get Ready

Main Idea

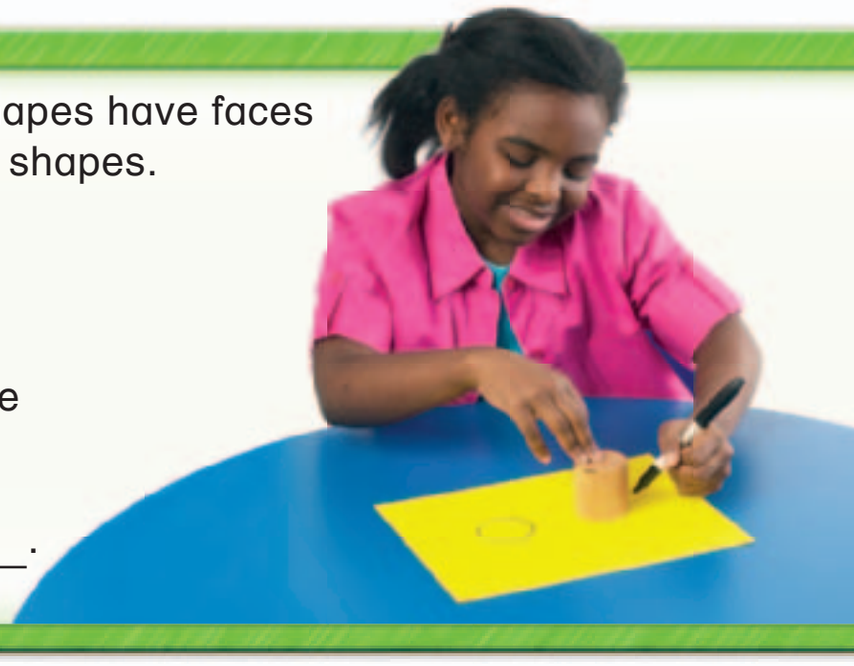
I will compare plane and solid shapes.

Some solid shapes have faces that are plane shapes.



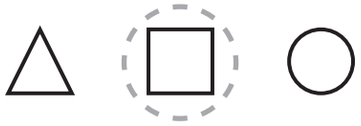
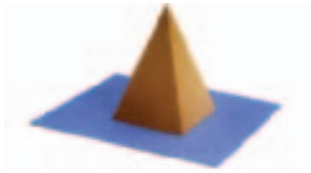
The face of the cylinder is a

circle .



Check

Use solid shapes. Trace around the face.
Circle the shape that you made. Name the shape.

1.			square
2.			
3.			

4. Talk About It — Compare a sphere and a circle. How are they alike? How are they different?

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(tr)Richard Hutchings, (l b bl)StudiOhio

Practice

Look at the picture. Draw the plane shape you would make if you traced one of the faces.

5.

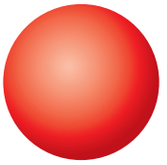
6.

7.

8.

H.O.T. Problems

9. Draw a picture of a shape that has no vertices and a curved edge. Is there more than one such shape?



10. Draw a picture of a shape that has 6 sides and 4 vertices. Is there such a shape?

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Alamy Images

Math at Home Activity: Have your child trace the faces of a box and a can. Ask them to name the plane shapes they traced.

Name _____

Make New Shapes

Hands-On Activity

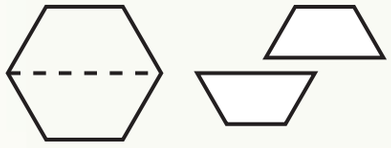
Get Ready

Main Idea

I will combine shapes to make new shapes.

You can put shapes together and take them apart to make new shapes.

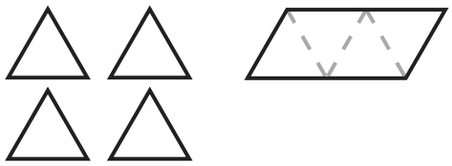
Put together 2 squares to make a rectangle.



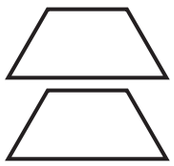
Take apart a hexagon to make 2 trapezoids.

Check

Use pattern blocks to make a new shape. Trace the shapes you used. Name the new shape.

1. 

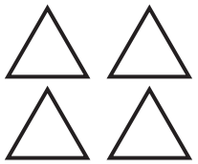
parallelogram

2. 

_____

3.

_____

4. 

_____

5. Talk About It

Describe how you would put these triangles together to make another shape.

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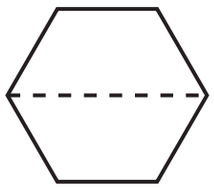
Richard Hutchings

Practice

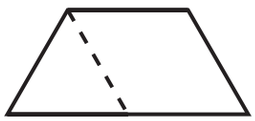
Trace each shape on another piece of paper. Cut along the dashed line. Circle the new shapes you made.

6.

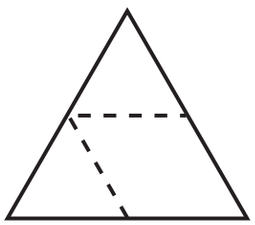
rectangle square triangle trapezoid

7. 

triangle parallelogram rectangle trapezoid

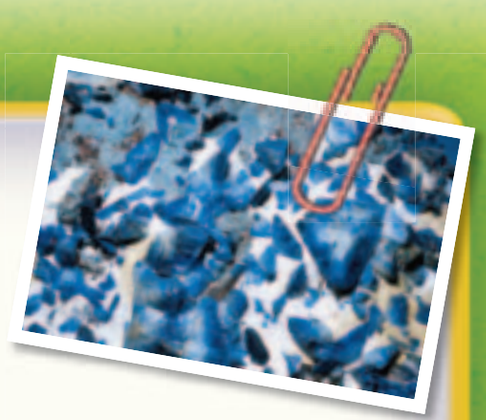
8. 

parallelogram triangle square hexagon

9. 

hexagon triangle parallelogram circle

Data File



In 1985, California named an official state gemstone. It is a blue crystal that is sometimes called a "blue diamond." A diamond is a parallelogram. This blue crystal is found inside California's state rock, the serpentine.

10. Use 2 triangles to make a parallelogram. Trace the shape you made.

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Math at Home Activity: Ask your child to show you how to put two squares together to make a new shape.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve the problem.

Your Mission:
Find the shape that is described.

I have a plane shape. It has 4 sides. Two sides are longer than the other two sides.

What is my shape?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle it.

Plan

How will I solve the problem?
One way is to guess and check.

Solve

Guess and Check
Make a guess for an answer. Then check your answer to see if it is correct.

square?

It has 4 sides but they are equal.

rectangle?

It has 4 sides and 2 are longer.

It is a _____.

Check

Look Back
Does my answer make sense?
How can I check my answer?

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Michael Newman/PhotoEdit

Mixed Problem Solving

Problem-Solving Strategies

- Guess and check
- Draw a picture
- Act it out

Solve.

1. I have one face.
I also have no edges.
I do have one vertex.
What shape am I?

a _____

2. Two numbers have a sum of 9 and a product of 18. What are the numbers?

_____ and _____

3. Beth says she knows 2 different ways to make a hexagon with pattern block shapes. What blocks can she use?

_____ and _____

4. You have 5 coins that total $0.75. What coins do you have?

_____

5. Trish had 39 baseball cards. She traded some with her friend Lou. She gave him 12 cards and got 9 cards from Lou. How many cards did she have then?

_____ cards

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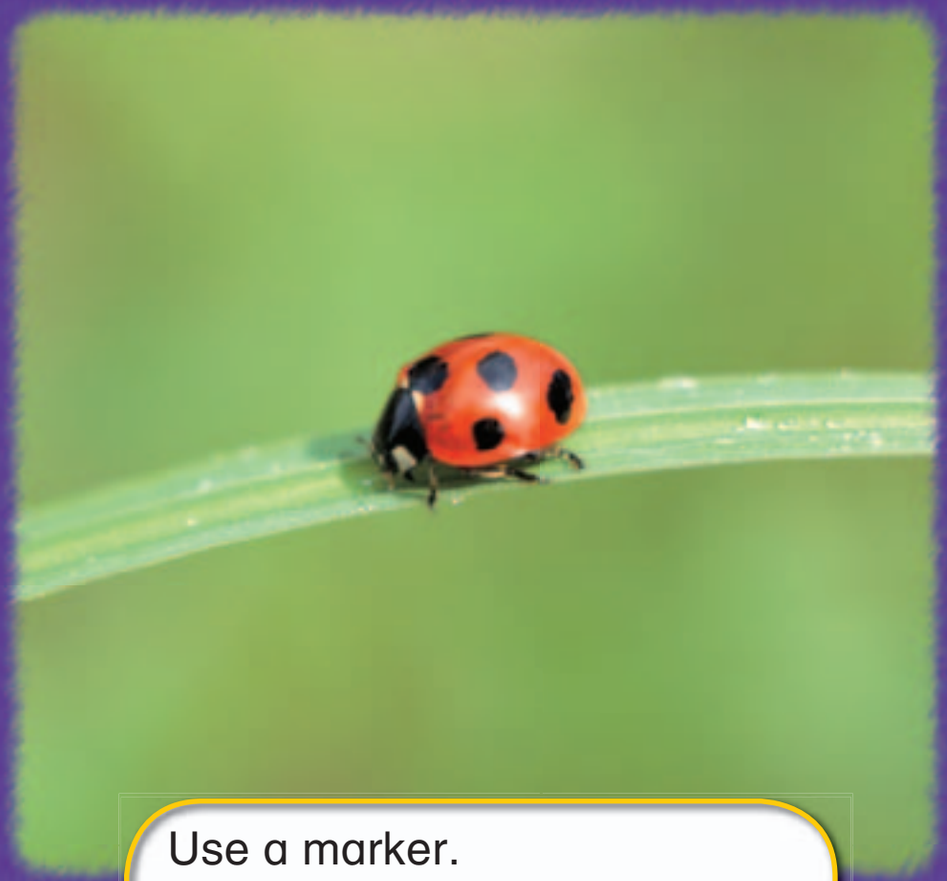
Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Look at all the shapes here.

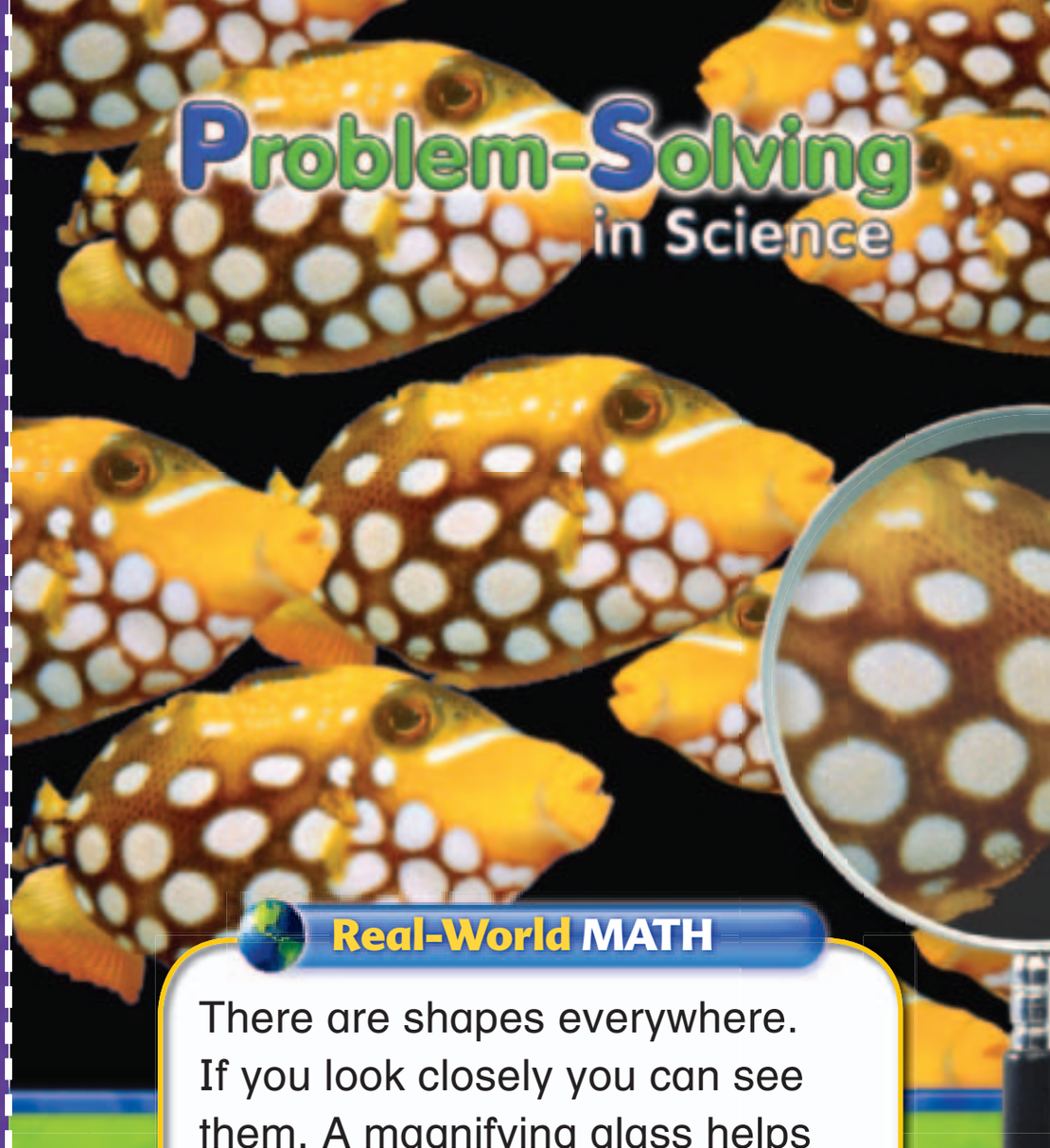


Use a marker.
Trace each shape you find.
Use a piece of paper.
Create your own picture using all the shapes you know.

Alamy Images

FOLD DOWN

Problem-Solving in Science



Real-World MATH

There are shapes everywhere. If you look closely you can see them. A magnifying glass helps you look closely at objects.

This book belongs to

_____

(t r)Jim Zuckerman/CORBIS, Getty Images

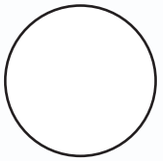
What shape do you see?

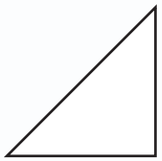
_____

Digital Vision/Getty Images

There are many shapes here. Can you find them all?

Draw a line from this shape to the shape in the web.





Lothar Lenz/zefa/CORBIS

Name _____

Vocabulary

Fill in the blanks.

1. A _____ has only length and width.
2. A triangle has 3 _____.
3. _____ have length, width and height.
4. A _____ is where edges meet.

Word Bank

solid shapes
plane shape
sides
vertex

Concepts

Write the name of the shape.
Color the shapes that match.

5. _____

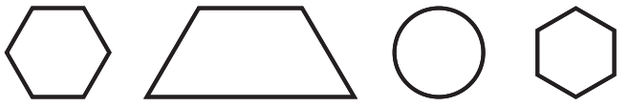
6. _____

Circle the objects that match the description.

7. 2 faces, 0 edges, 0 vertices

8. 6 faces, 12 edges, 8 vertices

Color the shapes that match the name.

Name	Shape
9. hexagon	
10. parallelogram	

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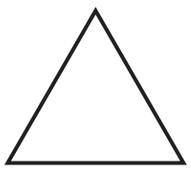
(c)C Squares Studios/Getty Images, (c)McGraw-Hill Companies

Circle the shape that matches the description.

13. 0 sides and 0 vertices

Write how many sides and vertices.

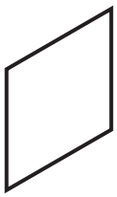
14.



_____ sides

_____ vertices

15.



_____ sides

_____ vertices

Look at the picture. Draw the plane shape you would make if you traced one of the faces.

16.

17.

18. Danika bought a toy at the toy store. Her toy has 0 faces, 0 edges, and 0 vertices.

Predict what Danika bought at the store. _____

Explain why you chose your answer.

_____

_____

19. Randy's favorite shape has 4 sides and 4 vertices. List three shapes that could be Randy's favorite.

_____, _____, _____ or _____

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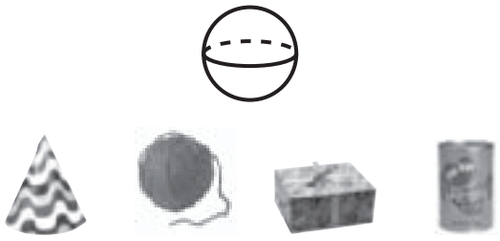
Getty Images

Name _____

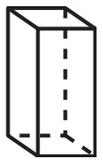
Listen as your teacher reads each problem.
Choose the correct answer.

A Look at the sphere and then at the objects. Which object has the same shape as the sphere?



○ ○ ○ ○

B Look at the rectangular prism. How many faces does a rectangular prism have?



0 4 5 6

○ ○ ○ ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 Look at the 2 triangles. What shape can you make when you put together the 2 triangles?

○ ○ ○ ○

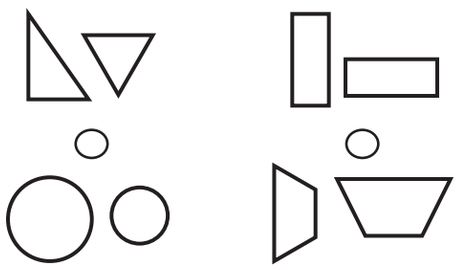
3 Which number goes in the box?

532 > ☐

678 557 612 469

○ ○ ○ ○

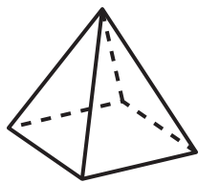
2 Look at the pairs of shapes. Which is a pair of triangles?



○ ○

○ ○

4 Look at the pyramid. How many vertices does the pyramid have?



1 3 4 5

○ ○ ○ ○

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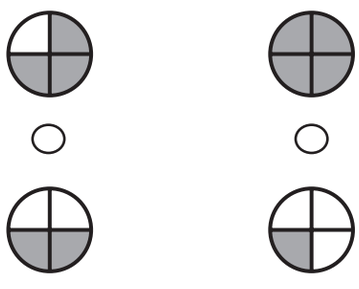
5 Look at the numbers. Which number has 3 tens and 4 ones?

234 ○ 341 ○ 437 ○ 483 ○

6 Look at the fraction bars. Which fraction bar shows $\frac{1}{4}$ shaded?



○ ○ ○ ○

7 Which of the following fractions is the least?

$\frac{1}{3}$ ○ $\frac{1}{5}$ ○ $\frac{1}{10}$ ○ $\frac{1}{12}$ ○

8 What is another way to write twenty-nine cents?

$2.90 ○ $0.29 ○

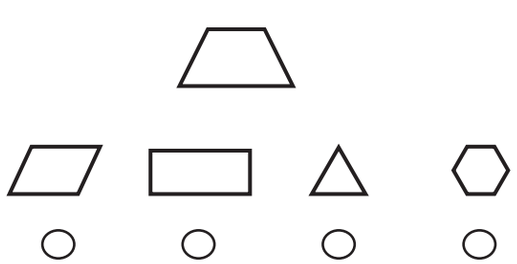
$29 ○ $2.09 ○

9 Keegan did this addition problem. Which subtraction problem shows that she got the right answer?

$$\begin{array}{r} 45 \\ +\ 24 \\ \hline 69 \end{array}$$

$\begin{array}{r} 69 \\ -\ 24 \\ \hline \end{array}$ ○ $\begin{array}{r} 45 \\ -\ 24 \\ \hline \end{array}$ ○ $\begin{array}{r} 24 \\ -\ 69 \\ \hline \end{array}$ ○ $\begin{array}{r} 69 \\ -\ 69 \\ \hline \end{array}$ ○

10 Shane has two trapezoids. Which of the following shapes can be made from the two trapezoids?



○ ○ ○ ○

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CHAPTER 12

Measurement and Time

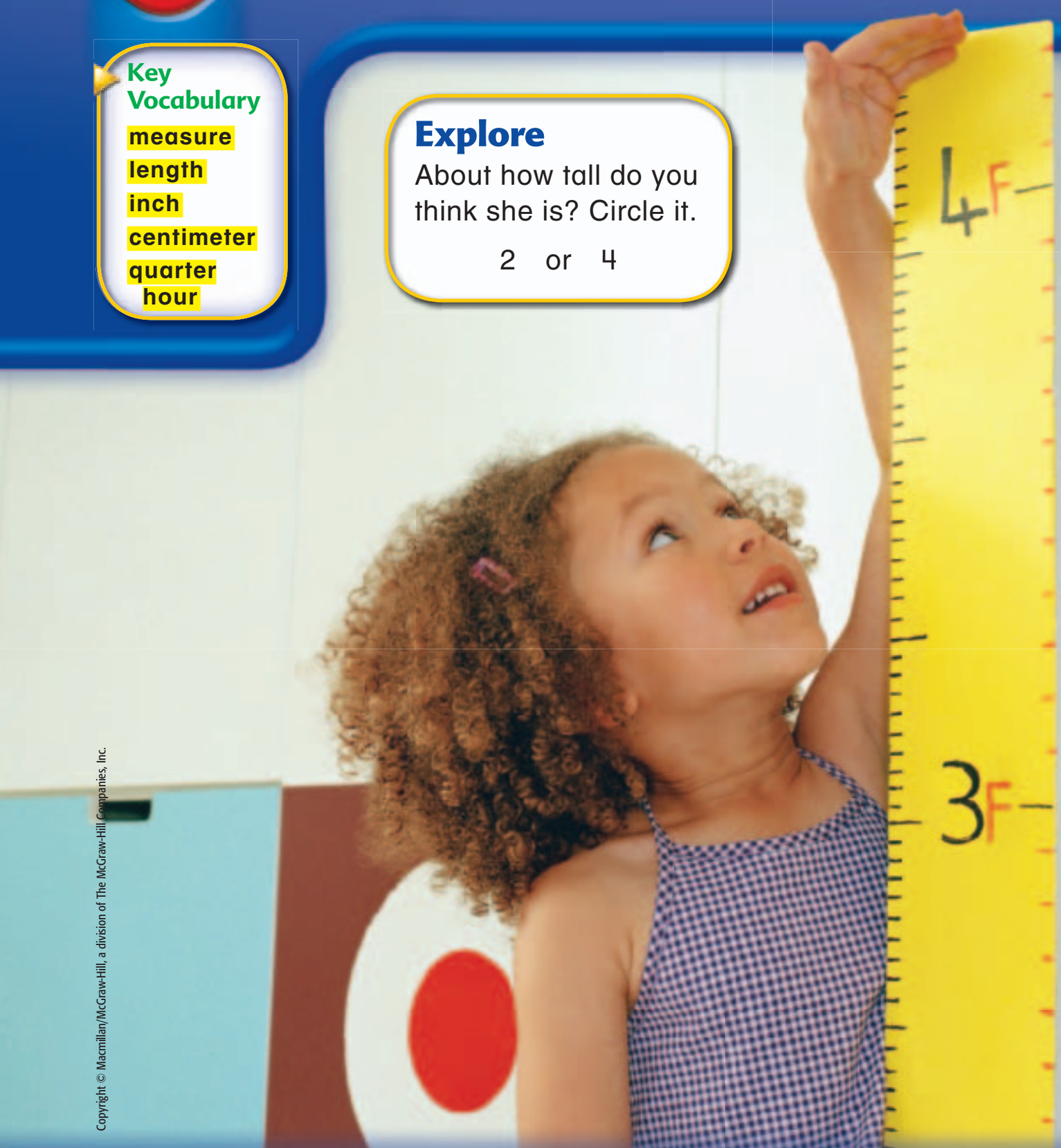
Key Vocabulary

- measure
- length
- inch
- centimeter
- quarter hour

Explore

About how tall do you think she is? Circle it.

2 or 4



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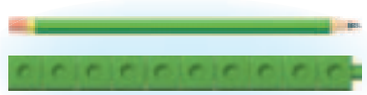
Name _____

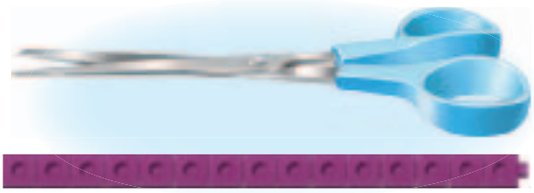
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 12?

Write the length.

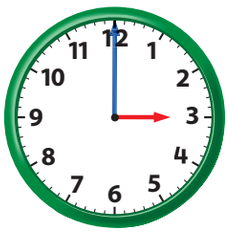
1. 

_____ cubes

2. 

_____ cubes

Circle the time.

3. 

5 o'clock
4 o'clock
3 o'clock

4.

7 o'clock
2 o'clock
6 o'clock

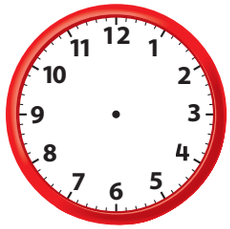
5.

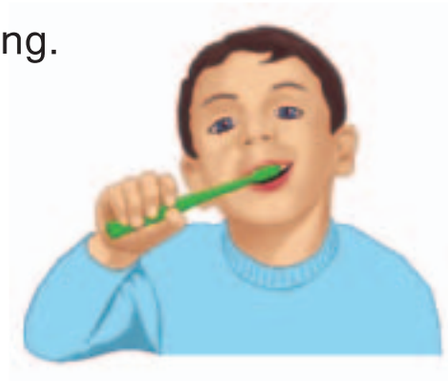
10:30
10:00
2:30

6.

5:30
5:00
5:15

7. Bo brushes his teeth at 7:00 every morning. This morning, he was a half hour late. On the clock below, draw the time Bo brushed his teeth today.





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This page checks skills needed for Chapter 12.

MATH at HOME

Dear Family,

Today my class started Chapter 12, **Measurement and Time**. In this chapter, I will learn to use standard and metric units of measurement. I will also learn about time and how to measure it. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child use a ruler to measure the length of a table in inches and centimeters. Which unit of measurement is the number greater?

Key Vocabulary

measure to find length, height, weight, capacity, or temperature using nonstandard and standard units

length how long or far something is

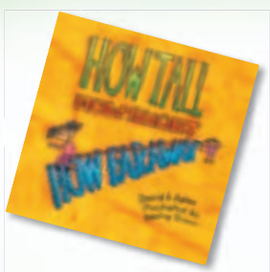
quarter hour one-fourth of an hour or 15 minutes of an hour

MathOnline Click on the eGlossary link at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

Clocks and More Clocks
by Pat Hutchins
Aladdin, 1994.

How Tall, How Short, How Far Away
by David A. Adler
Holiday House, Inc., 2000.



Inch by Inch
by Leo Lionni
HarperCollins Publishers, 1995.

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Eclipse Studios

MATEMÁTICAS en CASA

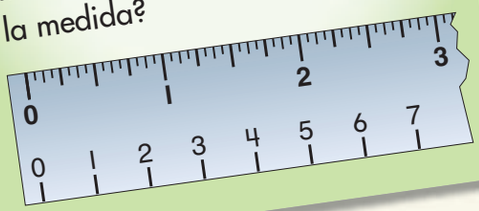
Estimada familia:

Hoy mi clase comenzó el Capítulo 12, **La medición y la hora**. En este capítulo, aprenderé a usar unidades de medidas estándares y métricas. También aprenderé acerca de la hora y cómo medirla. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Pídanle a su hijo(a) que use una regla para medir la longitud de una mesa en centímetros y en pulgadas. ¿Con qué unidad de medida es mayor el número de la medida?



Vocabulario clave

medir calcular el largo, la altura, la capacidad o la temperatura usando unidades estándares y no estándares

longitud el largo de alguna cosa o la distandia hasta algo

cuarto de hora un cuarto de hora ó 15 minutos de una hora

Math Online Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Relojes y más relojes
de Pat Hutchins
Aladdin, 1994.

De qué tamaño, a qué distancia
de David A. Adler
Holiday House, Inc., 2000.

Pulgada por pulgada
de Leo Lionni
HarperCollins Publishers, 1995.

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Name _____

Nonstandard Units

Hands-On Activity

Get Ready

Main Idea

I will estimate length.

Vocabulary

measure

length

I will estimate first. I think the pencil is about 6 cubes long.

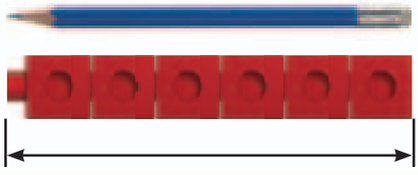
Length is how long an object is. You can estimate the length of an object.

Measure to see how close your estimate is.

Estimate. The pencil is about 6 cubes long.

Remember

Line up the end of the pencil with the end of the cube.



The pencil measures about 6 cubes long.

Check

Find the object. Estimate. Then use to measure.

1.

Estimate: about _____

Measure: about _____

2.

Estimate: about _____

Measure: about _____

3. Talk About It

What would your measure for exercise 2 look like if you used paper clips?

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Practice

Find the object. Estimate. Then use to measure.

4.

Estimate: about _____

Measure: about _____

5.

Estimate: about _____

Measure: about _____

6.

Estimate: about _____

Measure: about _____

Problem Solving

7. Critical Thinking Estimate the length of your shoe in new crayons. _____ crayons long

Estimate the length of your shoe in new pencils.

_____ pencils long

Now measure the length of your shoe.
Use a new crayon and a new pencil. _____ crayons long

_____ pencils long

Are your answers the same or different?

Explain why. _____

_____

_____

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Stockbyte/PictureQuest

Math at Home Activity: Ask your child to estimate and then measure the length of a spoon using pennies.

Name _____

Hands-On Activity

Measure to the Nearest Inch

Get Ready

Main Idea

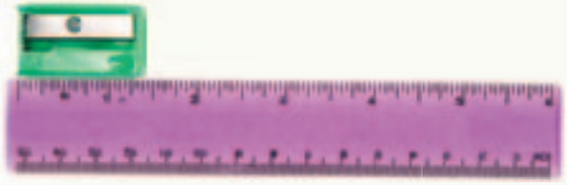
I will use an inch ruler to measure.

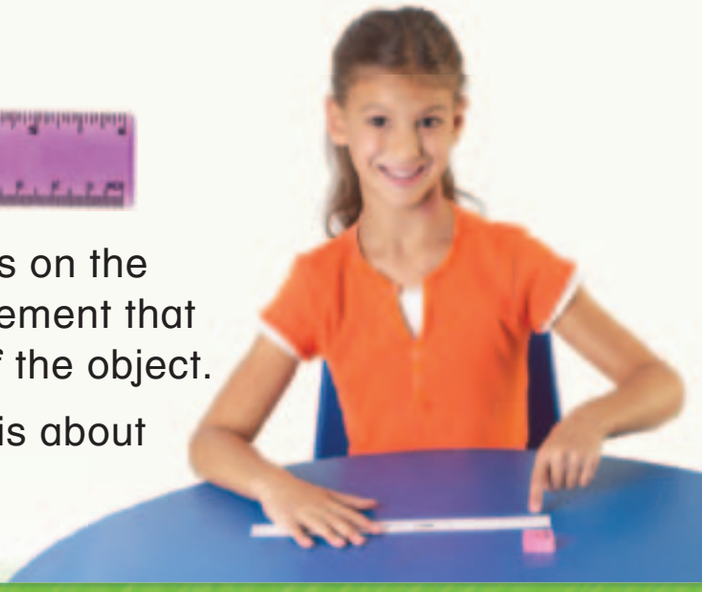
Vocabulary

inch

Use an **inch** ruler to measure length.

First, line up the object with the end of the ruler starting at zero.





Next, look at the marks on the ruler. Find the measurement that is closest to the end of the object.

This pencil sharpener is about _____ inch long.

Check

Find the object. Estimate. Then use an inch ruler to measure.

Find	Estimate	Measure
1.	about _____ inches	about _____ inches
2.	about _____ inches	about _____ inches

3. Talk About It — Describe how you use an inch ruler to measure.

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Richard Hutchings

Practice

Remember
Line up the object with the end of the ruler.

Find the object. Estimate. Measure to the nearest inch.

Find	Estimate	Measure
4.	about _____ inches	about _____ inches
5.	about _____ inches	about _____ inches
6.	about _____ inches	about _____ inches
7.	about _____ inches	about _____ inches
8.	about _____ inches	about _____ inches

Problem Solving

9. **Thinking Math** A large paper clip is about 2 inches long. How long is a chain of 4 paper clips?

about _____ inches

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Math at Home Activity: Ask your child to show you how to measure the length of a piece of yarn or string.

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Name _____

Hands-On Activity

Inch, Foot, Yard

Get Ready

Main Idea

I will measure objects in inches, feet, and yards.

Vocabulary

foot

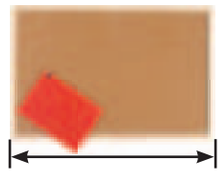
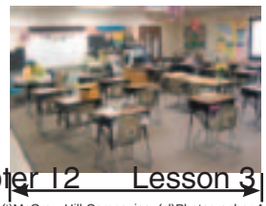
yard

Use a yardstick to measure longer objects.

1 **foot** = 12 inches 1 **yard** = 3 feet or 36 inches

Check

Find the object. Use inches, feet, or yards. Estimate. Measure each object in the unit shown.

Find	Estimate	Measure
1.	about _____ inches	about _____ inches
2. 	about _____ feet	about _____ feet
3. 	about _____ yards	about _____ yards

4. Talk Would you use inches or feet to measure

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(bl)M Stock, (t)McGraw-Hill Companies, (cl)Photographer Andy Crawford, (tr)Richard Hutchings,

Practice

Find the object. Use inches, feet, or yards. Estimate. Measure each object.

Find	Estimate	Measure
5.	about _____ feet	about _____ feet
6.	about _____ feet	about _____ feet
7.	about _____ inches	about _____ inches
8.	about _____ yards	about _____ yards
9.	about _____ inches	about _____ inches

10. WRITING IN MATH Record two items that could be measured in:

inches _____

feet _____

yards _____

Explain your thinking. _____

_____

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(t,tc)Brian Klutch/Getty Images, (c)Peter M. Fisher/CORBIS, (b)TH McGraw-Hill Companies

Math at Home Activity: Ask your child to identify some objects in your home that are 1 inch, 1 foot, and 1 yard long.

Name _____

Problem-Solving Strategy

Use Logical Reasoning

Main Idea

I will use logical reasoning to solve problems.

Koko wants to plant a garden. She cannot decide if it should be 4 inches, 4 feet, or 4 yards long.

About how long should the garden be?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will use logical reasoning.

Solve

I know 4 inches is too small.

I am about 4 feet tall. Still too small.

4 yards makes the most sense.

Check

Look Back
Does my answer make sense?
What helped me decide to choose 4 yards?

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Remember
Understand
Plan
Solve
Check

Try It

Use logical reasoning to solve.

1. Sam planted a bush that is 1 foot tall. The bush grows a little each week. After 4 weeks, would the bush be 10 inches or 14 inches tall?

2. Jane made a paper chain 1 yard long. Brad made a paper chain 2 feet long. Who made the longer paper chain?

Your Turn

Use logical reasoning to solve.

3. Mr. Moore's class is visiting the park. They are collecting things to measure. Lisa finds a pinecone. Would the pinecone be 3 inches, 3 feet, or 3 yards long?

4. Dave is more than 40 inches tall. He is less than 43 inches tall. He is not 41 inches tall. How tall is Dave?

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Estimate. Measure to the nearest inch.

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Game Time

Inching Along

Measurement

You Will Need

- 1 cube
- 1 paper clip

Play with a partner.

- Roll the 1 cube.
- Find the number in the chart.
- What unit should you use to measure that object?
- Have your partner check.
- Move your paper clip that many spaces.
- The first person to Finish wins!

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Name _____

Hands-On Activity

Measure to the Nearest Centimeter

Get Ready

Main Idea

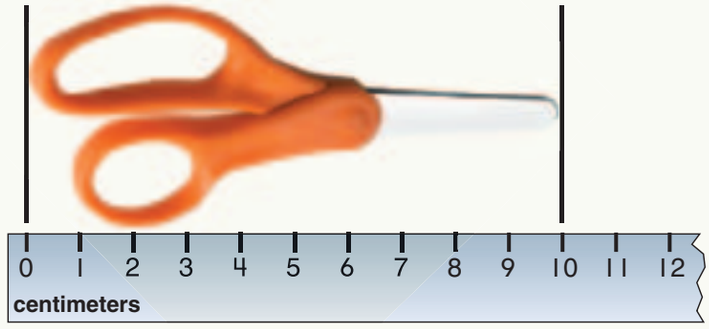
I will use a centimeter ruler to measure.

Vocabulary

centimeter

Use a **centimeter** ruler to measure shorter objects.

First, line up the object with the end of the centimeter ruler starting at zero.



Next, look at the marks on the ruler. Find the measurement that is closest to the end of the object.

The scissors are about 10 centimeters long.

Check

Find the object. Estimate. Then use a centimeter ruler to measure.

Find	Estimate	Measure
1.	about _____ centimeters	about _____ centimeters
2.	about _____ centimeters	about _____ centimeters

3. Talk About It When do you use centimeters to measure?

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Practice

Estimate. Then use a centimeter ruler to measure.

Find	Estimate	Measure
4.	about _____ centimeters	about _____ centimeters
5.	about _____ centimeters	about _____ centimeters
6.	about _____ centimeters	about _____ centimeters
7.	about _____ centimeters	about _____ centimeters
8.	about _____ centimeters	about _____ centimeters

Problem Solving

9. **Thinking Math** About how many centimeters long is a dollar? Write your answer.

_____ centimeters

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Math at Home Activity: Ask your child to measure a toy car or small stuffed animal using a centimeter ruler.

Name _____

Centimeter and Meter

Hands-On Activity

Get Ready

Main Idea

I will measure in centimeters and meters.

Vocabulary

meter

Use a meterstick to measure longer objects.

1 meter = 100 centimeters

Check

Find the object. Estimate. Measure each object in the unit shown.

Find	Estimate	Measure
1.	about _____ centimeters	about _____ centimeters
2.	about _____ meters	about _____ meters

3. Talk About It — Would you use a centimeter ruler or a meterstick to measure the teacher's desk? Explain.

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Richard Hutchings

Practice

Find the object. Estimate.
Measure each object in the unit shown.

Find	Estimate	Measure
4.	about _____ centimeters	about _____ centimeters
5.	about _____ meters	about _____ meters
6.	about _____ centimeters	about _____ centimeters
7.	about _____ meters	about _____ meters

H.O.T. Problem

8. Measure the bird's footprint. Use an inch ruler and a centimeter ruler. Are there a greater number of centimeters than inches? Why?

_____

_____

_____

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Math at Home Activity: Have your child identify objects he or she would measure using a centimeter ruler and objects he or she would measure using a meterstick.

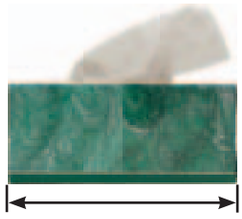
Name _____

Estimate. Then use to measure.

1. Estimate: about _____

Measure: about _____

Find the object. Use inches, feet, or yards. Estimate. Measure each object.

Find	Estimate	Measure
2. 	about _____ inches	about _____ inches
3.	about _____ feet	about _____ feet
4.	about _____ yards	about _____ yards

Find the objects. Use centimeters or meters. Estimate. Measure each object.

Find	Estimate	Measure
5.	about _____ centimeters	about _____ centimeters
6.	about _____ meters	about _____ meters

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(b)Jeffery w. Myers/Corbis, (tl)McGraw-Hill Companies, (cl)Najlah Feanny/Corbis, (tcl)Royalty-Free/Corbis

Spiral Review Chapters 1–12

Write the fraction.

7.

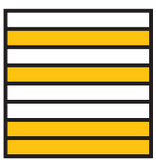
total number of colored parts / number of parts = ☐/☐

8.

total number of shaded parts / number of parts = ☐/☐

Write the fraction. Circle the fractions that equal 1.

9.

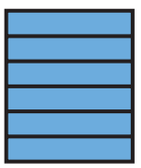


_____

10.

_____

11.



_____

Add or subtract.

12.
$$\begin{array}{r} 27 \\ +\ 3 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 52 \\ -\ 33 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 81 \\ -\ 6 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 44 \\ +\ 44 \\ \hline \end{array}$$

16. Erica wants to share her books with 4 of her friends. She has 12 books she can share. How many books will each one get? _____ books

Are there any books left over? _____

If so, how many are left? _____

Remember
Do not forget Erica.

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Name _____

Hands-On Activity

Time to the Quarter Hour

Get Ready

Main Idea

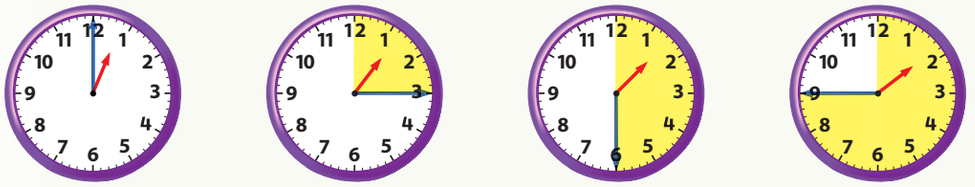
I will use a clock to tell time to the quarter hour.

Vocabulary

quarter hour

There are 15 minutes in a **quarter hour**.
Use a clock to measure time to the quarter hour.

quarter past 1	half past 1	quarter to 2



1:00 1:15 1:30 1:45

Check

Use your . Draw the minute hand to show the time.

1.

2.

3.

4.

5.

6.

7. Talk About It

At 4:15, where is the minute hand? Explain.

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Practice

Remember
A quarter-hour is 15 minutes.

Use your . Draw the minute hand to show the time.

8.

9.

10.

11.

12.

13.

14.

15.

16.

H.O.T. Problem

17. Why is each 15-minute period called a quarter?

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Math at Home Activity: Ask your child to tell you the time at 6:15, 7:30, and 8:45.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve problems.

Your Mission:
Find how many feet tall Holly is.

My teacher told the class to measure each other. I measured Holly with my eraser. 5 erasers are about 1 foot in length. Holly is 20 erasers tall. How many feet tall is she?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
One way is to make a table.

Solve

Make a table.

erasers				
feet				

Polly is _____ feet.

Check

Look Back
What helped me decide how to set up the table to find the answer?

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Mixed Problem Solving

Problem-Solving Strategies

- Make a table
- Draw a picture
- Logical reasoning

Choose a strategy. Solve.

1. There are 3 feet in a yard. The basketball court at school is 10 yards wide. How many feet wide is the court?

_____ feet

2. Juan has to replace the tires on some bikes. He has 3 different types of bikes. There are 2 types of each bike. How many tires does he need to replace?

_____

3. Robin's mom told her that the party started at 2:00. She said to leave at a quarter till. What time would Robin have to leave for the party?

_____

4. Marty is setting up his race cars. The black car is between the yellow car and the orange car. The orange car is between the red car and the black car. The yellow car is in front of the black car. Which car is last?

_____

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Elapsed Time

Hands-On Activity

Get Ready

Main Idea

I will find time.

A second grade class took a field trip to the zoo. They got to the zoo at 9:00 and left at 1:00. How long was the class at the zoo?

Count on each hour.
The class was at the zoo for 4 hours.

Remember
11:00 to 12:00 is 1 hour. 12:00 to 1:00 is another hour.

Check

Use your . Write the times. Then write how much time has passed.

Activity	Start Time	End Time	Time Passed
1. We played football.	3 : 00	5 : 00	We played football for _____ hours.
2. We visited a farm.	_____ : _____	_____ : _____	We visited the farm for _____ hours.

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Practice

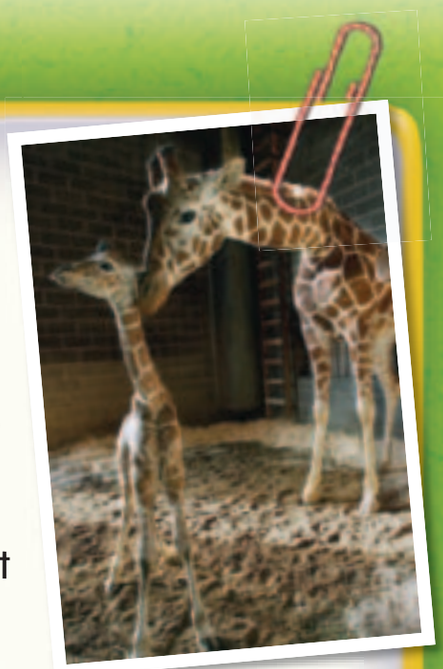
Remember
Start counting at the first hour.

Use your . Write the times.
Then write how much time has passed.

Activity	Start Time	End Time	Time Passed
4. We rode bikes.	_____ : _____	_____ : _____	We rode bikes for _____ hours.
5. We played soccer.	_____ : _____	_____ : _____	We played soccer for _____ hours.

Data File

Angel Arellano found out that the Fresno Chaffee Zoo needed money for repairs. She wrote a letter asking everyone to give $11. People all over Fresno started sending money to the zoo! Now the Fresno Chaffee Zoo has enough money for repairs, thanks to Angel.



6. The zoo opens at 8:00. It closes at 6:00 at night. How many hours is the zoo open?

_____ hours

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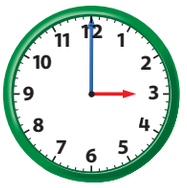
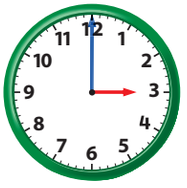
Practice

Remember
Start counting at the first hour.

Use your . Write the times. Then write how much time has passed.

Activity	Start Time	End Time	Time Passed
3. We went on a picnic.	____ : ____	 ____ : ____	We were at the picnic for ____ hour.
4. We built a sandcastle.	____ : ____	____ : ____	We built a sandcastle for ____ hours.
5. We went swimming.	 ____ : ____	____ : ____	We were swimming for ____ hours.
6. We walked the dog.	____ : ____	____ : ____	It took ____ hour to walk the dog.

7.

If school starts at 9:00 and ends at 3:00, how many hours have passed?

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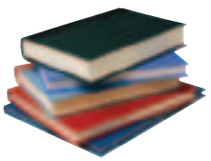
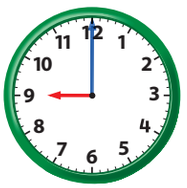
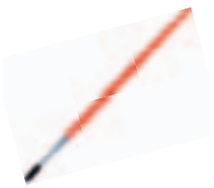
Practice

Activity	Start Time	End Time	Time Passed
8. We collected shells.	____ : ____	____ : ____	We were at the picnic for ____ hour.
9. We Skated.	____ : ____	____ : ____	We skated for ____ hours.
10. We played baseball.	____ : ____	____ : ____	The baseball game was ____ hours.
11.  We slept.	 ____ : ____	____ : ____	He slept for ____ hours.
12.  We painted.	____ : ____	____ : ____	We painted for ____ hour.

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Math at Home Activity: Look at the clock when you sit down to eat dinner. Look at the clock at bedtime. Discuss how much time has passed between dinner and bedtime.

Name _____

Time Relationships

Get Ready

Main Idea

I will select the best unit to measure time.

Choose the best units to estimate and measure time.

Time Relationships	
1 minute	= 60 seconds
1 hour	= 60 minutes
1 day	= 24 hours
1 week	= 7 days
1 month	= 4 full weeks
1 year	= 12 months or 52

Check

Circle the best unit to measure the time for each event.

1. to sneeze

seconds hours

2. to get ready for school

seconds minutes

3. to walk the dog

minutes days

4. to build a house

days months

5. Talk About It How many seconds are in 2 minutes?

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Practice

Circle the best unit to measure the time for each event.

6. to do the dishes

hours minutes

7. to finish second grade

months days

8. to go to the store

weeks hours

9. to build a playground

day month

10. to eat lunch

hours minutes

11. to sharpen your pencil

seconds hours

12. Mary went to the beach with her family for 4 weeks. How many days was Mary at the beach?

_____ days

Problem Solving

13. **Critical Thinking** How old are you to the nearest years, months, and days? _____

How old will you be in 12 months? _____

Explain. _____

Math at Home Activity: Look at a calendar together. Have your child pick a month. Ask him or her what date is the third Sunday of that month.

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Someday you might be as tall as your parents!

Mary's dad is 6 feet tall. Mary thinks she will be as tall as her dad someday. Mary is 3 feet tall now. How much more does Mary have to grow?

_____

D

Shalom Ormsby/Getty Images

FOLD DOWN

Problem-Solving in Science

Real-World MATH

Everyone grows! How tall are you?

_____

This book belongs to

_____

A

©Nicholas Prior/Stone/Getty Images

You can mark your height each year. This helps you see how much you have grown.

Masterfile

Your feet grow too. You know you are growing when your shoes get too tight.

Catherine Ledner/Getty Images

Name _____

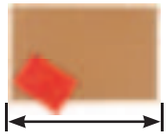
Vocabulary

Match. Write the letter by the correct vocabulary word.

inch	_____	**a.** a metric unit for measuring length
quarter hour	_____	**b.** 15 minutes to an hour
centimeter	_____	**c.** a customary unit for measuring length

Concepts

Find the object. Estimate. Then measure.

Find	Estimate	Measure
1.	about _____ inches	about _____ inches
2.	about _____ yards	about _____ yards
3.	about _____ feet	about _____ feet
4. 	about _____ meters	about _____ meters
5.	about _____ centimeters	about _____ centimeters

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Draw the time.

6.

7.

8.

Write how much time has passed for the activity.

	Activity	Start Time	End Time	Time Passed
9.	We rode in a car.	_____ : _____	_____ : _____	We rode for _____ hours.

Circle the best unit to measure the time.

10. to clean my room

weeks minutes

11. to sleep

hours days

12. Trey and his mom went shopping. They left the house at 4:00 and did not get home till 8:00. How long were they out shopping?

_____ hours

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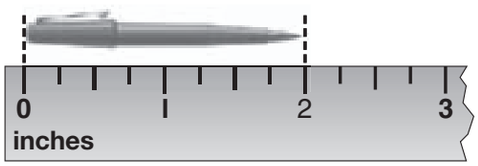
Name _____

Listen as your teacher reads the problem.
Choose the correct answer.

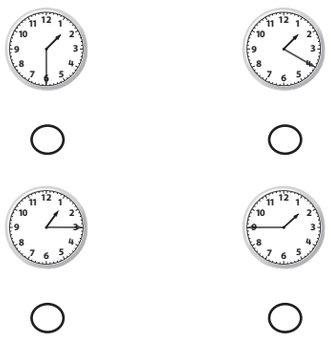
A Look at the pen and the ruler. What is the length of the pen to the nearest inch?



1 inch ○ 2 inches ○

3 inches ○ 4 inches ○

B Kevin starts a swimming lesson at a quarter after one. Which clock shows a quarter after one?



○ ○

○ ○

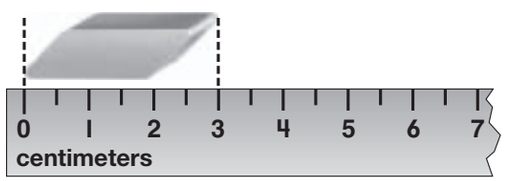
Listen as your teacher reads the problem.
Choose the correct answer.

1 Which unit would be best to measure the length of a book?

inches ○ feet ○

yards ○ paper clips ○

3 Look at the eraser and the centimeter ruler below it. How many centimeters long is the eraser?



1 cm ○ 2 cm ○ 3 cm ○ 5 cm ○

2 Look at the marker and the paperclip. Estimate the length of the marker.

about 2 ○ about 3 ○

about 4 ○ about 5 ○

4 Baseball camp starts at nine o'clock and ends seven hours later. At what time does baseball camp end?

7:00 P.M. ○ 6:00 P.M. ○

5:00 P.M. ○ 4:00 P.M. ○

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5 Which sign makes the number sentence true?

11 − 4 ☐ 7

>	<
○	○
−	=
○	○

6 Look at the soupcan. Which shape matches the soup can?

○ ○ ○ ○

7 What is the value of the five in five hundred thirty-two?

532

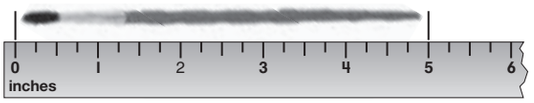
5	55	500	50
○	○	○	○

8 Which can be used to check eighty-nine minus twenty-four equals sixty-five?

89 − 24 = 65

24 + 65	89 + 65
○	○
65 − 24	24 + 89
○	○

9 Look at the picture of the paintbrush. About how long is the paintbrush?



3 inches	4 inches
○	○
5 inches	6 inches
○	○

10 Maude walked for one hour. How many minutes did Maude walk?

12	24	60	72
○	○	○	○

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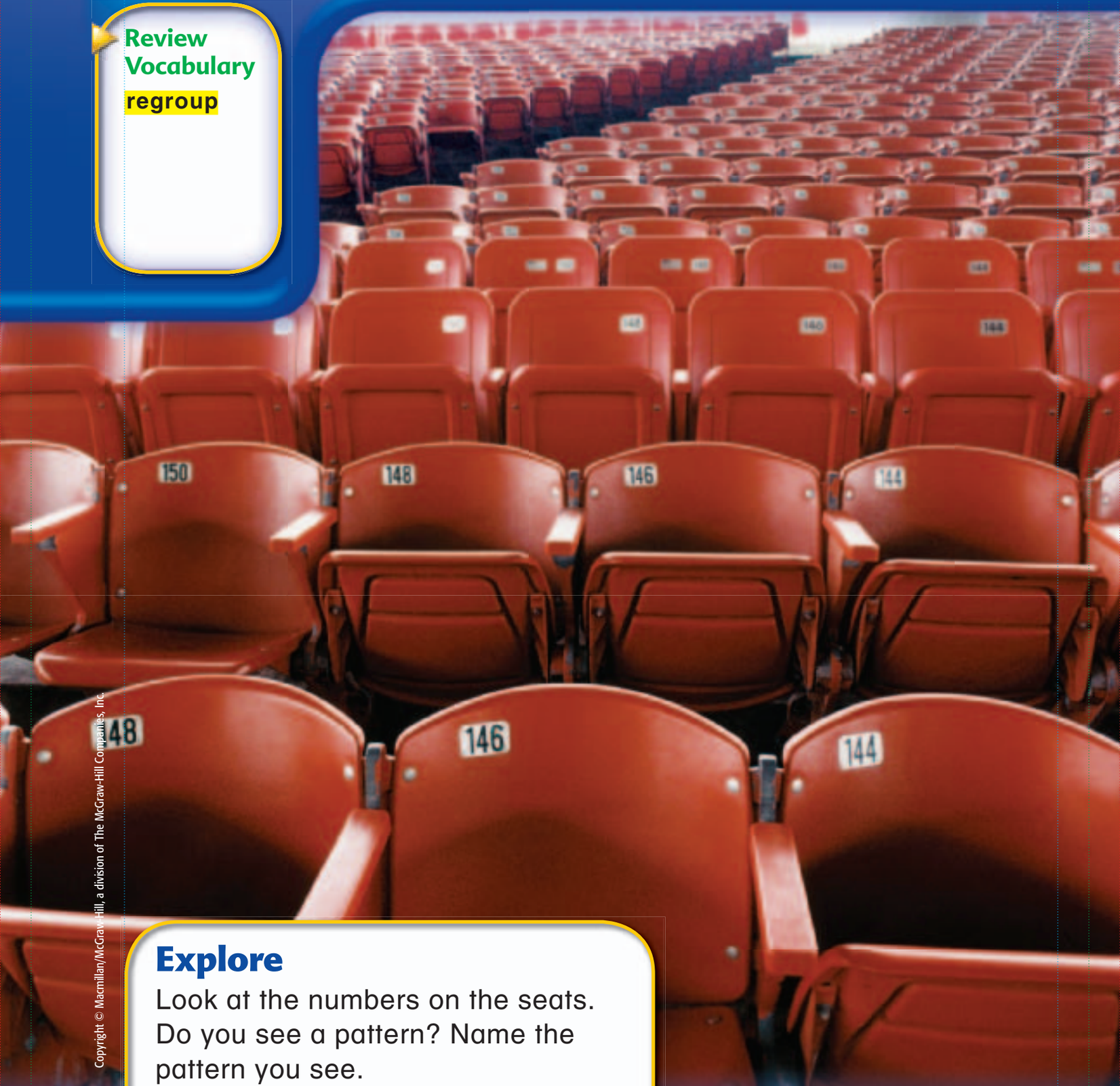
CHAPTER 13

Three-Digit Addition

Review Vocabulary

regroup



Explore

Look at the numbers on the seats. Do you see a pattern? Name the pattern you see.

Counting by_____.

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WireImageStock/Masterfile

Name _____

Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 13?

Add.

1. $\begin{array}{r} 9 \\ +\ 8 \\ \hline \end{array}$

2. $\begin{array}{r} 8 \\ +\ 5 \\ \hline \end{array}$

3. $\begin{array}{r} 9 \\ +\ 1 \\ \hline \end{array}$

4. $\begin{array}{r} 7 \\ +\ 4 \\ \hline \end{array}$

5. $\begin{array}{r} 40 \\ +\ 30 \\ \hline \end{array}$

6. $\begin{array}{r} 56 \\ +\ 28 \\ \hline \end{array}$

7. $\begin{array}{r} 27¢ \\ +\ 33¢ \\ \hline \end{array}$

8. $\begin{array}{r} \$0.71 \\ +\ \$0.18 \\ \hline \end{array}$

9. $\begin{array}{r} \$0.71 \\ +\ \$0.19 \\ \hline \end{array}$

Round to the nearest ten.

10. 67 rounds to _____.

11. 53 rounds to _____.

12. 25 rounds to _____.

13. 89 rounds to _____.

14. Josefina eats about 20 peanuts a day. About how many peanuts will she eat in five days?

about _____ peanuts

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MATH at HOME

Dear Family,

Today my class started Chapter 13, **Three-Digit Addition**. In this chapter, I will learn to add three-digit numbers. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Have your child collect 10 items they can "sell" you. Place price tags ranging from 99¢ to $4.99 on each item. Have your child set up the store, and then pick two items at a time to purchase. For each sale, have your child write out the bill, including what was purchased and the price.

Review Vocabulary

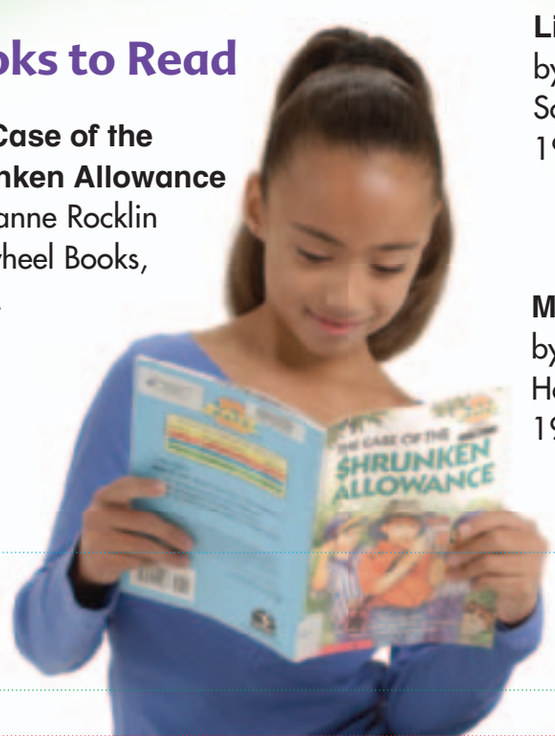
regroup to take apart a number to write it in a new way

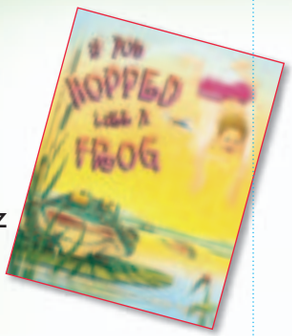
regroup → 1
21
+ 19
40

MathOnline Click on the eGlossary at ca.gr2math.com to find out more about these words. There are 13 languages.

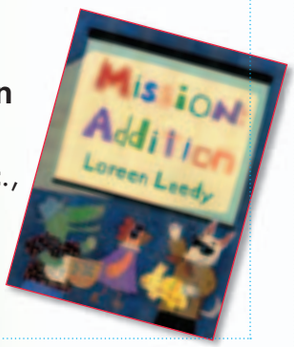
Books to Read

The Case of the Shrunken Allowance
by Joanne Rocklin
Cartwheel Books, 1999.





If You Hopped Like a Frog
by David Schwartz
Scholastic Press, 1999.



Mission: Addition
by Loreen Leedy
Holiday House, Inc., 1999.

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Eclipse Studios

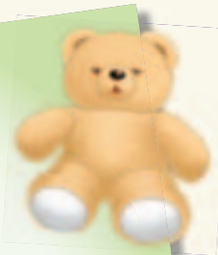
MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 13, **La adición con tres dígitos**. En este capítulo, aprenderé a sumar números de 3 tres dígitos. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad



Pídanle a su hijo(a) que reúna 10 artículos que pueda "venderles" a ustedes. Coloquen una etiqueta de precio en cada artículo que varíe de 99 [INS] a $4.99. Pídanle a su hijo(a) que arregle la tienda y, después, ustedes seleccionen dos artículos para comprar al mismo tiempo. Pídanle a su hijo(a) que escriba una factura para cada venta, la cual incluya lo comprado y el precio.

Repaso de vocabulario

reagrupar separar un número para escribirlo de una nueva manera

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

Si saltaras como una rana
de David Schwartz
Scholastic Press, 1999.

Misión: Suma
de Loreen Leedy
Holiday House, Inc., 1999.

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Name _____

Add Hundreds

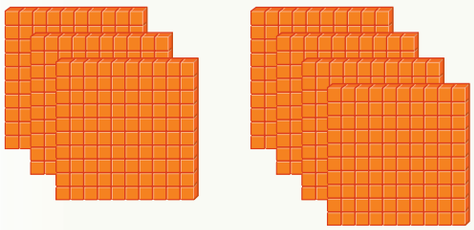
Get Ready

Main Idea

I will add numbers in the hundreds.

You can use addition facts to add numbers in the hundreds.

Find 300 + 400.



300	hundreds
+ 400	hundreds
	hundreds

300 + 400 = _____

Remember

3 + 4 = 7, *so*
300 + 400 = 700

Check

Add.

1. 600 + 100 = _____
2. 300 + 300 = _____
3. 200 + 300 = _____
4. 700 + 200 = _____
5. 400 + 200 = _____
6. 800 + 100 = _____

7.	8.	9.	10.
200	100	500	400
+ 100	+ 300	+ 0	+ 500

11. Talk About It — What addition fact can help you add 600 + 100?

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Practice

Think... of addition facts you know.

Add.

12. 200 + 300 = _____

13. 400 + 400 = _____

14. 700 + 100 = _____

15. 600 + 300 = _____

16. 400 + 200 = _____

17. 100 + 100 = _____

18. 300 + 400

19. 100 + 800

20. 200 + 600

21. 600 + 300

22. 500 + 300

23. 200 + 700

24. 400 + 300

25. 300 + 200

26. 600 + 200

27. 300 + 100

28. 900 + 0

29. 200 + 200

Problem Solving

30. **Number Sense** Hana has 700 pennies. Her brother gives her 200 more pennies.

How many pennies does Hanna have?

_____ pennies

Write the addition fact that helped you to solve.

_____ + _____ = _____

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Math at Home Activity: Ask your child how knowing 4 + 5 = 9 helps them to solve 400 + 500.

Name _____

Regroup Ones

Hands-On Activity

Get Ready

Main Idea

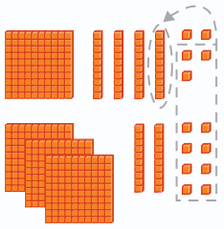
I will regroup the ones to add three-digit numbers.

Review Vocabulary

regroup

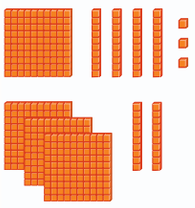
Find 135 + 328.

Step 1: Add the ones. If there are 10 or more ones, regroup 10 ones as 1 ten. Write the 1 in the tens column.



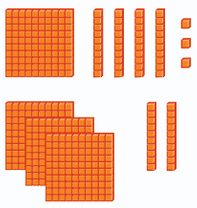
	hundreds	tens	ones
		□	
	1	3	5
+	3	2	8

Step 2: Add the tens.



	hundreds	tens	ones
		□	
	1	3	5
+	3	2	8
			3

Step 3: Add the hundreds.



	hundreds	tens	ones
		□	
	1	3	5
+	3	2	8
		6	3

135 + 328 = _____

Check

Use models and WorkMat 7. Add.

1. 436 + 245 = _____	**2.** 127 + 648 = _____
3. 651 + 39 = _____	**4.** 521 + 267 = _____
5. 349 + 441 = _____	**6.** 315 + 215 = _____

7. Talk About It — How is three-digit addition like two-digit addition?

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Practice

Use models and WorkMat 7. Add.

8. 243 + 219

9. 367 + 516

10. 468 + 23

11. 561 + 26

12. 236 + 518

13. 468 + 18

14. 427 + 144

15. 305 + 306

Copy these problems on another piece of paper. Add.

16. 306 + 408 = _____

17. 28 + 515 = _____

18. 283 + 224 = _____

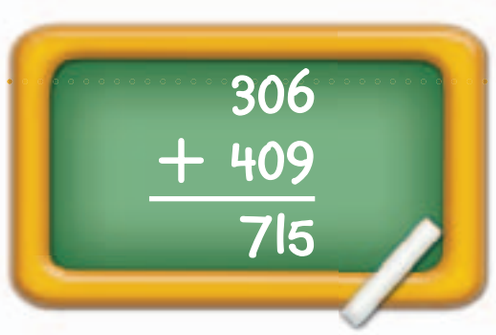
19. 607 + 13 = _____

20. 749 + 9 = _____

21. 146 + 253 = _____

H.O.T. Problem

22. Make It Right Josh adds 306 + 409 like this. Tell why Josh is wrong and make it right.



_____

_____

_____

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Math at Home Activity: Have your child show you how to add 487 + 413 and explain why regrouping is necessary.

Name _____

Add.

1. 300 + 200

2. 341 + 216

3. 621 + 4

4. 317 + 438

5. 463 + 27

6. 25 + 274

7. 162 + 519

8. 234 + 436

9. 152 + 208

10. 439 + 53

11. 505 + 206

12. 306 + 539

Color the sums that are < 600 yellow.
Color the sums that are > 600 orange.

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Game Time

Counting Up

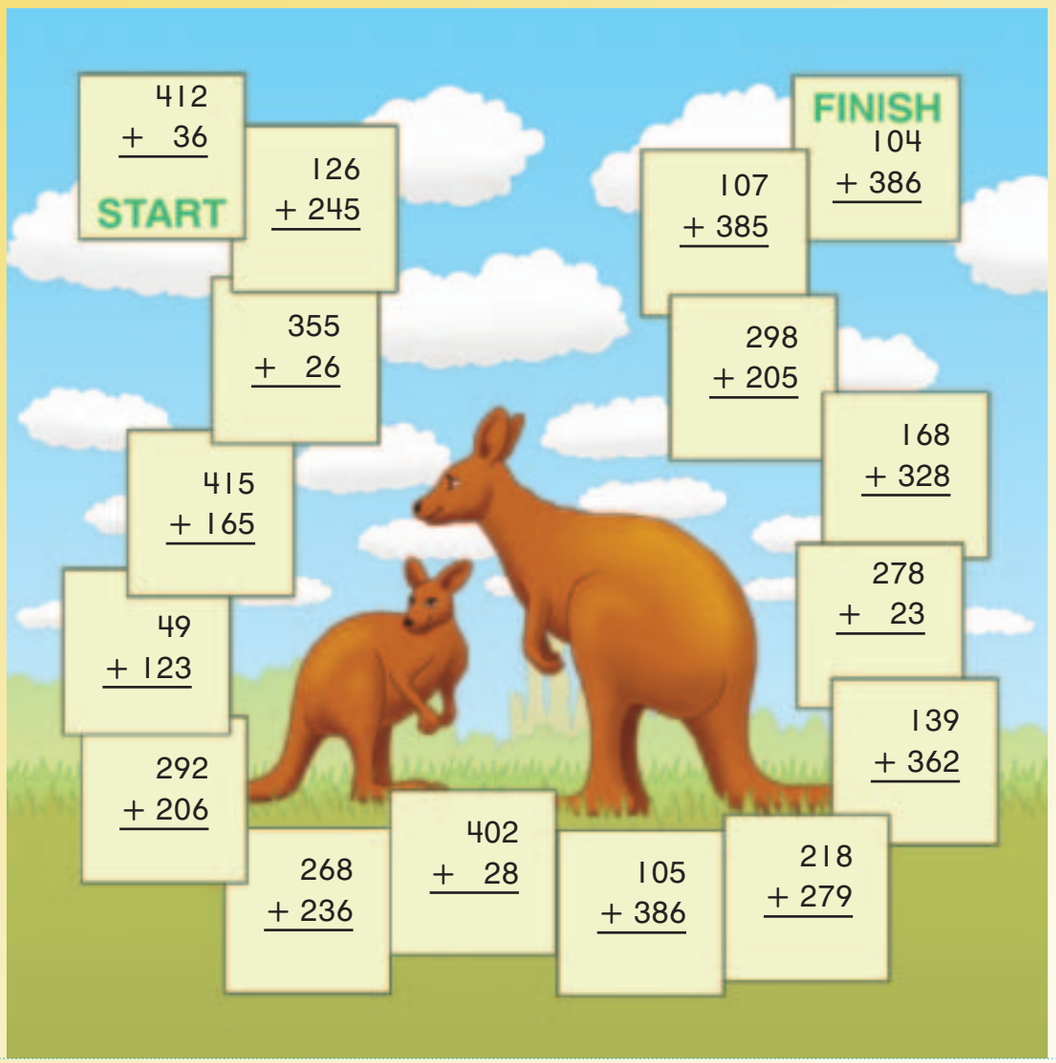
Addition

What You Need

- 30
-
-
- Pencil and paper

Play with a partner:

- Start with 5 .
- Take turns. Roll the and move your .
- Use paper and pencil to add the numbers.
- If the sum is > 500, take a counter.
- If the sum is < 500, take away a counter.
- The first person to make it to Finish with the most counters wins.



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Name _____

Hands-On Activity

Regroup Tens

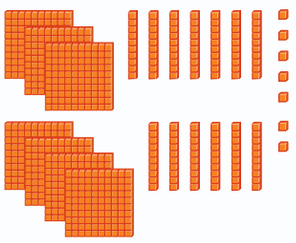
Get Ready

Main Idea

I will regroup the tens to add three-digit numbers.

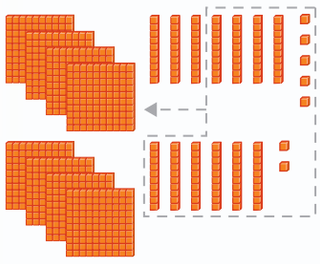
Find 375 + 462.

Step 1: Add the ones.



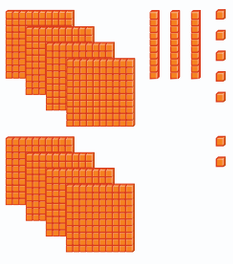
	hundreds	tens	ones
	□		
	3	7	5
+	4	6	2

Step 2: Add the tens. If there are 10 or more tens, regroup 10 tens as 1 hundred. Write the 1 in the hundreds column.



	hundreds	tens	ones
	□		
	3	7	5
+	4	6	2
			7

Step 3: Add the hundreds.



	hundreds	tens	ones
	□		
	3	7	5
+	4	6	2
		3	7

375 + 462 = _____

Check

Use models and WorkMat 7. Add.

1. 243 + 385 = _____	**2.** 562 + 174 = _____
3. 523 + 93 = _____	**4.** 467 + 61 = _____
5. 354 + 53 = _____	**6.** 735 + 192 = _____

7. Talk About It — How is regrouping ones different from regrouping tens?

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Practice

Add.

8. 456 + 291

9. 732 + 167

10. 689 + 29

11. 485 + 332

12. 263 + 581

13. 586 + 1

14. 724 + 124

15. 446 + 60

Copy these problems on another piece of paper. Add.

16. 352 + 475 = _____

17. 389 + 51 = _____

18. 609 + 391 = _____

19. 559 + 300 = _____

20. 271 + 45 = _____

21. 654 + 251 = _____

Data File

One of the best ways to see all the amazing places in California is to travel by car or bus.

Miles to Cities in California

City	Oakland	Los Angeles	San Diego
Oakland		372	492
Los Angeles	372		122
San Diego	492	122	

22. Mia's family lives in Oakland. They drive to Los Angeles and then drove on to San Diego. How many miles did they drive on the trip? _____ miles

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Math at Home Activity: Ask your child to add 199 + 230 and explain how he or she regrouped.

Name _____

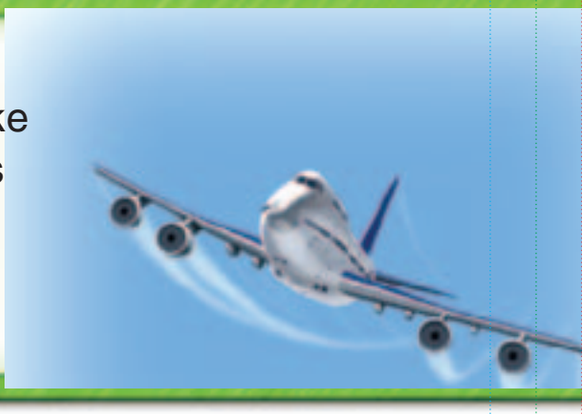
Problem-Solving Strategy
Make a Table

Main Idea

I will make a table to solve problems.

Catalina leaves for Hawaii at 2:30. Flights to Hawaii take off every two hours. Sonja is leaving 2 flights later.

What time is Sonja's flight?



Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will make a table to find out what time Sonja will leave.

Solve

Make a table.
Sonja's plane will leave at 6:30 .

Flight	Time
1	2:30
2	4:30
3	6:30

Check

Look Back
Did I answer the question?

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Try It

Make a table to solve.

1. Our class collected food to donate. 20 cans were collected each day. How many cans were collected in 5 days?

_____ cans collected

2. Ryan gets to pass out papers to the class for 4 weeks. He uses 1 box of paper every week. There are 100 sheets of paper in a box. How many sheets of paper does he pass out?

_____ sheets of paper

Your Turn

Make a table to solve.

3. Marquis collects cars. He keeps 5 cars on a shelf. He has 4 shelves full of cars. How many cars does he have?

_____ cars

4. Lorraine wants to buy a birthday present for her brother. She saves a quarter everyday. How much money will she have after 7 days?

_____

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Name _____

Add.

1. 400 + 400 = _____

2. 300 + 700 = _____

3. 600 + 200 = _____

4. 800 + 100 = _____

5. 422 + 229 = _____

6. 890 + 17 = _____

7. 844 + 60 = _____

8. 632 + 175 = _____

9. 300 + 200 = _____

10. 600 + 400 = _____

11. 500 + 100 = _____

12. 200 + 100 = _____

13. 514 + 108 = _____

14. 867 + 21 = _____

15. 651 + 309 = _____

16. 468 + 215 = _____

17. 187 + 322 = _____

18. 401 + 182 = _____

19. 771 + 135 = _____

20. 624 + 4 = _____

21. 399 + 192 = _____

22. 215 + 684 = _____

23. 468 + 41 = _____

24. 146 + 76 = _____

25. At the aquarium there are 368 fish in the tank. 260 starfish are put into the tank. Now how many fish and starfish are in the tank?

_____ fish and starfish

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Spiral Review Chapters 1–13

Add.

26. 35 + 48

27. 29 + 9

28. 64 + 31

29. 30 + 27

Round each added to the nearest ten.
Estimate the sum.

30. 34 + 27

_____ + _____ = _____

31. 66 + 21

_____ + _____ = _____

Circle the two numbers in the ones column that add to 10. Find the sum of the 3 numbers.

32. 31 + 29 + 40

33. 15 + 25 + 45

34. 62 + 1 + 18

35. 34 + 16 + 45

Write the number.

36. nine hundred eighteen _____

37. four hundred seven _____

Compare. Write >, <, or =.

38. 541 ◯ 145

39. 797 ◯ 977

40. Eric starts cleaning his room at 4:00. He is finished at 6:00. How long did it take Eric to clean his room?

_____ hours

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Name _____

Estimate Sums

Get Ready

Main Idea

I will estimate the sums of three-digit numbers.

Webster School has 429 students. Jefferson school has 267 students. About how many students attend both schools?

You can estimate to find the answer.

Estimate to the nearest ten.

429 is closer to 430.
267 is closer to 270.

429 rounds to → 430
+ 267 rounds to → + 270

Estimate to the nearest hundred.

429 is closer to 400.
267 is closer to 300.

429 rounds to → 400
+ 267 rounds to → + 300

The number of students is about _____.

The exact sum in 429 and 267 is 696.

Check

Estimate to the nearest ten and nearest hundred.
Find the exact sum. Circle the closest estimate.

	Exercise	Tens	Hundreds	Exact Sum
1.	382 + 517	380 + 520	400 + 500	382 + 517 899

2. Talk About It — Explain why 500 is a better estimate than 400 for the sum of 391 + 102.

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Practice

Estimate to the nearest ten and the nearest hundred.
Find the exact sum. Circle the closest estimate.

	Exercise	Tens	Hundreds	Exact Sum
3.	583 + 176	+ ____	+ ____	583 + 176
4.	246 + 212	+ ____	+ ____	246 + 212
5.	890 + 103	+ ____	+ ____	890 + 103
6.	625 + 355	+ ____	+ ____	625 + 355

7. **WRITING IN MATH** Claire is having 350 people come to her big party. She told her mom she will need about 400 balloons. Will Claire have enough balloons for each person? _____

How do you know?

_____

_____

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Math at Home Activity: Ask your child to estimate the sum of 102 and 910.

Name _____

Add Money

Get Ready

Main Idea

I will add money.

Sheila bought a bracelet for $4.25 and a scarf for $2.69. How much money did Sheila spend for the two items?

$$\begin{array}{r} \$4.25 \\ +\ \$2.69 \\ \hline \$6.94 \end{array}$$

Shelia spent $6.94.

Remember
When you add money, you use a dollar sign and decimal point.

Check

Add.

1. $2.53 + $3.27	**2.** $5.20 + $3.80	**3.** $4.22 + $1.38	**4.** $3.50 + $3.70
5. $7.20 + $2.51	**6.** $8.43 + $0.64	**7.** $8.10 + $1.90	**8.** $1.99 + $3.90

9. Talk About It — How are adding money and adding three-digit numbers alike?

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Practice

Add.

10. $3.46 + $4.34

11. $2.06 + $4.96

12. $2.03 + $1.93

Remember
Use a dollar sign and decimal point when adding money.

13. $4.52 + $5.08

14. $6.21 + $2.29

15. $5.47 + $1.23

16. $2.99 + $1.25

17. $4.60 + $3.40

18. $1.30 + $0.70

19. $2.40 + $3.50

20. $5.80 + $2.99

21. $0.25 + $2.70

22. $3.70 + $3.30

23. $0.14 + $3.70

24. $1.25 + $8.00

Copy these problems on another piece of paper. Add.

25. $5.37 + $0.03 = _____

26. $6.55 + $1.35 = _____

27. $8.19 + $1.29 = _____

28. $7.99 + $1.10 = _____

Problem Solving

29. Reasoning Khalid bought a baseball hat for $4.52 and two posters for $2.28 each. How much money did Khalid spend?

_____

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Math at Home Activity: Have your child add $7.90 and $2.10.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve the problem.

I have $6.25 saved in my piggy bank. My brother has $3.55 saved.

If we put our money together, how much would we have?

Your Mission:

Find how much money Cory and his brother have altogether.

Understand

What do I know?

Underline what you know.

What do I need to find out?

Circle it.

Plan

How will I solve the problem?

One way is to write a number sentence.

Solve

I will write a number sentence.

Corey and his brother would have _____

Check

Look Back

Does my answer solve the problem?

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Mark Hall/Getty Images

Mixed Problem Solving

Problem-Solving Strategies

- Write a number sentence
- Use logical reasoning
- Make a table

Choose a strategy. Solve.

1. Kendra puts cars in a row. The black car is behind the red car. The red car is behind the white car. Which color car is in front?

_____ car

2. Tino went on vacation over the summer. He traveled 312 miles to the beach. Then his family traveled 429 miles to his grandma's house. How many miles did they travel?

_____ miles

3. For the school carnival, the principal bought 505 bottles of water and 405 bottles of juice. How many bottles did he have?

_____ bottles

4. Ella gives out 3 packs of markers to each group. There are 5 groups in the class. How many packs of markers did Ella give out?

_____ packs

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Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

You can attract butterflies to your yard. Just plant flowers they like to eat.

D

Erin Hogan/Getty Images

FOLD DOWN

Problem-Solving in Science

Real-World MATH

If you are in the right spot you can see the air dotted with butterflies.

This book belongs to

_____

A

Joe Drivas/Getty Images

Ricardo likes to keep track of how many butterflies he sees at the park each day.

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Use a pencil and paper. How many butterflies did Ricardo see on Sunday and Monday?

_____ butterflies

How many butterflies did Ricardo see on the last two days of the week?

_____ butterflies

B

C

Bob Sciarrino/Star Ledger/CORBIS

Name _____

Vocabulary

Use the words below to complete the sentences.

sum	addend	regroup	round

1. In 1 + 2 = 3, the number 1 is called an _____.
2. When I don't need an exact answer, I can _____.
3. If my answer has ten or more ones, I will need to _____.
4. The answer to an addition sentence is the _____.

Concepts

Add.

5. 300 + 300 = _____
6. 200 + 800 = _____
7. 500 + 400 = _____
8. 600 + 200 = _____
9. 700 + 100 = _____
10. 300 + 200 = _____

11. 233 + 549 = _____
12. 428 + 354 = _____
13. 646 + 148 = _____
14. 555 + 415 = _____
15. 227 + 13 = _____
16. 319 + 614 = _____
17. 363 + 181 = _____
18. 395 + 221 = _____

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Add.

19. 476 + 231

20. 263 + 556

21. 395 + 129

22. 867 + 51

23. $2.25 + $4.39

24. $3.89 + $6.04

25. $7.77 + $1.30

26. $5.99 + $50

Estimate to the nearest ten and nearest hundred. Find the exact sum. Circle the closest estimate.

	Exercise	Tens	Hundreds	Exact Sum
27.	476 + 231	+ ____	+ ____	476 + 231
28.	728 + 234	+ ____	+ ____	728 + 234

29. A fountain contains $7.65 in coins. Salvador throws 4 more quarters into the fountain. How much money does the fountain contain now?

____

30. Jody estimates she has about 200 stickers. She wants to have 500 stickers in all. How many more stickers does she need to collect?

about ____ stickers

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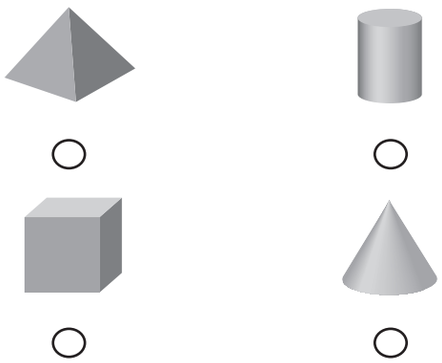
Name _____

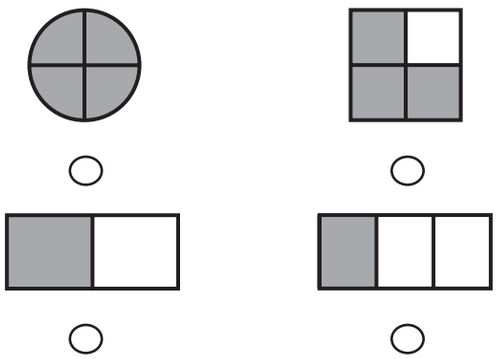
Listen as your teacher reads each problem.
Choose the correct answer.

A Look at the shapes. Which shape is a cone?



○ ○ ○ ○

B Look at the shapes. Which shape shows $\frac{3}{4}$?



○ ○ ○ ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 What is the solution to this problem?

$$\begin{array}{r} 127 \\ +\ 77 \\ \hline \end{array}$$

404 ○ 294 ○ 284 ○ 204 ○

3 What is the solution to this problem?

$$\begin{array}{r} 272 \\ +\ 189 \\ \hline \end{array}$$

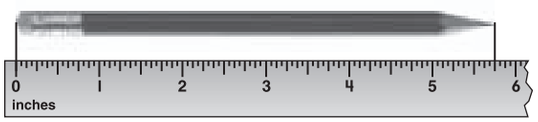
500 ○ 461 ○ 361 ○ 451 ○

2 Shane has 163 baseball cards. Robby has 208 baseball cards. How many baseball cards do Shane and Robby have altogether?

Shane	163
Robby	208

471 ○ 461 ○ 371 ○ 361 ○

4 Look at the pencil and the ruler below it. What is the length of the pencil to the nearest inch?



5 inches ○ 3 inches ○

6 inches ○ 4 inches ○

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5 Look at the numbers. Which number is more than 30 and less than 60?

14 22 42 71

14	22	42	71
○	○	○	○

6 What number goes in the box to make this number sentence true?

$4 + 5 = \square + 4$

3	4	5	6
○	○	○	○

7 Maria did this subtraction problem. Which addition problem shows that she got the right answer?

$$\begin{array}{r} 31 \\ +\ 27 \\ \hline 58 \end{array}$$

$\begin{array}{r} 59 \\ +\ 27 \\ \hline 31 \end{array}$	$\begin{array}{r} 51 \\ +\ 31 \\ \hline 20 \end{array}$	$\begin{array}{r} 59 \\ +\ 31 \\ \hline 28 \end{array}$	$\begin{array}{r} 27 \\ +\ 20 \\ \hline 7 \end{array}$
○	○	○	○

8 A number has six ones, eight tens, and three hundreds What is the number?

286	386	468	683
○	○	○	○

9 Round each addend to the nearest hundred. Add the hundreds. What is the best estimate for the sum?

333 + 569

900	800	700	600
○	○	○	○

10 A computer room uses 300 sheets of paper one month. The next month it uses 400 sheets of paper. How many sheets of paper are used in all?

$$\begin{array}{r} 300 \\ +\ 400 \\ \hline \end{array}$$

100	600	700	800
○	○	○	○

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CHAPTER 14

Three-Digit Subtraction

Review Vocabulary

subtract

regroup

estimate

Explore

Elephants can live up to 80 years. Estimate how old these elephants are:

_____, _____, _____

Steve Bloom/stevebloom.com

Name _____

Math Online
Take the Chapter Readiness Quiz at ca.gr2math.com.

Are You Ready for Chapter 14?

Subtract.

1. 9 − 6

2. 8 − 8

3. 17 − 8

4. 14 − 5

5. 60 − 30

6. 87 − 41

7. 62¢ − 37¢

8. $0.43 − $0.25

9. $0.95 − $0.14

10. 83 − 57

11. $0.81 − $0.68

12. 72 − 25

Round to the nearest hundred.

13. 892 rounds to _____.

14. 422 rounds to _____.

15. 917 rounds to _____.

16. 355 rounds to _____.

17. Rick saw eight squirrels. Two ran away. How many squirrels does Rick see now?

_____ squirrels

This page checks skills needed for Chapter 14.

MATH at HOME

Dear Family,

Today my class started Chapter 14, **Three-Digit Subtraction**. In this chapter, I will learn to subtract three-digit numbers. Here is an activity we can do and a list of books we can read together.

Love, _____

Activity

Give your child a list of phone numbers of friends and family in different locations. Have your child find the differences between your area code and those on the list. Subtract the smaller area code from the larger area code each time.

Review Vocabulary

subtract to take away, take apart, separate, or find the difference between two sets; the opposite of add

regroup to take apart a number to write it in a new way.
1 ten 2 ones becomes 12 ones

estimate to find a number close to an exact amount

MathOnline Click on the eGlossary at ca.gr2math.com to find out more about these words. There are 13 languages.

Books to Read

The Water Hole
by Graeme Base
Harry N Abrams, 2001.

Panda Math: Learning About Subtraction from Hua Mei and Mei Sheng
by Ann Whitehead Nagda Henry Holt and Co., 2005.

Alexander, Who Used to Be Rich Last Sunday
by Judith Viorst
Aladdin, 1987.

Eclipse Studios

MATEMÁTICAS en CASA

Estimada familia:

Hoy mi clase comenzó el Capítulo 14, **La sustracción con tres dígitos.** En este capítulo, aprenderé a restar números de tres dígitos. A continuación, hay una actividad que podemos hacer y una lista de libros que podemos leer juntos.

Cariños, _____

Actividad

Denle a su hijo(a) una lista de números telefónicos de familiares y amigos en diferentes lugares. Pídanle que busque las diferencias entre su código de área y los de la lista. En cada oportunidad, resten el código de área menor del código de área mayor.

Repaso de Vocabulario

restar quitar, separar o hallar la diferencia entre dos conjuntos; lo opuesto de la adición

reagrupar separar un número para escribirlo de una nueva manera

estimar hallar un número cercano a una cantidad exacta

MathOnline Visiten el eGlossary en ca.gr2math.com para averiguar más sobre estas palabras, las cuales se muestran en 13 idiomas.

Libros recomendados

El agujero de agua
de Graeme Base
Harry N Abrams, 2001.

Matemáticas de pandas: Aprende acerca de la sustracción de Hua Mei y Mei Sheng
de Ann Whitehead Nagda
Henry Holt and Co., 2005.

Alejandro, quien era rico el domingo pasado
de Judith Viorst Aladdin, 1987.

Name _____

Subtract Hundreds

Get Ready

Main Idea

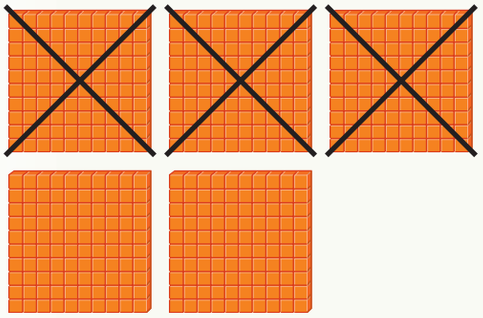
I will subtract numbers in the hundreds.

Review Vocabulary

subtract

You can use subtraction facts to subtract the hundreds.

Find 500 − 300.



500	hundreds
− 300	hundreds
200	hundreds

500 − 300 = 200

Think

I know 5 − 3 = 2, so 500 − 300 = 200.

Check

Subtract.

1. 800 − 100 = _____

2. 200 − 200 = _____

3. 600 − 500 = _____

4. 900 − 400 = _____

5. 700 − 100	6. 400 − 200	7. 500 − 0	8. 700 − 300

9. Talk About It — What subtraction fact can you use to find 900 − 800?

Practice

Use the subtraction facts you know to solve these.

Subtract.

10. 800 − 300 = _____

11. 600 − 600 = _____

12. 300 − 100 = _____

13. 900 − 200 = _____

14. 800 − 400 = _____

15. 700 − 500 = _____

16.
$$\begin{array}{r} 700 \\ -\ 400 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 800 \\ -\ 200 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 300 \\ -\ 300 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 500 \\ -\ 400 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 500 \\ -\ 300 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 200 \\ -\ 100 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 600 \\ -\ 200 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 900 \\ -\ 700 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 700 \\ -\ 200 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 400 \\ -\ 300 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 800 \\ -\ \ 0 \\ \hline \end{array}$$

27.
$$\begin{array}{r} 800 \\ -\ 800 \\ \hline \end{array}$$

H.O.T. Problems

When you subtract a number that is 1 less than the first number, the difference is 1.
For example, 5 − 4 = 1.

28. 400 − 399 = _____

29. 701 − 700 = _____

30. 601 − 600 = _____

31. 300 − 299 = _____

32. 501 − 500 = _____

33. 600 − 599 = _____

Math at Home Activity: Ask your child what number is 100 less than 500.

Name _____

Regroup Tens

Hands-On Activity

Get Ready

Main Idea

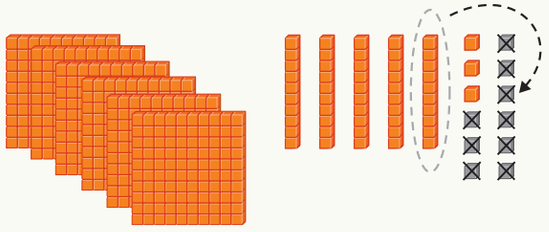
I will regroup tens to subtract three-digit numbers.

Review Vocabulary

regroup

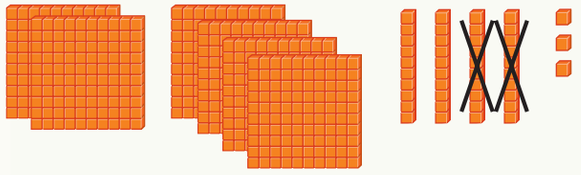
Find 652 − 429.

Step 1: Subtract the ones. You cannot subtract 9 from 2. Regroup 1 ten as 10 ones.



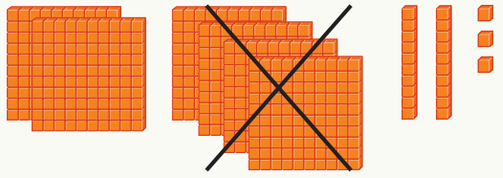
	hundreds	tens	ones
	6	5 (4)	2 (12)
−	4	2	9
			3

Step 2: Subtract the tens.



	hundreds	tens	ones
	6	5 (4)	2 (12)
−	4	2	9
		2	3

Step 3: Subtract the hundreds.



	hundreds	tens	ones
	6 (4)	5 (4)	2 (12)
−	4	2	9
	2	2	3

652 − 429 = 223

Check

Use models and WorkMat 7. Subtract.

1. 546 − 17 = _____

2. 782 − 439 = _____

3. 965 − 327 = _____

4. 450 − 8 = _____

Practice

Use models and WorkMat 7. Subtract.

8. 382 − 128 = _____

9. 467 − 49 = _____

10. 691 − 233 = _____

11. 575 − 66 = _____

12. 863 − 18 = _____

13. 754 − 507 = _____

14.
$$\begin{array}{r} 455 \\ -\ 325 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 780 \\ -\ 436 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 652 \\ -\ 35 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 931 \\ -\ 6 \\ \hline \end{array}$$

Copy these problems on another piece of paper. Subtract.

18.
$$\begin{array}{r} 742 \\ -\ 219 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 423 \\ -\ 119 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 550 \\ -\ 307 \\ \hline \end{array}$$

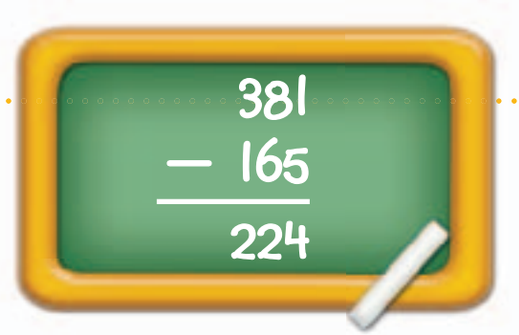
21.
$$\begin{array}{r} 762 \\ -\ 19 \\ \hline \end{array}$$

22. 471 − 315 = _____

23. 893 − 246 = _____

H.O.T. Problem

24. Make it Right Ana subtracted 381 − 165 like this. Tell why Ana is wrong. Make it right.



_____

_____

Math at Home Activity: Write this problem on a piece of paper: 618 − 309. Have your child subtract.

Name _____

Subtract.

1. $\begin{array}{r} 729 \\ -\ 317 \\ \hline \end{array}$

2. $\begin{array}{r} 928 \\ -\ 18 \\ \hline \end{array}$

3. $\begin{array}{r} 423 \\ -\ 116 \\ \hline \end{array}$

4. $\begin{array}{r} 582 \\ -\ 264 \\ \hline \end{array}$

5. $\begin{array}{r} 662 \\ -\ 329 \\ \hline \end{array}$

6. $\begin{array}{r} 825 \\ -\ 427 \\ \hline \end{array}$

7. $\begin{array}{r} 475 \\ -\ 25 \\ \hline \end{array}$

8. $\begin{array}{r} 846 \\ -\ 639 \\ \hline \end{array}$

9. $\begin{array}{r} 330 \\ -\ 3 \\ \hline \end{array}$

10. $\begin{array}{r} 488 \\ -\ 119 \\ \hline \end{array}$

11. $\begin{array}{r} 689 \\ -\ 425 \\ \hline \end{array}$

12. $\begin{array}{r} 397 \\ -\ 141 \\ \hline \end{array}$

Game Time

Subtract It!

Subtraction

What you need:

-
-
- Pencil and paper

Play with a partner:

- Take turns. Roll the . Put your on that flower.
- Subtract.
- Have your partner check your work.
- If you are right, put your name on the flower
- Move your to each flower only once.
- The first person to "pick" all of the flowers wins!

1. $\begin{array}{r} 700 \\ -\ 200 \\ \hline \end{array}$

2. $\begin{array}{r} 332 \\ -\ 110 \\ \hline \end{array}$

3. Go back 1 space

4. $\begin{array}{r} 476 \\ -\ 228 \\ \hline \end{array}$

5. $\begin{array}{r} 200 \\ -\ 100 \\ \hline \end{array}$

6. $\begin{array}{r} 591 \\ -\ 47 \\ \hline \end{array}$

Name _____

Hands-On Activity

Regroup Hundreds

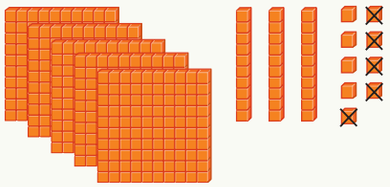
Get Ready

Main Idea

I will regroup hundreds to subtract three-digit numbers.

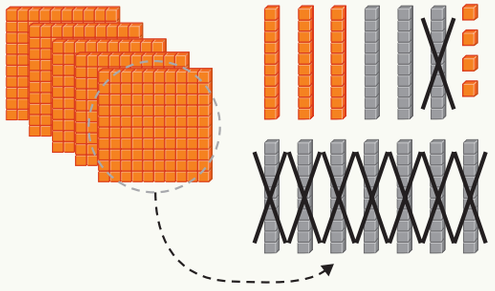
Find 539 − 285.

Step 1: Subtract the ones.



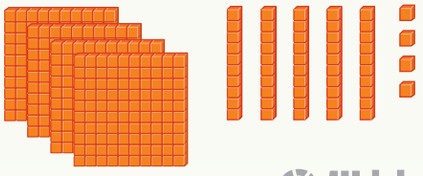
	hundreds	tens	ones
	5	3	9
−	2	8	5
			4

Step 2: Subtract the tens. You cannot subtract 8 from 3.
Regroup 1 hundred as 10 tens.Now subtract the tens.



	hundreds	tens	ones
	4	13	
	~~5~~	~~3~~	9
−	2	8	5
		5	4

Step 3: Subtract the hundreds.



539 − 285 = 254

	hundreds	tens	ones
	4	13	
	~~5~~	~~3~~	9
−	2	8	5
	2	5	4

Check

Use models and WorkMat 7. Subtract.

1. 568 − 197 = _____

2. 628 − 442 = _____

3. 759 − 5 = _____

4. 341 − 22 = _____

Practice

Use models and WorkMat 7. Subtract.

8. 586 − 295 = _____

9. 638 − 43 = _____

10. 929 − 777 = _____

11. 457 − 29 = _____

12. 799 − 541 = _____

13. 870 − 433 = _____

14.
$$\begin{array}{r} 545 \\ -\ 362 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 638 \\ -\ 36 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 173 \\ -\ 232 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 948 \\ -\ 472 \\ \hline \end{array}$$

Copy these problems on another piece of paper. Subtract.

18.
$$\begin{array}{r} 827 \\ -\ 247 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 565 \\ -\ 272 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 640 \\ -\ 50 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 729 \\ -\ 135 \\ \hline \end{array}$$

Data File

In 1863, workers started building a railroad in California going east. In the east, people started building a track going west. After six years, the two tracks met.

22. It took 227 days to build railroad tracks over a mountain. It took 132 days to build tracks on flat ground. How many more days did it take to build over the mountain?

_____ days

Peter Stackpole/Time Life Pictures/Getty Images

Math at Home Activity: Have your child show how to find 641 − 387 and explain the regrouping.

Name _____

Problem-Solving Strategy

Guess and Check

Main Idea

I will guess and check to solve a problem.

Dan has two baskets of apples. He has 80 apples in all.

How many apples might be in each basket?

25 35 45 56

Understand

What do I know? Underline what you know.
What do I need to find out? Circle the question.

Plan

How will I solve the problem?
I will make a guess. Then I will check my answer.

Solve

Use guess and check to solve.

24	1 45	1 35
+ 35	+ 56	+ 45
59	101	80
First try: too low	Second try: too high	Third try

Check

Look Back
Did I answer the question?

Remember
Understand
Plan
Solve
Check

Try It

Guess and check to solve.

1. The sum of two numbers is 75. One number is 15 less than the other. Circle the two numbers.

15 20 35 40 65

2. Maggie has 10 coins that equal 64¢. She has more dimes than quarters, more nickels than dimes, and more pennies than nickels. What coins does Maggie have?

Your Turn

Guess and check to solve.

3. Lauren's toy race cars are two different colors. She has 36 cars in all. What color are her cars?

red 10 green 16 blue 20

4. What number am I?
I am more than 143 + 137.
I have a 9 in the tens place.
The sum of my digits is 14.
Circle the number.

204 268 340 392 399

Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

Name _____

Subtract.

1. 800 − 500 = _____
2. 500 − 300 = _____
3. 900 − 200 = _____
4. 700 − 300 = _____
5. 863 − 347 = _____
6. 253 − 39 = _____
7. 655 − 227 = _____
8. 527 − 19 = _____

9. 553 − 306
10. 770 − 642
11. 483 − 34
12. 853 − 149
13. 475 − 295
14. 647 − 382
15. 954 − 7
16. 827 − 683
17. 319 − 29
18. 444 − 282
19. 875 − 481
20. 206 − 11

21. There are 620 buttons in a box. 200 of them are square. 40 of them are heart shaped. The rest are round. How many round buttons are in the box?

_____ round buttons

Spiral Review Chapters 1–14

Count on to add.

22 5 + 2 = _____ **23** 7 + 1 = _____ **24.** 3 + 5 = _____

Finish the tally chart. Answer the questions.

After School Activites		
Activity	Tally	Total
Homework	𝍸 𝍸	
Football	𝍸 I	
Park	𝍸 III	
Scissors	II	

25. How many students said homework?

_____

26. How many students said bike riding or football?

_____

Round each number to the nearest ten.
Estimate the difference.

27. 31 – 18

_____ – _____ = _____

28. 42 – 14

_____ – _____ = _____

29. 45 – 19

_____ – _____ = _____

30. 49 – 31

_____ – _____ = _____

Circle the shapes that match the description.

31. 4 sides and 4 vertices

32. 3 sides and 3 vertices

Name _____

Estimate Differences

Get Ready

Main Idea

I will estimate the difference of three-digit numbers.

Review Vocabulary

estimate

It is 357 miles from Anaheim to Phoenix and 266 miles from Anaheim to Las Vegas. About how many more miles is it to Phoenix?

You can estimate to find the answer.

Estimate to the nearest ten.

357 is closer to 360.
266 is closer to 270.

$$\begin{array}{rcr} 357 & \text{rounds to} \rightarrow & 360 \\ -\ 266 & \text{rounds to} \rightarrow & -\ 270 \\ \hline & & 90 \end{array}$$

About 90 miles

Estimate to the nearest hundred.

357 is closer to 400.
266 is closer to 300.

$$\begin{array}{rcr} 357 & \text{rounds to} \rightarrow & 400 \\ -\ 266 & \text{rounds to} \rightarrow & -\ 300 \\ \hline & & 100 \end{array}$$

About 100 miles

The exact difference in 357 and 266 is 91 miles. So, both estimates are reasonable.

Check

Estimate to the nearest ten and nearest hundred.
Find the exact difference. Circle the closest estimate.

	Exercise	Tens	Hundreds	Exact Difference
1.	$\begin{array}{r} 482 \\ -\ 217 \\ \hline \end{array}$	– _____	– _____	$\begin{array}{r} 482 \\ -\ 217 \\ \hline 265 \end{array}$

2. Talk About It — Estimate 789 to the nearest ten and hundred. Explain how the answers are different.

Practice

Estimate to the nearest ten and nearest hundred.
Find the exact difference. Circle the closest estimate.

	Exercise	Tens	Hundreds	Exact Difference
3.	762 − 308			762 − 308
4.	982 − 273			982 − 273
5.	423 − 357			423 − 357
6.	870 − 431			870 − 431

7. **WRITING IN MATH** In New York City, the Empire State Building is 381 meters tall, and the Trump Tower is 202 meters tall. Dion estimated the difference in heights to be 180 meters. Chris estimated the difference to be 200 meters. Why are their estimates different?

_____

_____

What is the exact difference in the heights? _____ meters

Math at Home Activity: Ask your child to round 923 and 210 to the nearest ten, and then subtract. Repeat the activity rounding to the nearest hundred.

Name _____

Subtract Money

Get Ready

Main Idea

I will subtract money.

Raquel earned $9.45 mowing.
Kim earned $6.35 weeding.
How much more money did Raquel earn?

$$\begin{array}{r} {}^{8}\cancel{9}.\,{}^{1}\cancel{4}\,5 \\ -\ \$6.\,3\,5 \\ \hline \$2.10 \end{array}$$

Raquel earned $2.10 more than Kim.

Check

Subtract.

1. $\begin{array}{r} \$6.43 \\ -\ \$3.25 \\ \hline \$3.18 \end{array}$

2. $\begin{array}{r} \$4.25 \\ -\ \$2.82 \\ \hline \end{array}$

3. $\begin{array}{r} \$7.29 \\ -\ \$2.48 \\ \hline \end{array}$

4. $\begin{array}{r} \$5.46 \\ -\ \$3.27 \\ \hline \end{array}$

5. $\begin{array}{r} \$9.53 \\ -\ \$6.71 \\ \hline \end{array}$

6. $\begin{array}{r} \$8.79 \\ -\ \$0.75 \\ \hline \end{array}$

7. $\begin{array}{r} \$2.50 \\ -\ \$1.19 \\ \hline \end{array}$

8. $\begin{array}{r} \$7.99 \\ -\ \$1.00 \\ \hline \end{array}$

9. Talk About It **2MR3.0** How is subtracting three-digit numbers and subtracting money alike?

Bob Daemmrich/Photo Edit Inc.

Practice

Subtract.

10. $7.43 − $5.34

11. $8.52 − $3.07

12. $6.29 − $2.32

13. $5.74 − $1.68

14. $3.50 − $2.70

15. $7.99 − $0.50

16. $9.97 − $1.51

17. $9.20 − $1.40

18. $3.36 − $1.42

19. $5.96 − $0.18

20. $6.18 − $2.64

Remember
Use a dollar sign and decimal point when subtracting money.

Copy these problems on another piece of paper.
Subtract.

21. $4.25 − $0.75

22. $4.70 − $3.80

23. $6.70 − $0.52

24. $3.75 − $2.66

Problem Solving

25. Number Sense Subtract the amounts of money. Which is the greatest amount? Circle it.

$6.23 − $2.54

$4.62 − $1.77

$6.25 − $2.37

26. Explain how you can tell which money amount is greatest.

Math at Home Activity: Look at two different prices at the grocery store, up to $10.00. Have your child subtract the greater price from the lesser price.

Name _____

Problem-Solving Investigation

Main Idea

I will choose a strategy to solve the problem.

Your Mission:
Find how many cubes Holly has now.

I had 600 cubes. I gave some to Polly. Now I have 200 cubes. How many cubes do I have now?

Understand

What do I know? Underline what you know.
What do I need to find out? Circle it.

Plan

How will I solve the problem?
One way is to work backward.

Solve

Work backward.

$$\underbrace{600}_{\text{started with}} - \underbrace{\square}_{\text{what I gave to Polly}} = \underbrace{200}_{\text{ended with}}$$

$$\begin{array}{r} 600 \\ -\,200 \\ \hline 400 \end{array}$$

I have _____ cubes.

Check

Look Back
Does my answer make sense?
How can I check my answer?

Eclipse Studios

Mixed Problem Solving

Problem-Solving Strategies

- Work backward
- Find a pattern
- Use logical reasoning

Choose a strategy. Solve.

1. I am a number greater than 100.
There is a two in the ones place.
I am less than 104.
What number am I?

_____

2. Bailey bought some crayons for $2.48.
Now she has $3.27. How much money did Bailey have to begin with?

_____

3. Brooke needs to put 2 fish in each bowl for a game at the school fair. She has 17 bowls. How many fish does she need?

_____ fish

4. My lunch costs $1.50. Each item costs the same. How much did each item cost? Do I have enough money?

_____; _____

Math at Home Activity: Take advantage of problem-solving opportunities during daily routines such as riding in the car, bedtime, doing laundry, putting away groceries, planning schedules, and so on.

A farmer in Fresno, California is sending his tomatoes to three different cities. The table shows how far the trucks will travel.

City	Miles
Las Vegas, NV	396
Flagstaff, AZ	593
Phoenix, AZ	591

One truck travels to Las Vegas. Another truck travels to Phoenix. Which truck travels the farthest? How much farther?

_____ miles

D

CORBIS

FOLD DOWN

Problem-Solving in Social Studies

Mitch Hrdlicka/Getty Images

Real-World MATH

Vegetables go through a lot before they get on your plate.

This book belongs to

_____

A

There are farmers who grow the vegetables from seeds. Then they are picked.

CORBIS

The vegetables are loaded onto big trucks. Some vegetables are sent to be canned, and some are sent to be frozen.

Some vegetables are sent to the grocery store.

(t b)CORBIS, Mark E. Gibson/CORBIS

Name _____

Vocabulary

Draw a line to match each term with an example.

1. decimal point	**a.** $3 - 2 = 1$
2. subtract	**b.** $432 \longrightarrow 400$
3. round	**c.** $5.79

Concepts

Subtract.

4. $600 - 400 =$ _____ **5.** $700 - 600 =$ _____

6. 800 − 400	**7.** 900 − 600	**8.** 773 − 559	**9.** 261 − 148
10. 938 − 329	**11.** 885 − 618	**12.** 357 − 185	**13.** 987 − 596
14. 446 − 171	**15.** 663 − 273	**16.** 399 − 12	**17.** 516 − 7
18. $4.25 − $3.09	**19.** $8.77 − $2.94	**20.** $5.86 − $1.37	**21.** $8.04 − $0.91

Estimate to the nearest ten nearest hundred.
Find the exact difference. Circle the closest estimate.

	Exercise	Tens	Hundreds	Exact Difference
22.	759 − 334			759 − 334
23.	887 − 718			887 − 718
24.	546 − 475			546 − 475
25.	802 − 466			802 − 466

26. A box of cereal costs $3.59 at the grocery store. Samuel gives the cashier $5.75. How much change should Samuel receive?

_____

27. There are 334 cars in the mall parking lot on Sunday. On Monday, there are 182 cars in the same lot. How many more cars were parked in the lot on Sunday?

_____

Name _____

Listen as your teacher reads each problem.
Choose the correct answer.

A In one week, the Mann Company collected eight hundred pounds of tin to recycle. They also collected four hundred pounds of plastic. How much more tin did they collect than plastic?

$$\begin{array}{r} 800 \\ -\ 400 \\ \hline \end{array}$$

500 ○ 400 ○ 300 ○ 200 ○

B Jorge's coloring book has three hundred twenty-one pages. He has colored one hundred seventeen pages. How many pages does he have left to color?

$$\begin{array}{r} 321 \\ -\ 117 \\ \hline \end{array}$$

94 ○ 104 ○ 154 ○ 204 ○

Listen as your teacher reads each problem.
Choose the correct answer.

1 What is another name for five hundred plus fifty plus one?

500501 ○ 5051 ○

5501 ○ 551 ○

3

$$\begin{array}{r} 156 \\ -\ 95 \\ \hline \end{array}$$

60 ○ 61 ○ 65 ○ 251 ○

2 I have two hundred fifty-four stamps in my collection. I gave one hundred thirty-six stamps to my brother. How many stamps do I have left?

$$\begin{array}{r} 254 \\ -\ 136 \\ \hline \end{array}$$

128 ○ 124 ○ 118 ○ 108 ○

4 About how long is a dollar bill?

1 centimeter ○ 1 inch ○

6 meters ○ 6 inches ○

5 Which number will make this sentence true?

$512 < ____$

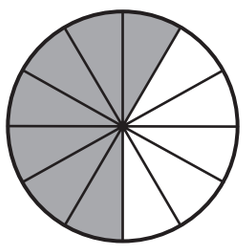
367 ○ 498 ○ 502 ○ 539 ○

6 Which number goes in the box? What number is between ninety-three and ninety-nine?

$93 < \square < 99$

100 ○ 94 ○ 92 ○ 91 ○

7 Look at the circle. What fraction of the circle is shaded?



$\frac{7}{12}$ ○ $\frac{6}{12}$ ○ $\frac{5}{12}$ ○ $\frac{4}{12}$ ○

8 What is the solution to this problem?

$$\begin{array}{r} 678 \\ -\ 21 \\ \hline \end{array}$$

750 ○ 657 ○ 457 ○ 375 ○

9 Terry put eighteen photos into three equal groups. How many photos are in each group?

5 ○ 6 ○ 7 ○ 8 ○

10 What is the difference between the tallest height and the shortest height?

Tree Height	
maple	109 feet
pine	344 feet
oak	572 feet

360 ○ 400 ○ 460 ○ 463 ○

Looking Ahead

to the Grade 2 Standards

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Let's Look Ahead

Understanding Probability xx

Using Probability xx

Cups and Gallons. xx

Milliliters and Liters xx

Ounces and Pounds xx

Grams and Kilograms xx

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Tim Fuller

Name _____

Hands-On Activity

Explore Probability

Get Ready

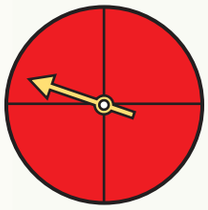
Main Idea

I will identify events as certain, probable, or improbable.

Vocabulary

certain
probable
improbable

You can tell if an event is certain, probable, or improbable.

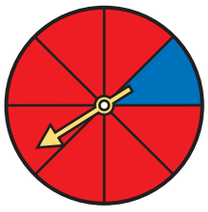
Certain	Probable	Improbable
		
Landing on red is certain. It will always happen.	Landing on red is probable. It is likely to happen.	Landing on red is improbable. It will never happen.

Check

5. Certain means the event will always happen, improbable means the event will never happen.

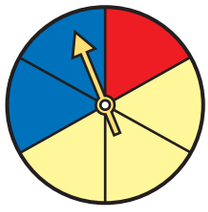
Look at each spinner to answer the question.

The spinner landing on red is

1. 

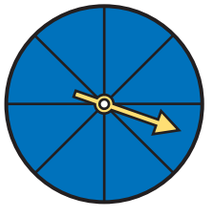
certain
(probable)
improbable

The spinner landing on green is

2. 

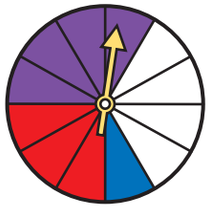
certain
probable
(improbable)

The spinner landing on blue is

3. 

(certain)
probable
improbable

The spinner landing on purple is

4. 

certain
(probable)
improbable

5. Talk About It — What does certain mean? What does improbable mean?

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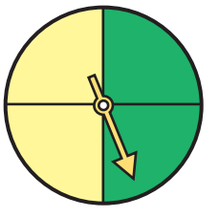
Practice

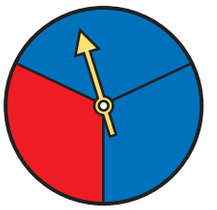
Look at each spinner to answer the question.
Circle the answer.

The spinner landing on green is

6. 

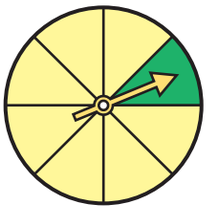
certain
(probable)
improbable

The spinner landing on blue is

7. 

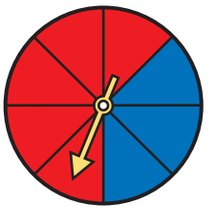
(certain)
probable
improbable

The spinner landing on green is

8. 

certain
(probable)
improbable

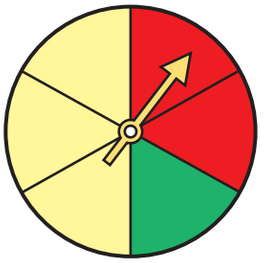
The spinner landing on yellow is

9. 

certain
probable
(improbable)

Problem Solving

10. **Reasoning** Mr. Franklin's students pick a color and spin the wheel. If it lands on the color they picked, they get a prize. Here are the colors each of his students picked.



Mary – blue
Seki – green
Rico – yellow
Marita – red

Which student is most likely to win a prize? _____

Which student will never win a prize? _____

Explain why. _____

_____

_____

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Math at Home Activity: Lay out 5 nickels, 10 pennies, and 2 dimes. Ask your child which coin is most likely to be picked up and which coin is least likely to be picked up.

Name _____

Hands-On Activity

Likely and Unlikely Events

Get Ready

Main Idea

I will identify events as likely and unlikely events.

Vocabulary

likely

unlikely

Sometimes you can tell if an event is likely or less likely to happen.

How likely is it that James will get a instead of a ?

There are more than . James is more likely to pick a .

James picks crayons out of a bag. He records the color on the tally chart. Then he puts the crayon back in the bag. James does this 10 times.

Color Chosen	
Color	Tally
red	𝍸 ||
green	|||

Check

2.–3. Answers will vary depending on results.

Tell how likely it is that the event will happen. Then follow the steps 10 times to complete the tally chart.

1. 4 and 2 are in a bag. How likely are you to pick instead of ? Circle.

likely less likely

2. Place 4 and 2 in a bag.

Color Chosen	
Color	Tally
green	
yellow	

3. Talk About It — Do your results from your tally chart match your answer in Exercise 1? Explain.

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C Squared Studios/Getty Images, Inc.

Practice

Tell how likely it is that the event will happen. Then follow the steps 10 times to complete the tally chart.

1. Pick a cube.
2. Record the color in the tally chart.
3. Return the cube to the bag.

4. 4 and 2 are in a bag. How likely are you to pick instead of ? Circle.

likely less likely

5. Place 4 and 2 in a bag.

Color Chosen	
Color	Tally
red	
yellow	

6. 5 and 4 are in a bag. How likely are you to pick a instead of a ?

likely less likely

7. Place 5 and 4 in a bag.

Color Chosen	
Color	Tally
orange	
yellow	

Problem Solving

8. **Reasoning** Terry put 5 and 5 in a bag. Would Terry be more likely to pick a or a ?

Explain. _____

_____

_____

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Math at Home Activity: Have your child put 2 red pens and 4 blue pens in a shopping bag. Ask your child which one is likely to be picked first.

Name _____

Hands-On Activity

Cups And Gallons

Get Ready

Main Idea

I will estimate and measure liquid volume.

Vocabulary

cup

gallon

Check

Circle the better estimate.

Container	Estimate	
1.	about 2 cups	about 10 cups
2.	about 3 gallons	about 30 gallons
3.	about 1 cup	about 1 gallon

4. Talk About It

Which unit of measure, cups or gallons, would be best to use to find out how much a water bottle can hold? Why?

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(t)Richard Hutchings

Practice

Find the container. Circle the better estimate.
Measure. Circle the closer measure.

Container	Estimate	Measure
5.	about 2 gallons about 10 gallons	2 gallons 10 gallons
6.	about 1 gallon about 2 gallons	1 gallon 2 gallon
7.	about 1 cup about 6 cups	1 cup 6 cups
8.	about 10 cups about 8 cups	10 cups 8 cups
9.	about 1 cup about 3 cups	1 cup 3 cups

10. **WRITING IN MATH** Explain how you could find how many cups in a gallon.

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Math at Home Activity: Use a cup measure. Ask your child to estimate how many cups it would take to fill different containers. Then have your child measure.

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Name _____

Hands-On Activity

Milliliters and Liters

Get Ready

Main Idea

I will estimate and measure capacity using milliliters and liters.

Vocabulary

milliliter

liter

You can use **liters** and **milliliters** to measure how much a container can hold.

This bottle can hold 1 liter.

This dropper can hold 1 milliliter of water.

Check

Circle the better estimate.

Container	Estimate
1.	about 1 milliliter about 1 liter
2.	about 1 milliliter about 1 liter
3.	about 1 milliliter about 1 liter

4. Talk About It — Does a bathroom sink hold more or less than 1 liter? How do you know?

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(tc,bl)Jacques Cornell/The McGraw-Hill Companies, (tr)The McGraw-Hill Companies, Inc/Ken Karp photographer

Practice

Find the container. Circle the better estimate.
Measure. Circle the closer measure.

Container	Estimate	Measure
5.	about 1 milliliter about 1 liter	1 liter 1 milliliter
6.	about 1 milliliter about 1 liter	1 liter 1 milliliter
7.	about 1 milliliter about 1 liter	1 liter 1 milliliter
8.	about 1 milliliter about 1 liter	1 liter 1 milliliter

Problem Solving

9. **Algebra** Melissa filled 6 glasses with 1 liter of juice. How many glasses could she fill with 3 liters of juice?

_____ + _____ + _____ = _____

Explain how you solved.

_____

_____

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Math at Home Activity: Have your child find and show you a container that holds more than 1 liter and container that holds less than 1 liter.

(bc)Lynx/Iconotec.com/Alamy Images, (cl)Phil Degginger/Alamy Images, (t)The McGraw-Hill Companies Inc./Ken Cavanagh Photographer

Name _____

Hands-On Activity

Ounces and Pounds

Get Ready

Main Idea

I will estimate and measure weight using ounces and pounds.

Vocabulary

ounce

pound

You can measure weight in **ounces** and **pounds**.
16 ounces = 1 pound

A slice of bread weighs about 1 ounce.

slice

1 ounce

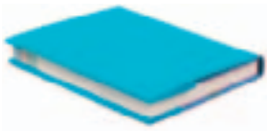
A loaf of bread weighs about 1 pound.

loaf

1 pound

Check

Circle the better estimate.

Item	Estimate
1.	about 1 pound about 1 ounce
2.	about 1 pound about 1 ounce
3. 	about 1 pound about 1 ounce

4. Talk About It — Which weighs more, 16 ounces of bricks or 1 pound of markers? Why?

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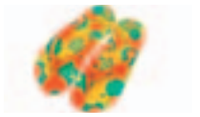
(bl)Brand X Pictures/PunchStock, (bc)©Royalty-Free/Corbis, (tr,c)StudiOhio

Practice

Find the item. Circle the better estimate. Measure. Circle the closer measure.

	Item	Estimate	Measure
5.		about 1 pound about 1 ounce	1 pound 1 ounce
6.		about 1 pound about 1 ounce	1 pound 1 ounce
7.		about 1 pound about 1 ounce	1 pound 1 ounce
8.		about 1 pound about 1 ounce	1 pound 1 ounce
9.		1 pound 1 ounce	1 pound 1 ounce

H.O.T. Problem

10. Explaining Math If you have a 1 pound bag of flour on one side of a balance scale and a 12 ounce can on the other side, what will happen to the scale? Explain why.

_____

_____

_____

_____

_____

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Math at Home Activity: Collect four items from around the house. Ask your child to put them in order by weight.

(cl)Sam Toren/Alamy Images, (br)StudiOhio

Name _____

Hands-On Activity

Grams and Kilograms

Get Ready

Main Idea

I will estimate and measure mass in grams and kilograms.

Vocabulary

gram

kilogram

You can measure mass in **grams** and **kilograms**.

1000 grams = 1 kilogram

1 gram

One piece of dog food is about 1 gram.

A can of dog food is about 1 kilogram.

1 kilogram

Check

Circle the better estimate.

Item	Estimate	
1.	about 1 gram	about 5 grams
2.	about 2 grams	about 10 grams
3.	about 1 kilogram	about 4 kilograms

4. Talk About It — Is a large object always heavier than a smaller object? Explain.

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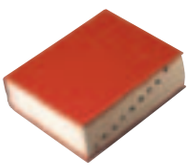
(l,tr,c)StudiOhio

Practice

Find the item. Circle the better estimate.
Measure. Circle the closer measure.

Item	Estimate	Measure
5.	about 3 grams about 15 grams	3 grams 15 grams
6.	about 10 grams about 1 gram	10 grams 1 gram
7.	about 10 kilograms about 5 kilograms	10 kilograms 5 kilograms
8. 	about 35 kilograms about 5 kilograms	35 kilograms 5 kilograms
9.	about 1000 grams about 100 grams	1000 grams 100 grams

H.O.T. Problem

10. Explaining Math If a can of soup is 330 grams, how many cans of soup would be about 1 kilogram?

about _____ cans of soup

Explain why. _____

_____

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Math at Home Activity: While at the grocery store, ask your child to find items that show the mass in kilograms and/or grams.

(b)Simon Battensby/Getty Images

Standards Review

It's time to review the California Mathematics Standards. You have been building your math skills in class. Soon you will have a chance to put them to work.

Tips for Success!

Before a Test

- Go to be early the night before.
- Eat a good breakfast the next morning.

During a Test

- Listen carefully as your teacher reads each question.
- Work carefully.

Whatever you do...

- Do not rush.
- Do not give up.

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Bubbles

You will fill in bubbles to answer questions.

- Fill in the bubble completely.
- Make your marks dark.
- If you make a mistake, be sure to erase it all.

Correct			
2	5	7	9
○	○	●	○

Not Correct			
2	5	7	9
○	○	◉	○

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Practice by Standard: Number Sense

Standard Set 1.0: Students understand the relationship between numbers, quantities, and place value in whole numbers up to 1,000.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check	QUICK Review
1. What is another way to write seven hundred fifty-three? 700 + 50 + 30 ⬭ 700 + 53 + 3 ⬭ 700 + 50 + 3 ⬭ 500 + 70 + 3 ⬭	**Strategy:** Write seven hundred fifty-three in expanded form. There is a 7 in the hundreds place. There is a 5 in the tens place. There is a 3 in the ones place. How can you write this number?
2. A number has four ones, seven tens, and six hundreds. What is the number? 476 ⬭ 764 ⬭ 647 ⬭ 674 ⬭	**Strategy:** Use place value to form a whole number. The table below shows the correct place values of the digits.

hundreds	tens	ones
6	7	4

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. What is the value of the eight in three hundred thirty-eight?

8 ⬭ 80 ⬭ 800 ⬭ 8,000 ⬭

4. What is another name for seven hundred plus sixty plus five?

7,065 ⬭ 765 ⬭ 7,056 ⬭ 70,650 ⬭

5. Which number goes in the box?

514 < ☐ < 531

418 ⬭ 508 ⬭ 522 ⬭ 569 ⬭

6. Which sign makes the number sentence true?

30 + 14 ☐ 44

\+ ⬭ > ⬭ < ⬭ = ⬭

7. A number has two ones, nine tens, and three hundreds. What is the number?

319 ⬭ 392 ⬭ 139 ⬭ 193 ⬭

8. Which number sentence is true?

456 < 456 ⬭ 219 > 233 ⬭

540 > 543 ⬭ 763 < 770 ⬭

9. What is the value of the two in two hundred seventy-four?

2 ⬭ 20 ⬭ 200 ⬭ 2,000 ⬭

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Name _____

Practice by Standard: Number Sense

Standard Set 2.0: Students estimate, calculate, and solve problems involving addition and subtraction of two- and three-digit numbers.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. Lawrence did this subtraction problem. Which addition problem shows that he got the right answer?

$$\begin{array}{r} 37 \\ -\ 24 \\ \hline 13 \end{array}$$

$\begin{array}{r} 13 \\ -\ 24 \end{array}$	$\begin{array}{r} 24 \\ -\ 24 \end{array}$	$\begin{array}{r} 13 \\ -\ 37 \end{array}$	$\begin{array}{r} 37 \\ -\ 24 \end{array}$
○	○	○	○

2. What is the solution to this problem?

$$\begin{array}{r} 119 \\ +\ 33 \\ \hline \end{array}$$

142	149	152	157
○	○	○	○

QUICK Review

Strategy: Add to check a subtraction problem.

Add the difference (13) to the number subtracted (24). The sum should equal 37.

$$\begin{array}{r} 37 \\ -\ 24 \\ \hline 13 \end{array} \qquad \begin{array}{r} 37 \\ +\ 24 \\ \hline 37 \end{array}$$

Strategy: Use regrouping to solve an addition problem.

Add the digits in the ones column. $9 + 3 = 12$
The sum is 10 or more, so we will regroup. Regroup 12 as 1 ten and 2 ones. Write the ones. Then add the tens and hundreds.

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. What is the solution to this problem?

$$\begin{array}{r} 438 \\ +\ 35 \\ \hline \end{array}$$

401 ⬭ 403 ⬭ 413 ⬭ 417 ⬭

4. Michelle had three hundred sixty-eight stickers. She gave one hundred forty-two of them to her friends. How many stickers does Michelle have left?

194 ⬭ 208 ⬭ 216 ⬭ 226 ⬭

5. Estimate to find the answer to the problem in the box.

$$\begin{array}{r} 24 \\ -\ 14 \\ \hline \end{array}$$

about 20 ⬭ about 30 ⬭

about 40 ⬭ about 50 ⬭

6. Which of these can be used to check the answer to the problem in the box?

$20 - 11 = 9$

$9 + 11 = 20$ ⬭ $11 + 11 = 22$ ⬭

$20 + 9 = 29$ ⬭ $20 - 9 = 11$ ⬭

7. Antonio scored eighteen points in his first basketball game. He scored twenty-one points in his second game. About how many points did he score altogether?

about 20 ⬭ about 40 ⬭

about 50 ⬭ about 60 ⬭

8. What is the solution to this problem?

$146 - 61$

65 ⬭ 73 ⬭ 82 ⬭ 85 ⬭

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Name _____

Practice by Standard: Number Sense

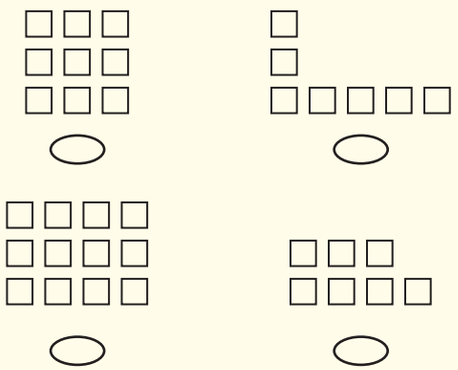
Standard Set 3.0: Students model and solve simple problems involving multiplication and division.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. Which drawing shows three times four?

20 − 11 = 9



QUICK Review

Strategy: Use repeated addition to model multiplication. How many rows of 4 are there for the product 3 × 4?

Multiplication is repeated addition.

1 × 4 = 4
2 × 4 = 4 + 4
3 × 4 = 4 + 4 + 4
4 × 4 = 4 + 4 + 4 + 4

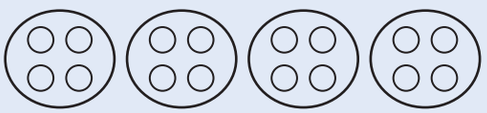
---

2. There are 16 students in a class. 4 students can sit at each table. How many tables are needed to fit all of the students?

3 ⬭ 4 ⬭ 5 ⬭ 6 ⬭

Strategy: Model a division problem.

We can make a model to solve. Divide 16 students into 4 equal groups.



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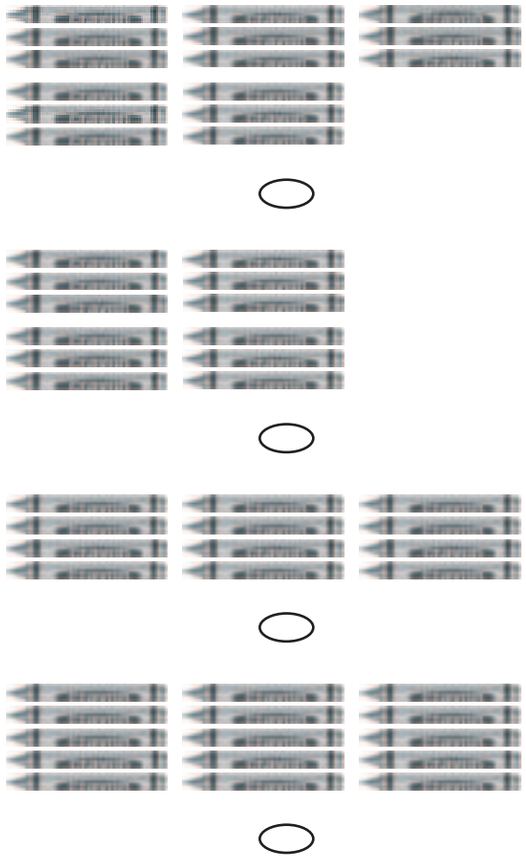
Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. Which picture shows how three students should share fifteen crayons equally?



4. Maria has this many balloons. She will give two balloons to each of 7 friends. How many balloons will Maria have left?

1 2 3 4

5. Adrian earns $5 for every 2 dogs that she walks. How much will she earn for walking 10 dogs?

Adrian's Dog Walking	
Dogs Walked	Earnings
2	$5
4	$10
6	$15
8	$25
10	

$22 $25 $30 $35

6. There are nine puppies at the park. Each puppy has four paws. How many paws are there altogether?

36 35 32 30

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Name _____

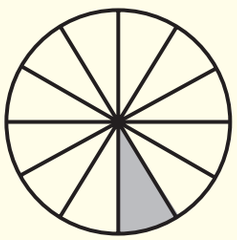
Practice by Standard: Number Sense

Standard Set 4.0: Students understand that fractions and decimals may refer to parts of a set and parts of a whole.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. What fractional part of this figure is shaded?



$\frac{1}{8}$ ○ $\frac{1}{9}$ ○ $\frac{1}{10}$ ○ $\frac{1}{12}$ ○

2. What fraction of the circles is shaded?

$\frac{1}{5}$ ○ $\frac{2}{5}$ ○ $\frac{3}{5}$ ○ $\frac{3}{8}$ ○

QUICK Review

Strategy: Count the number of shaded parts. Compare this to the number of total parts.

The circle is divided into equal parts. How many equal parts do you see? How many of the equal parts are shaded? Use this information to write the fraction.

$$\frac{\text{number of shaded parts}}{\text{total number of parts}}$$

Strategy: Count the number of shaded circles. Compare this to the total number of circles.

How many circles are there in all? How many of them are shaded?

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

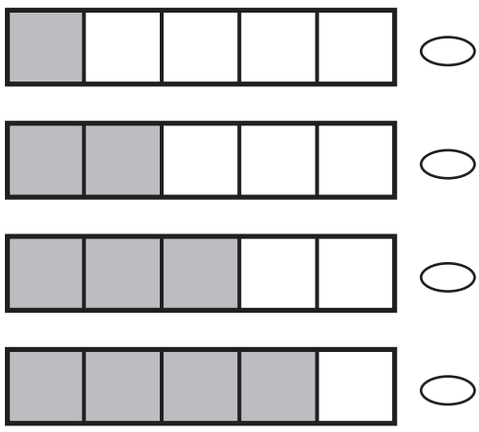
3. Which fraction is equal to one whole?

$\frac{1}{7}$ ⬭ $\frac{3}{4}$ ⬭ $\frac{7}{7}$ ⬭ $\frac{3}{8}$ ⬭

4. Which of the following fractions is the greatest?

$\frac{1}{5}$ ⬭ $\frac{1}{2}$ ⬭ $\frac{1}{12}$ ⬭ $\frac{1}{8}$ ⬭

5. Look at the fraction bars. Which fraction bar shows one-fifth shaded?



⬭

⬭

⬭

⬭

6. What fraction of the students on the playground are boys?

boy	boy	girl	girl	girl
boy	girl	girl	girl	girl

$\frac{1}{10}$ ⬭ $\frac{3}{10}$ ⬭ $\frac{6}{10}$ ⬭ $\frac{7}{10}$ ⬭

7. A teacher divides a whole class into groups on a field trip. Each group has one-eighth of all the children in the class. How many groups are there?

2 ⬭ 4 ⬭ 6 ⬭ 8 ⬭

8. Tommy's family has five pets. Two of the pets are cats. What fraction of the family pets are cats?

$\frac{4}{5}$ ⬭ $\frac{3}{5}$ ⬭ $\frac{2}{5}$ ⬭ $\frac{1}{5}$ ⬭

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Name _____

Practice by Standard: Number Sense

Standard Set 5.0: Students model and solve problems by representing, adding, and subtracting amounts of money.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. Tonya has two quarters, four dimes, and three nickels. How much money does she have?

$0.85 ⬭ $1.05 ⬭

$1.15 ⬭ $1.30 ⬭

2. What is another way to write thirty-five cents?

35¢

$35.00 ⬭ $3.50 ⬭

$3.05 ⬭ $0.35 ⬭

QUICK Review

Strategy: Add values of coins to find the total amount of money.

A quarter is worth $0.25 or 25¢. A dime is worth $0.10 or 10¢. A nickel is worth $0.05 or 5¢.

Think:
$0.25 + $0.25 +
$0.10 + $0.10 + $0.10 +
$0.10 +
$0.05 + $0.05 + $0.05

Strategy: Use the decimal point and dollar sign to show amounts of money.

Write the dollars in between the dollar sign and the decimal point.

Write the cents on the right side of the decimal point.

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. Evan has the money you see in the box. Which is a greater amount of money than Evan's?

4. Tonya has one quarter, two dimes, and five nickels. How much money does she have?

85¢ $1.10 70¢ 65¢

5. Molly has the money you see in the box.

If Molly buys a fruit smoothie for $2.63, how much money will she have left?

$0.97 $6.23

$1.96 $0.85

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Name _____

Practice by Standard: Number Sense

Standard Set 6.0: Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, hundreds, and thousands places.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. About how long is your math book?

1 inch ⬭ 10 inches ⬭

2 feet ⬭ 100 feet ⬭

QUICK Review

Strategy: Choose the best unit for the estimate. Then think how many of those units make up the object.

Is a foot the unit you would use to measure the length of your math book? You can get rid of answers that do not make sense.

---

2. About how much sleep do you get in one week?

240 hours ⬭ 70 hours ⬭

10 hours ⬭ 30 minutes ⬭

Strategy: Use what you know about time to make a reasonable estimate.

Estimate the amount of sleep you get in one night. Then think about the number of nights in one week. Use repeated addition to solve.

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. Sam makes $10 each day. He wants to know how much he will earn in 1 month. What is a reasonable estimate?

$700 ⬭ $200 ⬭
$300 ⬭ $400 ⬭

4. About how tall is a garbage can?

5 inches ⬭ 3 feet ⬭
1 yard ⬭ 14 meters ⬭

5. Nikki is writing a story. She writes 62 pages the first month. If she keeps up this pace, about how many pages will she write in 4 months?

240 pages ⬭ 200 pages ⬭
280 pages ⬭ 300 pages ⬭

6. About how high is a basketball hoop in the school gym?

1 yard ⬭ 30 inches ⬭
5 feet ⬭ 10 feet ⬭

7. It takes Kendra about one half hour to complete a math worksheet. Tonight, Kendra completes 3 math worksheets in a row. Estimate how many minutes Kendra was working.

30 minutes ⬭ 60 minutes ⬭
90 minutes ⬭ 2 hours ⬭

8. About how tall is the jungle gym on the playground? What is a reasonable estimate?

5 inches ⬭ 45 inches ⬭
8 feet ⬭ 80 feet ⬭

9. About how long is the power cord on a computer?

1 centimeter ⬭ 16 meters ⬭
2 feet ⬭ 11 feet ⬭

10. Skylar earns $960 the first week. She earns $1,120 the second week. About how much money will Skylar have after four weeks?

$500 ⬭ $2,000 ⬭
$3,000 ⬭ $4,000 ⬭

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Name _____

Practice by Standard: Algebra and Functions

Standard Set 1.0: Students model, represent, and interpret number relationships to create and solve problems involving addition and subtraction.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. What number goes in the box to make this number sentence true?

$21 + \square = 11 + 21$

8 ○ 9 ○ 10 ○ 11 ○

2. Carrie had eleven stuffed animals. She won some more at a carnival last summer. Now she has sixteen stuffed animals. Which number sentence could be used to show how many stuffed animals she won last summer?

$11 + 16 = \square$ ○

$11 + \square = 16$ ○

$\square - 16 = 11$ ○

$\square - 11 = 16$ ○

QUICK Review

Strategy: Choose the number that will give the same sum on both sides of the equals sign.

Remember that $2 + 5 = 5 + 2$. It does not matter what order you add whole numbers.

Strategy: Let $\square$ represent the number of stuffed animals Carrie won.

Carrie had eleven stuffed animals. She added $\square$ stuffed animals to this number. How can you write this sum?

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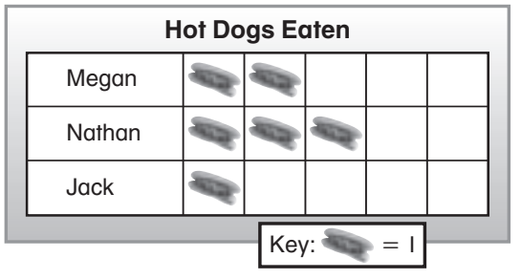
Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. Look at the graph. Which number sentence shows how many hot dogs Megan and Nathan ate altogether?



$2 + 1 = 3$ ⬭ $2 + 3 = 5$ ⬭

$3 + 3 = 6$ ⬭ $12 - 6 = 12$ ⬭

4. Paula skipped rope two hundred sixty-five times in a row. Michelle skipped rope one hundred ninety-three times in a row. Which number sentence can be used to find how many more times Paula skipped rope in a row than Michelle?

265
193

$265 + 193 =$ ⬭ $193 + 265 =$ ⬭

$265 - 193 =$ ⬭ $193 - 265 =$ ⬭

5. Look at the addition problem in the box. Which other problem has the same answer?

$2 + 3 + 5 = 10$

$3 + 5 + 10 = \square$ ⬭

$3 + 4 + 5 = \square$ ⬭

$5 + 10 + 2 = \square$ ⬭

$3 + 5 + 2 = \square$ ⬭

6. What number goes in the box to make this number sentence true?

$6 + 9 = \square + 6$

15 ⬭ 11 ⬭ 9 ⬭ 6 ⬭

7. Look at the number sentence in the box. Which of the following has the same value as eight plus seven?

$8 + 7 = 15$

$7 + 8 = \square$ ⬭ $15 - 7 = \square$ ⬭

$8 - 7 = \square$ ⬭ $7 + 15 = \square$ ⬭

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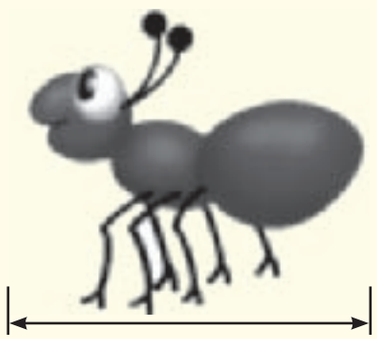
Name _____

Practice by Standard: Measurement and Geometry

Standard Set 1.0: Students understand that measurement is accomplished by identifying a unit of measure, iterating (repeating) that unit, and comparing it to the item to be measured.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check	QUICK Review
1. Jamie's volleyball practice began at four o'clock and lasted two hours. At what time did her practice end? 2:00 ⬭ 5:00 ⬭ 5:30 ⬭ 6:00 ⬭	**Strategy:** Add the length of time at practice to the starting time. This will give you end ending time. Start at 4:00. Add two hours. The answer is the time that practice ended.
2. Look at the picture of the ant. Measure the length in inches. How long is the ant?  1 inch ⬭ 2 inches ⬭ 3 inches ⬭ 4 inches ⬭	**Strategy:** Use an inch ruler to find the length of the ant. Place one end of the ruler at the end of one ant. Count the number of inches to the end of the other end.

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. This pencil is about nine marbles long. About how many paperclips long is the pencil?

5 ○ 4 ○ 3 ○ 2 ○

4. Christy did jumping jacks for one minute. How many seconds did she spend doing jumping jacks?

60 ○ 7 ○ 30 ○ 52 ○

5. Carmen will be going to a summer camp for 2 weeks. How many days will she spend at the summer camp?

52 ○ 30 ○ 14 ○ 60 ○

6. Look at the picture of the glass below. How many units tall is the glass?

⊢ = 1 unit

6 ○ 5 ○ 4 ○ 3 ○

7. Look at the picture of the eraser. Measure the length of the eraser in centimeters. What is this length?

4 centimeters ○

5 centimeters ○

6 centimeters ○

7 centimeters ○

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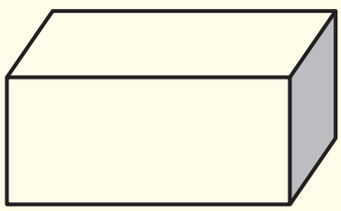
Practice by Standard: Measurement and Geometry

Standard Set 2.0: Students identify and describe the attributes of common figures in the plane and of common objects in space.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

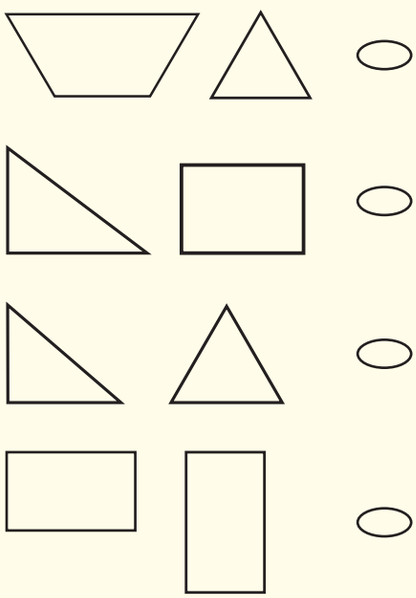
QUICK Check

1. How many edges does a rectangular prism have?



4 ⬭ 8 ⬭ 10 ⬭ 12 ⬭

2. Look at the pairs of shapes. Which is a pair of triangles?



QUICK Review

Reading Hint: An *edge* is a line segment where two faces meet.

Count the edges of the prism. Remember to count the ones that you cannot see.

Reading Hint: A *triangle* is a shape that has three sides.

Think about triangles.

We know that triangles have 3 sides.

Look for the answer choice where both shapes have 3 sides.

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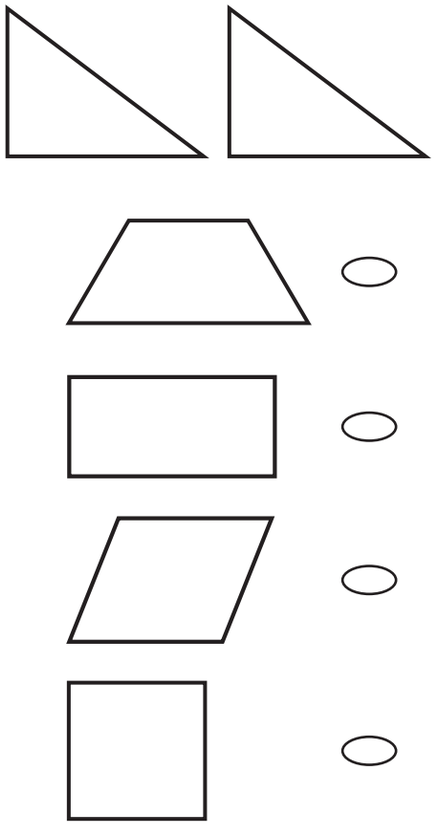
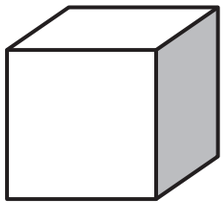
Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. Look at the two triangles. Which of the following shapes can be made from the two triangles?

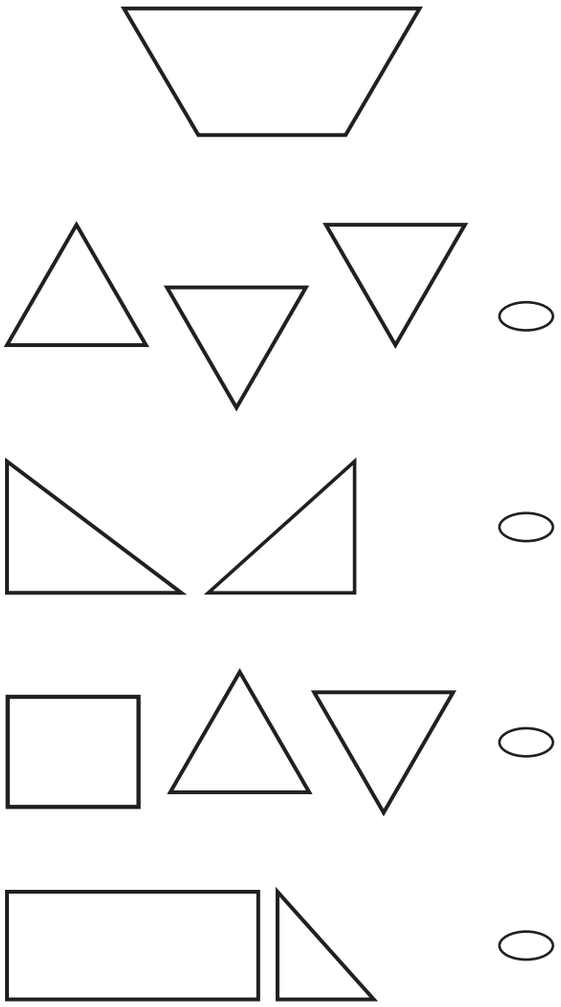


4. How many faces does a cube have?



4 6 8 10

5. Look at the figure below. Which set of figures could be used to form this figure?



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Practice by Standard: Statistics, Data Analysis and Probability

Standard Set 1.0: Students collect numerical data and record, organize, display, and interpret the data on bar graphs and other representations.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. Look at the student's heights. What is the range?

Student's Heights	
Student	Height
Evan	36
Maria	48
Conner	40
Stacey	40
Julio	45

10 ○ 11 ○ 12 ○ 13 ○

2. Use the table of heights in Exercise 1. What is the mode?

48 ○ 38 ○ 41 ○ 40 ○

QUICK Review

Strategy: Use a table to find the range of heights.

Who is the tallest student?

Who is the shortest?

Subtract to find the difference.

Strategy: Use a table to find the mode.

Which number do you see most often?

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. The students in Mr. Alvarez's gym class are voting on their favorite activity. Nine students vote for dodge ball. Seven students vote for kickball. Eleven students vote for soccer. Which tally chart shows these results?

Favorite Activity	
Dodge ball	9
Kickball	7
Soccer	11

Favorite Activity	
Dodge ball	9
Kickball	7
Soccer	10

Favorite Activity	
Dodge ball	8
Kickball	8
Soccer	11

Favorite Activity	
Dodge ball	9
Kickball	7
Soccer	11

4. Which activity is the most popular?

dodge ball

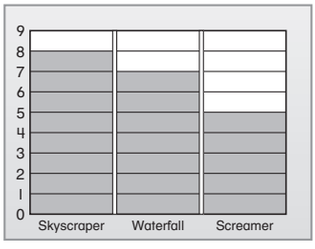
kickball

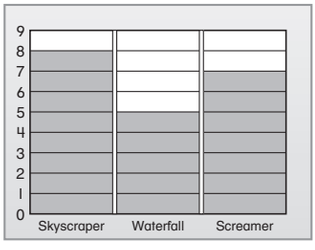
soccer

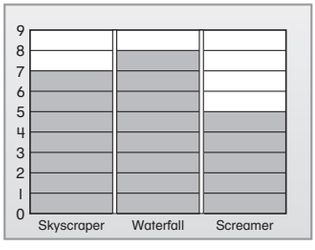
basketball

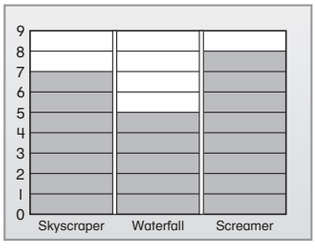
5. The tally chart shows the favorite ride of third graders at an amusement park. Which graph matches the tally marks in the chart?

Favorite Ride	
Skyscraper	8
Waterfall	5
Screamer	7









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Practice by Standard: Statistics, Data Analysis and Probability

Standard Set 2.0: Students demonstrate an understanding of patterns and how patterns grow and describe them in general ways.

Directions

Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check | QUICK Review

1. The table shows the number of tires needed for different numbers of bicycles. Which rule tells how to find the number of tires needed for eight bicycles?

Bicycle Tires Needed	
Number of Bicycles	Number of Tires
1	2
2	4
3	6
4	8
5	10

multiply 8 by 2 ⬭
divide 8 by 2 ⬭
add 2 and 8 ⬭
subtract 2 from 8 ⬭

Strategy: Look for a pattern in the table. Describe how the number of tires can be found.

Two tires are needed for each bicycle.
Multiply the number of bicycles by 2 to find the number of tires needed.

2. Look at the pattern below. What is the next number in the pattern?

1, 3, 5, 7, 9, 11, 13, ☐

14 ⬭ 15 ⬭ 16 ⬭ 17 ⬭

Strategy: Look for the pattern in the set of numbers.

The pattern is found by adding two each time.
You can find the next number by adding 2 to 13.

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. The table shows the number of children with each adult on a field trip. Suppose there are thirty-five children. How many adults are there?

Field Trip	
Adults	Children
1	5
2	10
3	15
4	20
5	25

6 ⬭ 9 ⬭ 8 ⬭ 7 ⬭

4. Look at the pattern below. What is the missing number in the pattern?

4, 8, ☐, 16, 20, 24

9 ⬭ 10 ⬭ 12 ⬭ 18 ⬭

5. Look at the pattern below. Which rule tells how to find more numbers in the pattern?

1, 4 7, 10, 13, 16

add 3 ⬭ subtract 2 ⬭

add 4 ⬭ multiply by 3 ⬭

6. Mary and Angie are playing a board game. Each time a player lands on a bonus space on the board, the player earns ten points. How many points would be earned if a player lands on nine bonus spaces during a game?

Bonus Squares	Points Earned
1	10
2	20
3	30
4	40
5	50

80 ⬭ 90 ⬭ 100 ⬭ 110 ⬭

7. Tommy has a collection of dimes. Each dime is worth ten cents. How many dimes does Tommy have if they are worth one hundred forty cents altogether?

Coin Collection	
Number of Dimes	Value of Coins
1	10¢
2	20¢
3	30¢
4	40¢
5	50¢

28 ⬭ 25 ⬭ 12 ⬭ 14 ⬭

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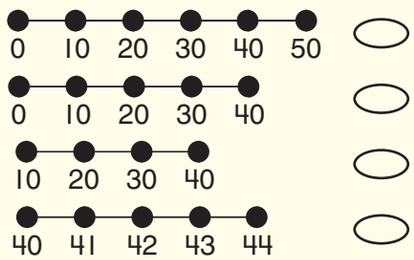
Practice by Standard: Mathematical Reasoning

Standard Set 1.0: Students make decisions about how to set up a problem.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. Coach Williams placed a forty-foot long rope on the field. He put one cone at the beginning and one at the end of the rope. Then he put another cone every ten feet in between along the rope. Which sketch below could be used to find how many cones are needed in all?



2. Mandy has 3 snack packs. Each snack pack contains 2 graham crackers. How could you find out how many graham crackers she has in all?

$3 - 2$ $3 + 2$ 3×2 $3 \div 2$

QUICK Review

Strategy: Use a sketch to help you solve the problem.

Which sketch shows a cone at the beginning, a cone at the end, and a cone every ten feet?

Strategy: Decide which number sentence will help you solve the problem.

How many graham crackers are in each group?

How many groups are there?

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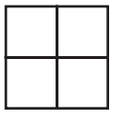
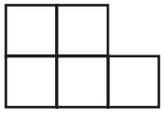
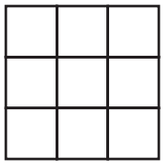
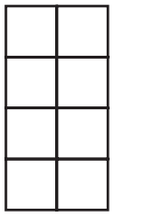
Practice On Your Own

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

3. Reggie is using square tiles to create squares of different sizes. The sketches below show the first two sizes. Which sketch will help you find the next size?

1 square tile


4 square tiles

4. Mandy has a collection of quarters in her piggy bank. She wants to make a pattern of numbers to show how many cents she has in quarters. Which pattern can she use to show the value of her quarters?

1, 2, 3, 4, 5 ⬭
5, 10, 15, 20, 25 ⬭
10, 20, 30, 40, 50 ⬭
25, 50, 75, 100, 125 ⬭

5. Ronnie has three stickers for every two stickers that Carrie has. Ronnie has fifteen stickers in all. You want to know how many stickers Carrie has. Which chart will help you solve the problem?

Ronnie	𝍸 𝍸 𝍸 𝍸 𝍸
Carrie	| | | | |

⬭

Ronnie	𝍸 𝍸 𝍸
Carrie	|| || ||

⬭

Ronnie	𝍸 𝍸 𝍸 𝍸 𝍸
Carrie	|| || || || ||

⬭

Ronnie	|| || || || ||
Carrie	𝍸 𝍸 𝍸 𝍸 𝍸

⬭

6. Lauren is three years older than her younger brother Martin. Martin is five years old. How can you find Lauren's age?

subtract 3 from 5 ⬭
add 3 to 5 ⬭
multiply 3 and 5 ⬭
divide 5 by 3 ⬭

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Practice by Standard: Mathematical Reasoning

Standard Set 2.0: Students solve problems and justify their reasoning.

Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. Eduardo's garden has tulips and roses. There are 4 tulips and twice as many roses. Which number sentence could you use to find out how many roses are in Eduardo's garden?

- 4 tulips + 2 = 6 roses ⬭
- 4 tulips + 4 tulips = 8 tulips ⬭
- 4 tulips × 2 = 8 roses ⬭
- 8 roses × 2 = 16 tulips ⬭

2. Justine has one dollar bill, one quarter, and two nickels. She says she has $1.35. Which number sentence could be used to check Justine's statement?

- $1 + $0.25 + $0.25 + $0.05 ⬭
- $1 + $0.25 + $0.05 + $0.05 ⬭
- $1.35 − $1.00 − $0.25 − $0.05 ⬭
- $1 + $0.25 + $0.50 + $0.50 ⬭

QUICK Review

Strategy: Justify your answer by explaining your work.

To show *twice as many*, we can multiply by 2.

Which equation equals *twice as many* as the number of tulips?

Strategy: Check a statement by finding the total amount of money.

Think about the value of Justine's money.
A dollar is worth $1.00.
A quarter is worth $0.25.
A nickel is worth $0.05.

Find the sum to check Justine's statement.

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Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. The second graders collected forty-five canned goods during the first day of a food drive. They collected sixty-one canned goods on the second day. How many cans are there in all?

There are 16 cans because 61 − 45 = 16. ⬭

There are 106 cans because 61 × 45 = 106. ⬭

There are 96 cans because 61 + 45 = 96. ⬭

There are 106 cans because 61 + 45 = 106. ⬭

4. Mickey scored two times as many points as Colleen in a basketball game. Mickey scored six points in all. How many points did Colleen score?

Colleen scored 12 points because 6 times 2 equals 12. ⬭

Colleen scored 2 points because 6 divided by 3 equals 2. ⬭

Colleen scored 4 points because 6 minus 2 equals 4. ⬭

Colleen scored 3 points because 6 divided by 2 equals 3. ⬭

5. Look at the pattern below. What is the missing number in the pattern?

5, 10, 15, ☐ 25, 30

16, I skip counted by 1s. ⬭

16, I skip counted by 5s. ⬭

20, I skip counted by 3s. ⬭

20, I skip counted by 5s. ⬭

6. Look at the pattern below. How would you find the next number in the pattern?

18, 16, 14, 12, 10, 8

I would subtract 2 to get 6. ⬭

I would add 2 to get 10. ⬭

I would divide by 2 to get 4. ⬭

I would multiply by 2 to get 16. ⬭

7. Three students are standing in line. Roberto is in front of Amy. Lindsay is behind Amy. Your classmate says Lindsay is last in line. Which sketch could be used to check this answer?

Roberto Lindsay Amy → ⬭

Lindsay Amy Roberto → ⬭

Roberto Amy Lindsay → ⬭

Amy Roberto Lindsay → ⬭

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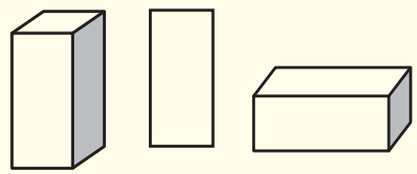
Practice by Standard: Mathematical Reasoning

Standard Set 3.0: Students note connections between one problem and another.

Directions
Listen as your teacher reads each problem.
Choose the correct answer.

QUICK Check

1. One of these shapes does not belong. Choose the answer that tells which shape does not belong and why.



- ⬭ because it has 6 faces.
- ⬭ because it has 12 edges.
- ⬭ because it is plane shape.
- ⬭ because it has 8 vertices.

2. Look at the numbers patterns. What do these patterns have in common?

Pattern 1: $5, $10, $15, $20, $25…

QUICK Review

Strategy: Note differences and similarities between plane shapes and solid shapes.

List the traits of each shape to determine which shape is different.

rectangular prism solid shape 6 faces 8 vertices 12 edges	rectangle plane shape 4 sides 4 vertices	rectangular prism solid shape 6 faces 8 vertices 12 edges

Strategy: Find a connection between two patterns. Test each answer choice to determine which statements are true and which statements are false.

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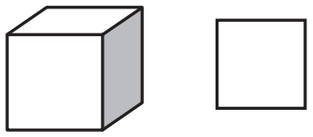
Practice On Your Own

Listen as your teacher reads each problem. Choose the correct answer.

3. How are these shapes related?



Both shapes have 4 vertices. ⬭

Both shapes are 2-dimensional. ⬭

A cube is made up of squares. ⬭

A square is made up of cubes. ⬭

4. What is the connection between these two number patterns?

Pattern 1: 32, 28, 24, 20…
Pattern 2: 10, 8, 6, 4…

Both patterns are counting by 2s. ⬭

Both patterns are getting bigger. ⬭

Both patterns are getting smaller. ⬭

Both patterns are counting by 4s. ⬭

5. What do these number sentences have in common?

$3 + 4 = 7$ $7 - 4 = 3$

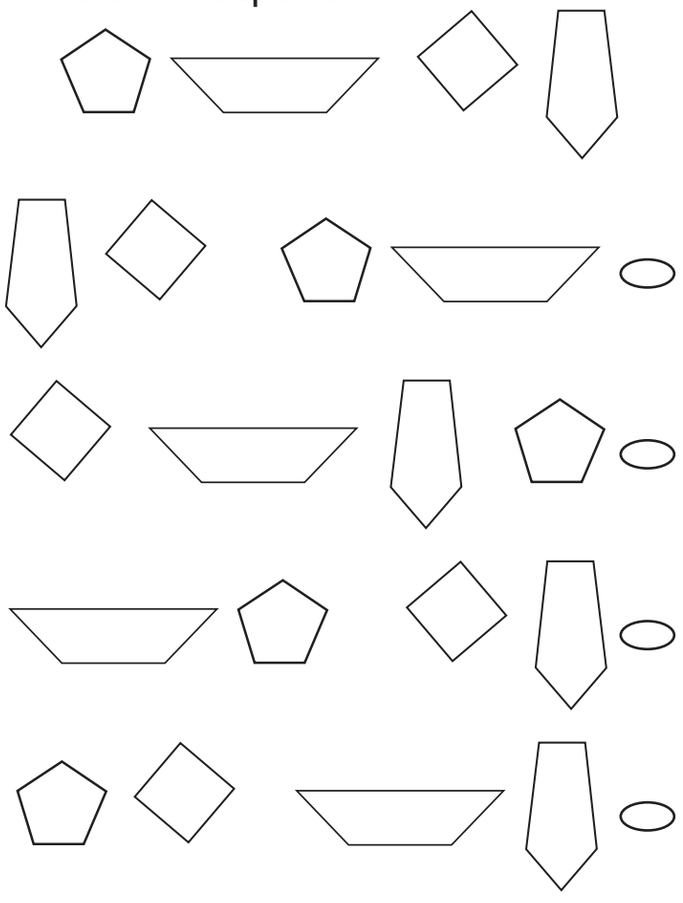
They both equal zero. ⬭

They both find the sum. ⬭

They represent fractions. ⬭

They are part of the same fact family. ⬭

6. What is the best way to group these shapes?



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WorkMat 1

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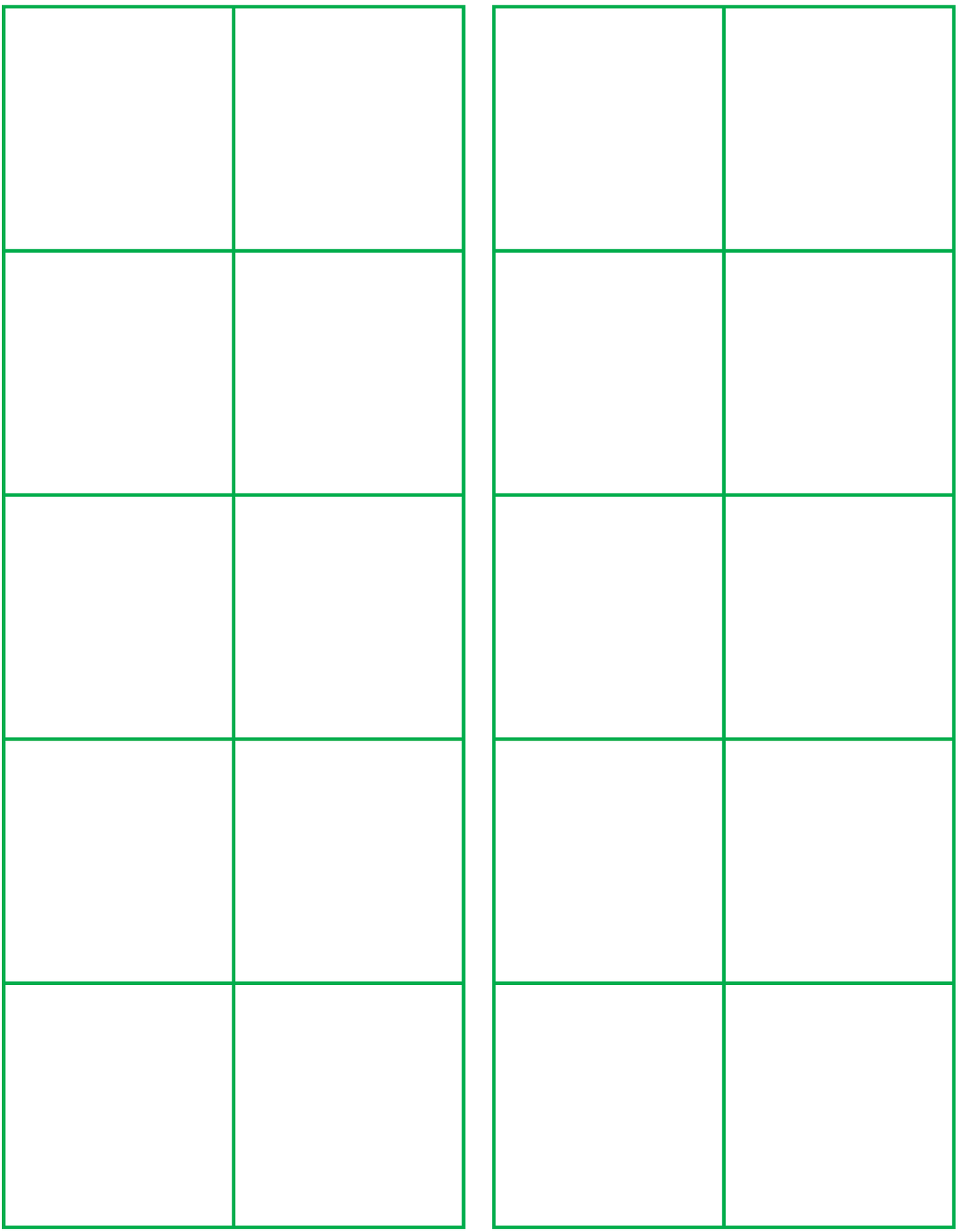
WorkMat 2



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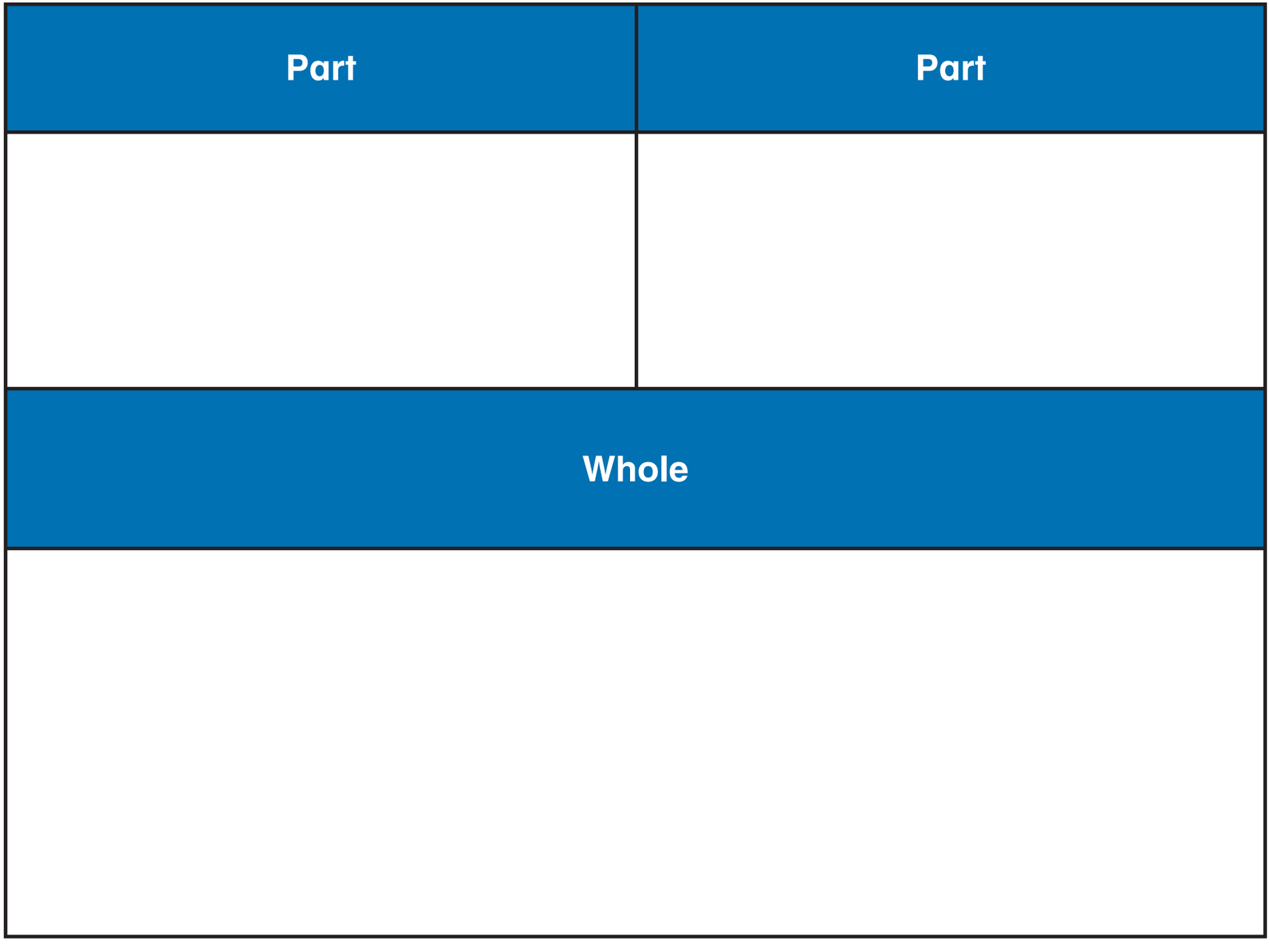

WorkMat 3

WorkMat

WorkMat 4

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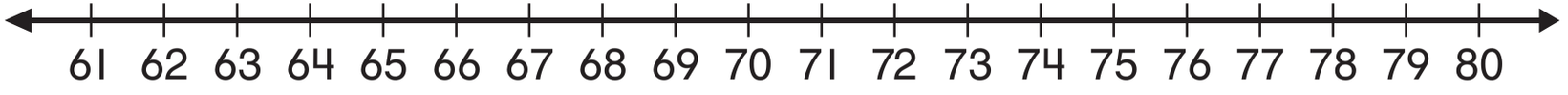

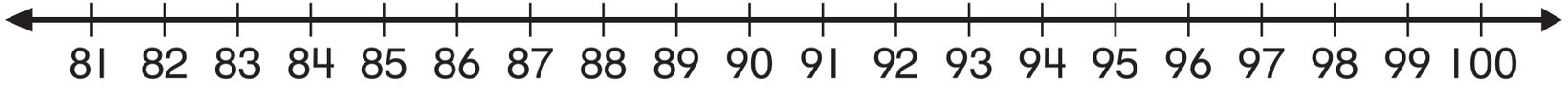

WorkMat 5

WorkMat

WorkMat 6

Tens	Ones

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WorkMat 7

Hundreds	Tens	Ones

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WorkMat 8

Thousands	Hundreds	Tens	Ones

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English	A	Español
add (addition) Join together sets to find the total or sum. The opposite of *subtract*. (page xx) 2 + 5 = 7 		**español** tk
addend Any numbers or quantities being added together. (page xx) In 2 + 3 = 5, 2 is an addend and 3 is an addend.		**español** tk
addition sentence A math sentence that has an addition sign in it. (page xx) 5 + 4 = 9		**español** tk
after Follow in place or time. (page xx) 5, 6, 7, 8 6 is just *after* 5		**español** tk
analog clock A clock that has an **hour hand** and a **minute hand.** (page xx) 		**español** tk

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Glossary/Glosario

A
B
C

English	Español
A	
array Objects displayed in rows and columns. (page xx) rows columns 	**español** tk
B	
bar graph A graph that uses bars to show data. (page xx) 	**español** tk
before (page xx) 5, 6, 7, 8 6 is just *before* 7	**español** tk
between (page xx) 47, 48, 49, 50 49 is *between* 47 and 50	**español** tk
C	
cent ¢ (page xx) 1¢ 1 cent 	**español** tk

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Glossary/Glosario

English	Español
centimeter (cm) A metric unit for measuring length. (page xx)	**español** tk
circle A closed, round plane shape. (page xx)	**español** tk
compare Look at objects, shapes, or numbers and see how they are alike or different. (page xx)	**español** tk
cone A solid shape that narrows to a point from a circular base. (page xx)	**español** tk
count back On a number line, start at the greater number (5) and count back (3). (page xx) $5 - 3 = 2$	**español** tk

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Glossary/Glosario

English	Español
C	
count on (or count up) Start at a number on a number line and count up to the next number. (page xx) 4 + 2 = 6 	**español** tk
cube A solid shape with 6 square faces. (page xx) 	**español** tk
cylinder A solid shape that looks like a can. (page xx) 	**español** tk
D	
data Numbers or symbols, sometimes collected from a survey or experiment, that show information. *Data* is plural. (page xx) 	**español** tk

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English	Español
decimal point A period used in a decimal number. (page xx) $2.95	**español** tk
difference The answer to a subtraction problem. (page xx) 3 − 1 = 2 The difference is 2.	**español** tk.
digit A symbol used to write numbers. The ten digits are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. (page xx)	**español** tk.
digital clock A clock that uses only numbers to show time. (page xx)	**español** tk.
dime dime = 10¢ or 10 cents (page xx) heads tails	**español** tk
divide (division) Separate into equal groups. (page xx) 10 ÷ 2 = 5	**español** tk
division sentence A number sentence that has a division sign in it. (page xx) 12 ÷ 3 = 4	**español** tk

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Glossary/Glosario

English	Español
D	
dollar ($) one dollar = 100¢ or 100 cents or $1.00 (page xx) front back 	**español** tk
doubles Two addends that are the same number. (page xx) 7 + 7 = 14 ←doubles 7 + 8 = 15 ←near doubles 	**español** tk
E	
edge The line where two sides (faces) meet. (page xx) edge 	**español** tk
equal groups Each group has the same number of objects. (page xx) There are four equal groups of counters. 	**español** tk

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Glossary/Glosario

English	Español
E	
equal parts Each part is the same size. (page xx) This pie is cut into 4 equal parts. 	**español** tk
estimate Find a number close to an exact amount. (page xx) 47 + 22 rounds to 50 + 20 The estimate is 70.	**español** tk
expanded form The representation of a number as a sum that shows the value of each digit. Sometimes called *expanded notation*. (page xx) 536 is written as 500 + 30 + 6.	**español** tk
F	
face The flat part of a solid shape. (page xx) A square is a face of a cube. 	**español** tk
fact family Number sentences that use the same numbers. (page xx) 6 + 7 = 13 13 − 7 = 6 7 + 6 = 13 13 − 6 = 7	**español** tk.

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Glossary/Glosario

English	Español
F	
factor A number that is multiplied by another number. (page xx) $3 \times 6 = 18$ factors	**español** tk
foot (ft) A customary unit for measuring. The plural is *feet*. (page xx) 1 foot = 12 inches 	**español** tk
fraction A number that represents part of a whole or part of a set. (page xx) $\left(\frac{1}{2}\right), \left(\frac{1}{3}\right), \left(\frac{1}{4}\right), \left(\frac{3}{4}\right)$ 	**español** tk
G	
group A set of objects (page xx) group of 4 	**español** tk

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English	Español
half dollar half dollar = 50¢ or 50 cents (page xx) heads tails	**español** tk
half hour One half of an hour is 30 minutes. Sometimes called *half past* or *half past* the hour. (page xx)	**español** tk
hexagon A plane shape that has six sides. (page xx)	**español** tk
hour A unit of time. (page xx) 1 hour = 60 minutes	**español** tk

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Glossary/Glosario

English	Español
H	
hour hand The shorter hand on a clock that tells the hour. (page xx) **hour hand**	**español** tk
hundreds The numbers 100–999. (page xx) In the number 234, the 2 is in the hundreds place.	**español** tk
I	
inch (in.) A customary unit for measuring length. The plural is *inches.* (page xx) 12 inches = 1 foot	**español** tk
inverse operation Operations that undo each other. (page xx) Addition and subtraction are inverse or opposite operations.	**español** tk
is greater than > (page xx) 7 > 2 7 is greater than 2	**español** tk

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Glossary/Glosario

English	Español
I	
is less than < (page xx) 4 < 7 4 is less than 7	**español** tk
is the same as = (page xx) 6 = 6 6 *is the same as* or *is equal to* 6.	**español** tk
K	
key Tells what (or how many) each symbol stands for. (page xx) 	**español** tk
L	
length How long or how far away something is. (page xx) length 	**español** tk

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Glossary/Glosario

M

English	Español
less likely (or least likely) An event that will probably *not* happen. (page xx) Picking the blue cube is *less likely* than picking a red one. 	**español** tk
meter (m) A metric unit for measuring length. A meter is about the length of a baseball bat or the width of a door. (page xx) 1 meter = 100 centimeters 	**español** tk
minute (min) A unit used to measure time. (page xx) 1 minute = 60 seconds minute 	**español** tk

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English	Español
minute hand The longer hand on a clock that tells the minutes. (page xx) minute hand 	**español** tk
missing addend (page xx) $9 + ____ = 16$ The missing addend is 7.	**español** tk
mode The number(s) that occurs most often in a set of numbers. A set can have more than one mode. (page xx) 7, 4, 7, 10, 7, and 2 The *mode* is 7.	**español** tk
multiples A multiple of a number is the product of that number and any whole number. (page xx) 15 is a multiple of 5 because $3 \times 5 = 15$.	**español** tk
multiplication sentence A number sentence that has a multiplication sign in it. (page xx) $5 \times 4 = 20$	**español** tk

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Glossary/Glosario

English	Español
M	
multiply (multiplication) Find the product. The operation of repeated addition of the same number. (page xx) $4 \times 2 = 8$ Four groups of two are equal to eight or $2 + 2 + 2 + 2 = 8$.	**español** tk
N	
nickel nickel = 5¢ or 5 cents (page xx) heads tails	**español** tk
number line A line with number labels. (page xx)	**español** tk
number sentence An expression using numbers and the = sign, or the < or > sign. (page xx) $5 + 4 = 9$ or $8 > 5$	**español** tk

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English		Español
ones A place value of a number. (page xx) This number has 3 ones. 23	O	**español** tk
parallelogram A plane shape that has four sides. Each pair of opposite sides is equal and parallel. (page xx) 	P	**español** tk
pattern An order that a set of objects or numbers follows over and over. (page xx) A, A, B, A, A, B, A, A, B pattern unit 		**español** tk
penny penny = 1¢ or 1 cent (page xx) heads tails 		**español** tk

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Glossary/Glosario

P

English	Español
pictograph A graph that uses the same picture or symbol to show the data. (page xx)	**español** tk
picture graph A graph that has different pictures to show information collected. (page xx)	**español** tk
place value The value given to a digit by its place in a number. (page xx) 365 3 is in the hundreds place 6 is in the tens place 5 is in the ones place	**español** tk
plane shape A figure such as a triangle or square that is flat or 2-dimensional. (page xx)	**español** tk
product The answer to a multiplication problem. (page xx) $3 \times 4 = 12$ product	**español** tk

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English	Español
P	
pyramid A solid shape with a polygon as a base and triangular shaped faces. (page xx)	**español** tk
Q	
quadrilateral A plane shape that has 4 sides and 4 angles. (page xx) square, rectangle, and parallelogram	**español** tk
quarter quarter = 25¢ or 25 cents (page xx) heads tails	**español** tk
quarter hour One-fourth of an hour or 15 minutes. (page xx)	**español** tk

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Glossary/Glosario

English	Español
Q	
quarter till (or quarter past) 15 minutes before or 15 minutes after the hour has begun. (page xx) quarter till 11 quarter past 10	**español** tk
range The difference between the greatest and least number in a set of data. (page xx) 4, 7, 10, and 2 (10 is the greatest and 2 the least) The *range* is 8.	**español** tk
R	
rectangle A plane shape with four sides and four corners. (page xx)	**español** tk
rectangular prism A solid shape with faces that are rectangles. (page xx)	**español** tk

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English	Español
regroup Take apart a number to write it in a new way. (page xx) 1 ten + 2 ones becomes 12 ones 	**español** tk
related fact(s) Basic facts using the same numbers. Sometimes called a *fact family*. (page xx) 4 + 1 = 5 5 − 4 = 1 1 + 4 = 5 5 − 1 = 4	**español** tk
remainder The number that is left after one whole number is divided by another. (page xx) 	**español** tk
round Change the value of a number to one that is easier to work with. (page xx) 24 rounded to the nearest ten is 20.	**español** tk

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Glossary/Glosario

English	Español
side One of the line segments that make up a shape. (page xx) A pentagon has five sides. 	**español** tk
skip count Count objects in equal groups of two or more. (page xx) 5, 10, 15, 20 	**español** tk
solid shape A figure having the three dimensions: length, width, and height. (page xx) 	**español** tk
sphere A solid shape that looks like a round ball. (page xx) 	**español** tk

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English	Español
square A rectangle that has four equal sides. (page xx) square 	**español** tk
subtract (subtraction) Take away, take apart, separate, or find the difference between two sets. The opposite of *add*. (page xx) 4 − 1 = 3 	**español** tk
subtraction sentence A number sentence that has a subtraction sign in it. (page xx) 9 − 4 = 5	**español** tk
sum The answer to an addition problem. (page xx) 2 + 4 = 6 ↑ sum	**español** tk

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Glossary/Glosario

S
T

S

English	Español
survey Collect data by asking people the same questions. (page xx) This survey shows favorite sports. 	**español** tk
symbol A letter or figure that stands for something. (page xx) This symbol means to add. +	**español** tk

T

English	Español
tally mark A mark used to record data collected in a survey. (page xx) 	**español** tk
tens A place value of a number. (page xx) **23** The 2 is in the tens place. 	**español** tk

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English	Español
thousand(s) A place value of a number. (page xx) 1,253 The 1 is in the thousands place.	**español** tk
3-dimensional figure See *solid shape*.	**español** tk
trapezoid A four-sided plane shape with only two opposite sides that are the same length. (page xx)	**español** tk
triangle A plane shape with three sides and three angles. (page xx)	**español** tk
2-dimensional figure See *plane shape*.	**español** tk

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Glossary/Glosario

English		Español
unit fraction Any fraction with a numerator of 1. (page xx) $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$	U	**español** tk
value How much something is worth. (page xx)	V	**español** tk
vertex A point on a solid shape where two or more sides (edges) meet. (page xx)		**español** tk
whole The entire amount or object. (page xx)	W	**español** tk
yard A customary unit for measuring length. (page xx) 1 yard = 3 feet	Y	**español** tk

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Name _____

Count on 1, 2, and 3 (Use with Chapter 2)

1.	1 + 0	2 + 9	4 + 3	6 + 3	2 + 6	6 + 1
2.	9 + 2	2 + 5	4 + 2	3 + 5	3 + 8	1 + 3
3.	2 + 2	3 + 0	7 + 1	1 + 7	4 + 1	1 + 5

Name _____

Count Back (Use with Chapter 3)

1.	2 − 1	6 − 2	4 − 2	7 − 3	5 − 1	8 − 2
2.	7 − 2	6 − 1	4 − 1	8 − 1	9 − 1	1 − 1
3.	9 − 3	3 − 3	9 − 2	2 − 2	5 − 3	6 − 3

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Name _____

Count on 1, 2, and 3 (Use with Chapter 2)

4.	6 + 2	5 + 1	2 + 7	2 + 4	7 + 3	9 + 3
5.	9 + 1	3 + 4	1 + 6	1 + 4	1 + 8	5 + 3
6.	8 + 2	1 + 9	7 + 2	3 + 7	3 + 6	8 + 1

Name _____

Count Back (Use with Chapter 3)

4.	3 − 1	7 − 3	3 − 3	4 − 3	8 − 1	9 − 3
5.	3 − 2	5 − 2	8 − 3	5 − 1	7 − 2	9 − 1
6.	6 − 2	7 − 1	6 − 1	8 − 3	9 − 2	5 − 3

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Name _____

Doubles and Near Doubles (Use with Chapter 4)

1.	5 + 6	5 + 4	4 + 4	9 + 9	6 + 7	7 + 8
2.	8 + 8	8 + 9	8 + 7	6 + 5	5 + 5	7 + 7
3.	4 + 3	1 + 2	4 + 5	2 + 2	7 + 6	9 + 8

Name _____

Doubles (Use with Chapter 5)

1.	18 − 9	2 − 1	10 − 5	6 − 3	8 − 4	12 − 6
2.	14 − 7	4 − 2	12 − 6	10 − 5	14 − 7	18 − 9
3.	8 − 4	16 − 8	6 − 3	4 − 2	6 − 3	16 − 8

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Name _____

Doubles and Near Doubles (Use with Chapter 4)

4.	2 + 3	8 + 7	7 + 7	4 + 4	4 + 5	4 + 3
5.	1 + 1	5 + 4	0 + 1	0 + 0	6 + 5	1 + 0
6.	6 + 6	2 + 1	5 + 5	3 + 2	3 + 3	2 + 2

Name _____

Doubles (Use with Chapter 5)

4.	12 − 6	14 − 7	18 − 9	8 − 4	2 − 1	16 − 8
5.	4 − 2	10 − 5	12 − 6	10 − 5	18 − 9	14 − 7
6.	16 − 8	6 − 3	4 − 2	6 − 3	8 − 4	2 − 1

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Name _____

Make a Ten (Use with Chapter 6)

1.	2 + 8	6 + 6	9 + 6	3 + 9	4 + 6	5 + 8
2.	6 + 8	7 + 7	7 + 9	9 + 5	5 + 7	9 + 9
3.	8 + 8	6 + 5	7 + 4	8 + 6	9 + 7	7 + 6

Name _____

Facts to 10 (Use with Chapter 7)

1.	9 + 1	4 + 4	4 + 6	6 + 4	5 + 1	2 + 1
2.	4 + 5	8 + 2	5 + 5	2 + 3	2 + 6	6 + 2
3.	1 + 6	5 + 3	2 + 7	3 + 7	8 + 0	7 + 3

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Name _____

Make a Ten (Use with Chapter 6)

4.	7 + 3	2 + 9	4 + 8	4 + 9	9 + 8	4 + 7
5.	6 + 4	5 + 5	6 + 7	3 + 7	9 + 3	7 + 5
6.	3 + 8	7 + 8	5 + 6	1 + 9	6 + 9	5 + 9

Name _____

Facts to 10 (Use with Chapter 7)

4.	4 + 6	1 + 7	2 + 8	1 + 9	7 + 1	0 + 8
5.	2 + 5	4 + 2	9 + 1	6 + 0	4 + 3	3 + 6
6.	3 + 4	1 + 8	3 + 5	7 + 2	3 + 7	4 + 1

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Name _____

Subtract from 10 (Use with Chapter 7)

1.	10 − 8	9 − 6	10 − 7	9 − 8	10 − 5	8 − 7
2.	10 − 4	8 − 6	10 − 1	9 − 7	10 − 9	8 − 5
3.	10 − 2	9 − 4	10 − 7	10 − 3	10 − 4	10 − 6

Name _____

Facts to 14 (Use with Chapter 8)

1.	9 + 1	5 + 9	7 + 5	7 + 4	5 + 5	7 + 7
2.	8 + 6	2 + 7	5 + 3	3 + 5	7 + 3	4 + 8
3.	5 + 7	6 + 6	6 + 8	3 + 9	1 + 2	6 + 1

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Name _____

Subtract from 10 (Use with Chapter 7)

4.	10 − 7	8 − 4	10 − 9	10 − 5	10 − 7	10 − 3
5.	10 − 8	10 − 6	10 − 4	9 − 2	9 − 8	10 − 8
6.	9 − 3	10 − 3	9 − 6	10 − 2	10 − 1	10 − 6

Name _____

Facts to 14 (Use with Chapter 8)

4.	9 + 5	4 + 9	4 + 6	5 + 8	4 + 4	4 + 7
5.	7 + 6	5 + 6	3 + 6	2 + 8	9 + 4	2 + 9
6.	8 + 4	9 + 3	8 + 3	3 + 7	6 + 7	8 + 2

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Name _____

Subtract from 14 (Use with Chapter 8)

1.	14 − 5	13 − 6	14 − 7	14 − 9	14 − 8	11 − 2
2.	12 − 8	12 − 7	12 − 5	13 − 9	14 − 7	13 − 8
3.	14 − 8	11 − 5	14 − 6	14 − 6	13 − 8	12 − 9

Name _____

Facts to 18 (Use with Chapter 9)

1.	9 + 9	9 + 2	8 + 4	5 + 6	7 + 9	6 + 4
2.	7 + 8	7 + 6	6 + 9	6 + 9	4 + 9	9 + 8
3.	9 + 5	9 + 3	6 + 8	2 + 6	8 + 8	7 + 2

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Name _____

Subtract from 14 (Use with Chapter 8)

4.	14 − 6	11 − 3	14 − 7	14 − 5	11 − 9	14 − 8
5.	14 − 9	13 − 4	14 − 5	11 − 7	14 − 8	13 − 7
6.	14 − 7	14 − 6	12 − 8	13 − 5	14 − 9	12 − 4

Name _____

Facts to 18 (Use with Chapter 9)

4.	5 + 8	7 + 4	5 + 9	8 + 9	6 + 5	7 + 3
5.	9 + 4	5 + 7	5 + 4	7 + 7	6 + 7	6 + 6
6.	8 + 7	8 + 2	7 + 5	9 + 6	8 + 6	9 + 7

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Name _____

Subtract from 18 (Use with Chapter 9)

1.	15 − 8	12 − 9	13 − 6	18 − 9	13 − 4	12 − 7
2.	12 − 4	12 − 5	18 − 9	17 − 9	15 − 9	12 − 6
3.	12 − 8	16 − 7	17 − 8	13 − 5	16 − 9	16 − 8

Name _____

Multiply by 2 (Use with Chapter 10)

1.	2 × 0	2 × 4	9 × 2	5 × 2	2 × 9	7 × 2
2.	2 × 7	6 × 2	2 × 2	2 × 6	1 × 2	2 × 8
3.	2 × 3	3 × 2	4 × 2	8 × 2	2 × 1	2 × 5

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Name _____

Subtract from 18 (Use with Chapter 9)

4.	18 − 9	13 − 8	15 − 9	16 − 7	17 − 9	14 − 8
5.	15 − 6	14 − 7	13 − 7	14 − 9	14 − 5	16 − 8
6.	17 − 8	15 − 8	14 − 6	16 − 9	13 − 9	18 − 9

Name _____

Multiply by 2 (Use with Chapter 10)

4.	2 × 6	9 × 2	2 × 3
5.	8 × 2	2 × 1	6 × 2
6.	2 × 2	2 × 5	2 × 4

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Name _____

Related Facts to 12 (Use with Chapter 11)

1.	8 + 5	13 − 5	12 − 5	7 + 5	6 + 5	11 − 6
2.	11 − 4	4 + 7	8 + 6	14 − 6	15 − 6	9 + 6
3.	11 − 8	8 + 3	13 − 6	7 + 6	12 − 4	4 + 8

Name _____

Multiply by 5 (Use with Chapter 12)

1.	5 × 1	5 × 4	3 × 5	2 × 5	7 × 5	4 × 5
2.	5 × 6	6 × 5	5 × 7	5 × 3	1 × 5	8 × 5
3.	5 × 9	5 × 2	4 × 5	5 × 0	5 × 8	5 × 5

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Name _____

Related Facts to 12 (Use with Chapter 11)

4.	12 − 6	6 + 6	10 − 3	7 + 3	15 − 7	7 + 8
5.	9 + 8	17 − 9	13 − 5	8 + 5	12 − 5	7 + 5
6.	9 + 7	16 − 7	12 − 4	8 + 4	9 + 6	15 − 6

Name _____

Multiply by 5 (Use with Chapter 12)

4.	5 × 9	2 × 5	3 × 5
5.	4 × 5	5 × 7	5 × 5
6.	5 × 8	1 × 5	5 × 4

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Name _____

Related Facts to 18 (Use with Chapter 13)

1.	18 − 9	9 + 9	17 − 9	9 + 8	16 − 8	8 + 8
2.	14 − 8	8 + 6	7 + 8	15 − 7	8 + 6	14 − 8
3.	9 + 6	15 − 9	17 − 6	9 + 6	15 − 8	7 + 8

Name _____

Multiply by 10 (Use with Chapter 14)

1.	10 × 9	4 ×10	10 × 7	5 ×10	1 ×10	2 ×10
2.	10 × 6	10 × 2	9 ×10	10 × 0	10 × 5	3 ×10
3.	10 × 4	10 × 3	6 ×10	10 × 1	10 × 8	7 ×10

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Name _____

Related Facts to 18 (Use with Chapter 13)

4.	13	6		14	6		13	5
	− 6	+ 7		− 8	+ 8		− 5	+ 8
5.	14	7		11	4		15	8
	− 7	+ 7		− 7	+ 7		− 8	+ 7
6.	11	5		9	18		16	8
	− 6	+ 6		+ 9	− 9		− 8	+ 8

Name _____

Multiply by 10 (Use with Chapter 14)

4.	10	3	10
	× 9	×10	× 7
5.	10	10	10
	× 0	× 8	× 1
6.	6	10	10
	×10	× 2	× 5

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English	A	Español
add (addition) Join together sets to find the total or sum. The opposite of *subtract*. (page xx) 2 + 5 = 7 		**español** tk
addend Any numbers or quantities being added together. (page xx) In 2 + 3 = 5, 2 is an addend and 3 is an addend.		**español** tk
addition sentence A math sentence that has an addition sign in it. (page xx) 5 + 4 = 9		**español** tk
after Follow in place or time. (page xx) 5, 6, 7, 8 6 is just *after* 5		**español** tk
analog clock A clock that has an **hour hand** and a **minute hand.** (page xx) 		**español** tk

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Glossary/Glosario

A
B
C

English	Español
A	
array Objects displayed in rows and columns. (page xx) rows columns 	**español** tk
B	
bar graph A graph that uses bars to show data. (page xx) 	**español** tk
before (page xx) 5, 6, 7, 8 6 is just *before* 7	**español** tk
between (page xx) 47, 48, 49, 50 49 is *between* 47 and 50	**español** tk
C	
cent ¢ (page xx) 1¢ 1 cent 	**español** tk

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Glossary/Glosario

English	Español
centimeter (cm) A metric unit for measuring length. (page xx)	**español** tk
circle A closed, round plane shape. (page xx)	**español** tk
compare Look at objects, shapes, or numbers and see how they are alike or different. (page xx)	**español** tk
cone A solid shape that narrows to a point from a circular base. (page xx)	**español** tk
count back On a number line, start at the greater number (5) and count back (3). (page xx) $5 - 3 = 2$	**español** tk

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Glossary/Glosario

English	Español
C	
count on (or count up) Start at a number on a number line and count up to the next number. (page xx) 4 + 2 = 6 	**español** tk
cube A solid shape with 6 square faces. (page xx) 	**español** tk
cylinder A solid shape that looks like a can. (page xx) 	**español** tk
D	
data Numbers or symbols, sometimes collected from a survey or experiment, that show information. *Data* is plural. (page xx) 	**español** tk

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English	Español
decimal point A period used in a decimal number. (page xx) $2.95	**español** tk
difference The answer to a subtraction problem. (page xx) 3 − 1 = 2 The difference is 2.	**español** tk.
digit A symbol used to write numbers. The ten digits are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. (page xx)	**español** tk.
digital clock A clock that uses only numbers to show time. (page xx)	**español** tk.
dime dime = 10¢ or 10 cents (page xx) heads tails	**español** tk
divide (division) Separate into equal groups. (page xx) 10 ÷ 2 = 5	**español** tk
division sentence A number sentence that has a division sign in it. (page xx) 12 ÷ 3 = 4	**español** tk

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Glossary/Glosario

English	Español
D	
dollar ($) one dollar = 100¢ or 100 cents or $1.00 (page xx) front back 	**español** tk
doubles Two addends that are the same number. (page xx) 7 + 7 = 14 ←doubles 7 + 8 = 15 ←near doubles 	**español** tk
E	
edge The line where two sides (faces) meet. (page xx) edge 	**español** tk
equal groups Each group has the same number of objects. (page xx) There are four equal groups of counters. 	**español** tk

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Glossary/Glosario

English	Español
E	
equal parts Each part is the same size. (page xx) This pie is cut into 4 equal parts. 	**español** tk
estimate Find a number close to an exact amount. (page xx) 47 + 22 rounds to 50 + 20 The estimate is 70.	**español** tk
expanded form The representation of a number as a sum that shows the value of each digit. Sometimes called *expanded notation*. (page xx) 536 is written as 500 + 30 + 6.	**español** tk
F	
face The flat part of a solid shape. (page xx) A square is a face of a cube. 	**español** tk
fact family Number sentences that use the same numbers. (page xx) 6 + 7 = 13 13 − 7 = 6 7 + 6 = 13 13 − 6 = 7	**español** tk.

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Glossary/Glosario

English	Español
F	
factor A number that is multiplied by another number. (page xx) $3 \times 6 = 18$ factors	**español** tk
foot (ft) A customary unit for measuring. The plural is *feet*. (page xx) 1 foot = 12 inches 	**español** tk
fraction A number that represents part of a whole or part of a set. (page xx) $\left(\frac{1}{2}\right), \left(\frac{1}{3}\right), \left(\frac{1}{4}\right), \left(\frac{3}{4}\right)$ 	**español** tk
G	
group A set of objects (page xx) group of 4 	**español** tk

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English	Español
half dollar half dollar = 50¢ or 50 cents (page xx) heads tails	**español** tk
half hour One half of an hour is 30 minutes. Sometimes called *half past* or *half past* the hour. (page xx)	**español** tk
hexagon A plane shape that has six sides. (page xx)	**español** tk
hour A unit of time. (page xx) 1 hour = 60 minutes	**español** tk

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Glossary/Glosario

English	Español
H	
hour hand The shorter hand on a clock that tells the hour. (page xx) **hour hand**	**español** tk
hundreds The numbers 100–999. (page xx) In the number 234, the 2 is in the hundreds place.	**español** tk
I	
inch (in.) A customary unit for measuring length. The plural is *inches.* (page xx) 12 inches = 1 foot	**español** tk
inverse operation Operations that undo each other. (page xx) Addition and subtraction are inverse or opposite operations.	**español** tk
is greater than > (page xx) 7 > 2 7 is greater than 2	**español** tk

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Glossary/Glosario

English	Español
I	
is less than < (page xx) 4 < 7 4 is less than 7	**español** tk
is the same as = (page xx) 6 = 6 6 *is the same as* or *is equal to* 6.	**español** tk
K	
key Tells what (or how many) each symbol stands for. (page xx) 	**español** tk
L	
length How long or how far away something is. (page xx) length 	**español** tk

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Glossary/Glosario

M

English	Español
less likely (or least likely) An event that will probably *not* happen. (page xx) Picking the blue cube is *less likely* than picking a red one. 	**español** tk
meter (m) A metric unit for measuring length. A meter is about the length of a baseball bat or the width of a door. (page xx) 1 meter = 100 centimeters 	**español** tk
minute (min) A unit used to measure time. (page xx) 1 minute = 60 seconds minute 	**español** tk

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English	Español
minute hand The longer hand on a clock that tells the minutes. (page xx) minute hand 	**español** tk
missing addend (page xx) $9 + ____ = 16$ The missing addend is 7.	**español** tk
mode The number(s) that occurs most often in a set of numbers. A set can have more than one mode. (page xx) 7, 4, 7, 10, 7, and 2 The *mode* is 7.	**español** tk
multiples A multiple of a number is the product of that number and any whole number. (page xx) 15 is a multiple of 5 because $3 \times 5 = 15$.	**español** tk
multiplication sentence A number sentence that has a multiplication sign in it. (page xx) $5 \times 4 = 20$	**español** tk

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Glossary/Glosario

English	Español
M	
multiply (multiplication) Find the product. The operation of repeated addition of the same number. (page xx) $4 \times 2 = 8$ Four groups of two are equal to eight or $2 + 2 + 2 + 2 = 8$.	**español** tk
N	
nickel nickel = 5¢ or 5 cents (page xx) heads tails	**español** tk
number line A line with number labels. (page xx)	**español** tk
number sentence An expression using numbers and the = sign, or the < or > sign. (page xx) $5 + 4 = 9$ or $8 > 5$	**español** tk

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English		Español
ones A place value of a number. (page xx) This number has 3 ones. 23	O	**español** tk
parallelogram A plane shape that has four sides. Each pair of opposite sides is equal and parallel. (page xx) 	P	**español** tk
pattern An order that a set of objects or numbers follows over and over. (page xx) A, A, B, A, A, B, A, A, B pattern unit 		**español** tk
penny penny = 1¢ or 1 cent (page xx) heads tails 		**español** tk

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Glossary/Glosario

P

English	Español
pictograph A graph that uses the same picture or symbol to show the data. (page xx)	**español** tk
picture graph A graph that has different pictures to show information collected. (page xx)	**español** tk
place value The value given to a digit by its place in a number. (page xx) 365 3 is in the hundreds place 6 is in the tens place 5 is in the ones place	**español** tk
plane shape A figure such as a triangle or square that is flat or 2-dimensional. (page xx)	**español** tk
product The answer to a multiplication problem. (page xx) $3 \times 4 = 12$ product	**español** tk

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English	Español
P	
pyramid A solid shape with a polygon as a base and triangular shaped faces. (page xx)	**español** tk
Q	
quadrilateral A plane shape that has 4 sides and 4 angles. (page xx) square, rectangle, and parallelogram	**español** tk
quarter quarter = 25¢ or 25 cents (page xx) heads tails	**español** tk
quarter hour One-fourth of an hour or 15 minutes. (page xx)	**español** tk

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Glossary/Glosario

English	Español
Q	
quarter till (or quarter past) 15 minutes before or 15 minutes after the hour has begun. (page xx) quarter till 11 quarter past 10	**español** tk
range The difference between the greatest and least number in a set of data. (page xx) 4, 7, 10, and 2 (10 is the greatest and 2 the least) The *range* is 8.	**español** tk
R	
rectangle A plane shape with four sides and four corners. (page xx)	**español** tk
rectangular prism A solid shape with faces that are rectangles. (page xx)	**español** tk

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English	Español
regroup Take apart a number to write it in a new way. (page xx) 1 ten + 2 ones becomes 12 ones 	**español** tk
related fact(s) Basic facts using the same numbers. Sometimes called a *fact family*. (page xx) 4 + 1 = 5 5 − 4 = 1 1 + 4 = 5 5 − 1 = 4	**español** tk
remainder The number that is left after one whole number is divided by another. (page xx) 	**español** tk
round Change the value of a number to one that is easier to work with. (page xx) 24 rounded to the nearest ten is 20.	**español** tk

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Glossary/Glosario

English	Español
side One of the line segments that make up a shape. (page xx) A pentagon has five sides. 	**español** tk
skip count Count objects in equal groups of two or more. (page xx) 5, 10, 15, 20 	**español** tk
solid shape A figure having the three dimensions: length, width, and height. (page xx) 	**español** tk
sphere A solid shape that looks like a round ball. (page xx) 	**español** tk

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English	Español
square A rectangle that has four equal sides. (page xx) square 	**español** tk
subtract (subtraction) Take away, take apart, separate, or find the difference between two sets. The opposite of *add*. (page xx) 4 − 1 = 3 	**español** tk
subtraction sentence A number sentence that has a subtraction sign in it. (page xx) 9 − 4 = 5	**español** tk
sum The answer to an addition problem. (page xx) 2 + 4 = 6 ↑ sum	**español** tk

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Glossary/Glosario

S
T

S

English	Español
survey Collect data by asking people the same questions. (page xx) This survey shows favorite sports. 	**español** tk
symbol A letter or figure that stands for something. (page xx) This symbol means to add. +	**español** tk

T

English	Español
tally mark A mark used to record data collected in a survey. (page xx) 	**español** tk
tens A place value of a number. (page xx) **23** The 2 is in the tens place. 	**español** tk

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English	Español
thousand(s) A place value of a number. (page xx) 1,253 The 1 is in the thousands place.	**español** tk
3-dimensional figure See *solid shape*.	**español** tk
trapezoid A four-sided plane shape with only two opposite sides that are the same length. (page xx)	**español** tk
triangle A plane shape with three sides and three angles. (page xx)	**español** tk
2-dimensional figure See *plane shape*.	**español** tk

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Glossary/Glosario

English		Español
unit fraction Any fraction with a numerator of 1. (page xx) $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$	U	**español** tk
value How much something is worth. (page xx)	V	**español** tk
vertex A point on a solid shape where two or more sides (edges) meet. (page xx)		**español** tk
whole The entire amount or object. (page xx)	W	**español** tk
yard A customary unit for measuring length. (page xx) 1 yard = 3 feet	Y	**español** tk

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Name _____

Count on 1, 2, and 3 (Use with Chapter 2)

1.	1 + 0	2 + 9	4 + 3	6 + 3	2 + 6	6 + 1
2.	9 + 2	2 + 5	4 + 2	3 + 5	3 + 8	1 + 3
3.	2 + 2	3 + 0	7 + 1	1 + 7	4 + 1	1 + 5

Name _____

Count Back (Use with Chapter 3)

1.	2 − 1	6 − 2	4 − 2	7 − 3	5 − 1	8 − 2
2.	7 − 2	6 − 1	4 − 1	8 − 1	9 − 1	1 − 1
3.	9 − 3	3 − 3	9 − 2	2 − 2	5 − 3	6 − 3

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Name _____

Count on 1, 2, and 3 (Use with Chapter 2)

4.	6 + 2	5 + 1	2 + 7	2 + 4	7 + 3	9 + 3
5.	9 + 1	3 + 4	1 + 6	1 + 4	1 + 8	5 + 3
6.	8 + 2	1 + 9	7 + 2	3 + 7	3 + 6	8 + 1

Name _____

Count Back (Use with Chapter 3)

4.	3 − 1	7 − 3	3 − 3	4 − 3	8 − 1	9 − 3
5.	3 − 2	5 − 2	8 − 3	5 − 1	7 − 2	9 − 1
6.	6 − 2	7 − 1	6 − 1	8 − 3	9 − 2	5 − 3

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Doubles and Near Doubles (Use with Chapter 4)

1.	5 + 6	5 + 4	4 + 4	9 + 9	6 + 7	7 + 8
2.	8 + 8	8 + 9	8 + 7	6 + 5	5 + 5	7 + 7
3.	4 + 3	1 + 2	4 + 5	2 + 2	7 + 6	9 + 8

Name _____

Doubles (Use with Chapter 5)

1.	18 − 9	2 − 1	10 − 5	6 − 3	8 − 4	12 − 6
2.	14 − 7	4 − 2	12 − 6	10 − 5	14 − 7	18 − 9
3.	8 − 4	16 − 8	6 − 3	4 − 2	6 − 3	16 − 8

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Doubles and Near Doubles (Use with Chapter 4)

4.	2 + 3	8 + 7	7 + 7	4 + 4	4 + 5	4 + 3
5.	1 + 1	5 + 4	0 + 1	0 + 0	6 + 5	1 + 0
6.	6 + 6	2 + 1	5 + 5	3 + 2	3 + 3	2 + 2

Name _____

Doubles (Use with Chapter 5)

4.	12 − 6	14 − 7	18 − 9	8 − 4	2 − 1	16 − 8
5.	4 − 2	10 − 5	12 − 6	10 − 5	18 − 9	14 − 7
6.	16 − 8	6 − 3	4 − 2	6 − 3	8 − 4	2 − 1

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Make a Ten (Use with Chapter 6)

1.	2 + 8	6 + 6	9 + 6	3 + 9	4 + 6	5 + 8
2.	6 + 8	7 + 7	7 + 9	9 + 5	5 + 7	9 + 9
3.	8 + 8	6 + 5	7 + 4	8 + 6	9 + 7	7 + 6

Name _____

Facts to 10 (Use with Chapter 7)

1.	9 + 1	4 + 4	4 + 6	6 + 4	5 + 1	2 + 1
2.	4 + 5	8 + 2	5 + 5	2 + 3	2 + 6	6 + 2
3.	1 + 6	5 + 3	2 + 7	3 + 7	8 + 0	7 + 3

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Name _____

Make a Ten (Use with Chapter 6)

4.	7 + 3	2 + 9	4 + 8	4 + 9	9 + 8	4 + 7
5.	6 + 4	5 + 5	6 + 7	3 + 7	9 + 3	7 + 5
6.	3 + 8	7 + 8	5 + 6	1 + 9	6 + 9	5 + 9

Name _____

Facts to 10 (Use with Chapter 7)

4.	4 + 6	1 + 7	2 + 8	1 + 9	7 + 1	0 + 8
5.	2 + 5	4 + 2	9 + 1	6 + 0	4 + 3	3 + 6
6.	3 + 4	1 + 8	3 + 5	7 + 2	3 + 7	4 + 1

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Name _____

Subtract from 10 (Use with Chapter 7)

1.	10 − 8	9 − 6	10 − 7	9 − 8	10 − 5	8 − 7
2.	10 − 4	8 − 6	10 − 1	9 − 7	10 − 9	8 − 5
3.	10 − 2	9 − 4	10 − 7	10 − 3	10 − 4	10 − 6

Name _____

Facts to 14 (Use with Chapter 8)

1.	9 + 1	5 + 9	7 + 5	7 + 4	5 + 5	7 + 7
2.	8 + 6	2 + 7	5 + 3	3 + 5	7 + 3	4 + 8
3.	5 + 7	6 + 6	6 + 8	3 + 9	1 + 2	6 + 1

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Subtract from 10 (Use with Chapter 7)

4.	10 − 7	8 − 4	10 − 9	10 − 5	10 − 7	10 − 3
5.	10 − 8	10 − 6	10 − 4	9 − 2	9 − 8	10 − 8
6.	9 − 3	10 − 3	9 − 6	10 − 2	10 − 1	10 − 6

Name _____

Facts to 14 (Use with Chapter 8)

4.	9 + 5	4 + 9	4 + 6	5 + 8	4 + 4	4 + 7
5.	7 + 6	5 + 6	3 + 6	2 + 8	9 + 4	2 + 9
6.	8 + 4	9 + 3	8 + 3	3 + 7	6 + 7	8 + 2

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Name _____

Subtract from 14 (Use with Chapter 8)

1.	14 − 5	13 − 6	14 − 7	14 − 9	14 − 8	11 − 2
2.	12 − 8	12 − 7	12 − 5	13 − 9	14 − 7	13 − 8
3.	14 − 8	11 − 5	14 − 6	14 − 6	13 − 8	12 − 9

Name _____

Facts to 18 (Use with Chapter 9)

1.	9 + 9	9 + 2	8 + 4	5 + 6	7 + 9	6 + 4
2.	7 + 8	7 + 6	6 + 9	6 + 9	4 + 9	9 + 8
3.	9 + 5	9 + 3	6 + 8	2 + 6	8 + 8	7 + 2

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Name _____

Subtract from 14 (Use with Chapter 8)

4.	14 − 6	11 − 3	14 − 7	14 − 5	11 − 9	14 − 8
5.	14 − 9	13 − 4	14 − 5	11 − 7	14 − 8	13 − 7
6.	14 − 7	14 − 6	12 − 8	13 − 5	14 − 9	12 − 4

Name _____

Facts to 18 (Use with Chapter 9)

4.	5 + 8	7 + 4	5 + 9	8 + 9	6 + 5	7 + 3
5.	9 + 4	5 + 7	5 + 4	7 + 7	6 + 7	6 + 6
6.	8 + 7	8 + 2	7 + 5	9 + 6	8 + 6	9 + 7

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Name _____

Subtract from 18 (Use with Chapter 9)

1.	15 − 8	12 − 9	13 − 6	18 − 9	13 − 4	12 − 7
2.	12 − 4	12 − 5	18 − 9	17 − 9	15 − 9	12 − 6
3.	12 − 8	16 − 7	17 − 8	13 − 5	16 − 9	16 − 8

Name _____

Multiply by 2 (Use with Chapter 10)

1.	2 × 0	2 × 4	9 × 2	5 × 2	2 × 9	7 × 2
2.	2 × 7	6 × 2	2 × 2	2 × 6	1 × 2	2 × 8
3.	2 × 3	3 × 2	4 × 2	8 × 2	2 × 1	2 × 5

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Name _____

Subtract from 18 (Use with Chapter 9)

4.	18 − 9	13 − 8	15 − 9	16 − 7	17 − 9	14 − 8
5.	15 − 6	14 − 7	13 − 7	14 − 9	14 − 5	16 − 8
6.	17 − 8	15 − 8	14 − 6	16 − 9	13 − 9	18 − 9

Name _____

Multiply by 2 (Use with Chapter 10)

4.	2 × 6	9 × 2	2 × 3
5.	8 × 2	2 × 1	6 × 2
6.	2 × 2	2 × 5	2 × 4

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Name _____

Related Facts to 12 (Use with Chapter 11)

1.	8 + 5	13 − 5	12 − 5	7 + 5	6 + 5	11 − 6
2.	11 − 4	4 + 7	8 + 6	14 − 6	15 − 6	9 + 6
3.	11 − 8	8 + 3	13 − 6	7 + 6	12 − 4	4 + 8

Name _____

Multiply by 5 (Use with Chapter 12)

1.	5 × 1	5 × 4	3 × 5	2 × 5	7 × 5	4 × 5
2.	5 × 6	6 × 5	5 × 7	5 × 3	1 × 5	8 × 5
3.	5 × 9	5 × 2	4 × 5	5 × 0	5 × 8	5 × 5

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Name _____

Related Facts to 12 (Use with Chapter 11)

4.	12 − 6	6 + 6	10 − 3	7 + 3	15 − 7	7 + 8
5.	9 + 8	17 − 9	13 − 5	8 + 5	12 − 5	7 + 5
6.	9 + 7	16 − 7	12 − 4	8 + 4	9 + 6	15 − 6

Name _____

Multiply by 5 (Use with Chapter 12)

4.	5 × 9	2 × 5	3 × 5
5.	4 × 5	5 × 7	5 × 5
6.	5 × 8	1 × 5	5 × 4

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Name _____

Related Facts to 18 (Use with Chapter 13)

1.	18 − 9	9 + 9	17 − 9	9 + 8	16 − 8	8 + 8
2.	14 − 8	8 + 6	7 + 8	15 − 7	8 + 6	14 − 8
3.	9 + 6	15 − 9	17 − 6	9 + 6	15 − 8	7 + 8

Name _____

Multiply by 10 (Use with Chapter 14)

1.	10 × 9	4 ×10	10 × 7	5 ×10	1 ×10	2 ×10
2.	10 × 6	10 × 2	9 ×10	10 × 0	10 × 5	3 ×10
3.	10 × 4	10 × 3	6 ×10	10 × 1	10 × 8	7 ×10

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Name _____

Related Facts to 18 (Use with Chapter 13)

4.	13	6		14	6		13	5
	− 6	+ 7		− 8	+ 8		− 5	+ 8
5.	14	7		11	4		15	8
	− 7	+ 7		− 7	+ 7		− 8	+ 7
6.	11	5		9	18		16	8
	− 6	+ 6		+ 9	− 9		− 8	+ 8

Name _____

Multiply by 10 (Use with Chapter 14)

4.	10	3	10
	× 9	×10	× 7
5.	10	10	10
	× 0	× 8	× 1
6.	6	10	10
	×10	× 2	× 5

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