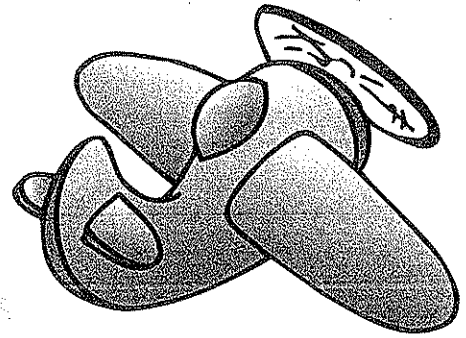




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300

practice exercises that build and
reinforce scientific concepts

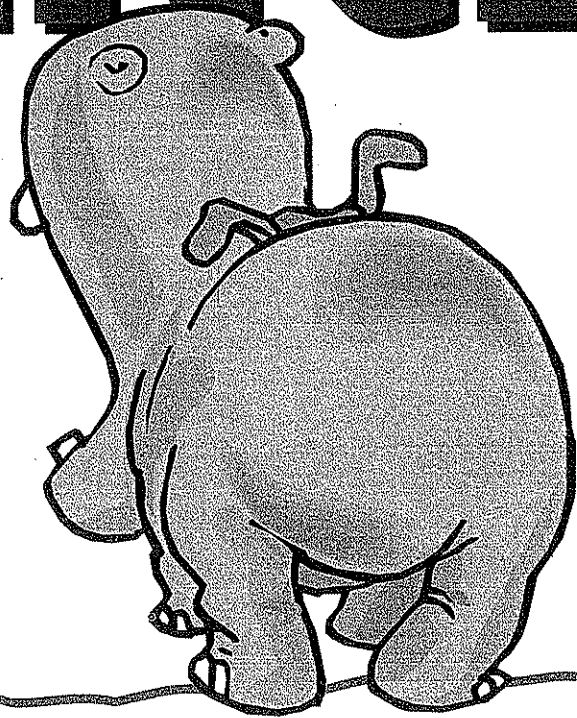


Kindergarten SCIENCE

Name _____

Class _____

School _____



Mabel Cheong B.Bus., P.G.D.E.

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Note to Parents

Dear Parents,

Kindergarten Science is written to introduce pre-schoolers to the world of Science in a structured but lively way. This book provides the foundation upon which complex facts and ideas are built. Various aspects of Science are explored with short and simple notes before each topic together with beautifully illustrated pictures to engage the child's curiosity in the subject.

A wide range of topics are covered together with activities ranging from the easy to the more difficult. These activities are written to reinforce the teaching points in a creative and fun way. Within the same topic, a variety of activities are used to help the child learn more effectively about the concepts. The activities also teach process skills such as observation, labelling, prediction and sequencing. This makes learning Science interesting and entertaining as well.

So, go on and let your child learn more about Science. Just make them do Kindergarten Science!

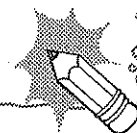
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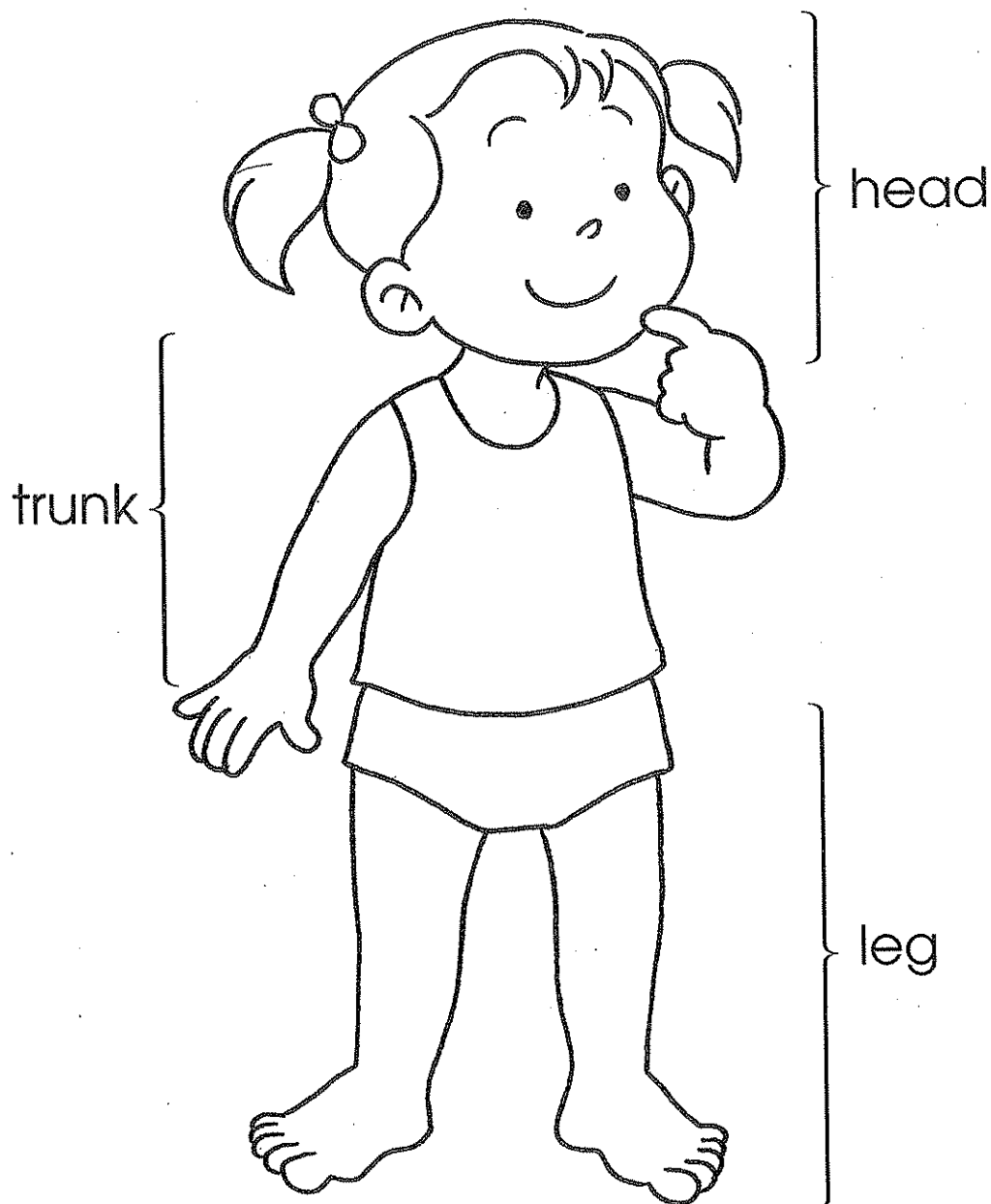
Our body



Our body is made up of three main parts — the head, trunk and leg.



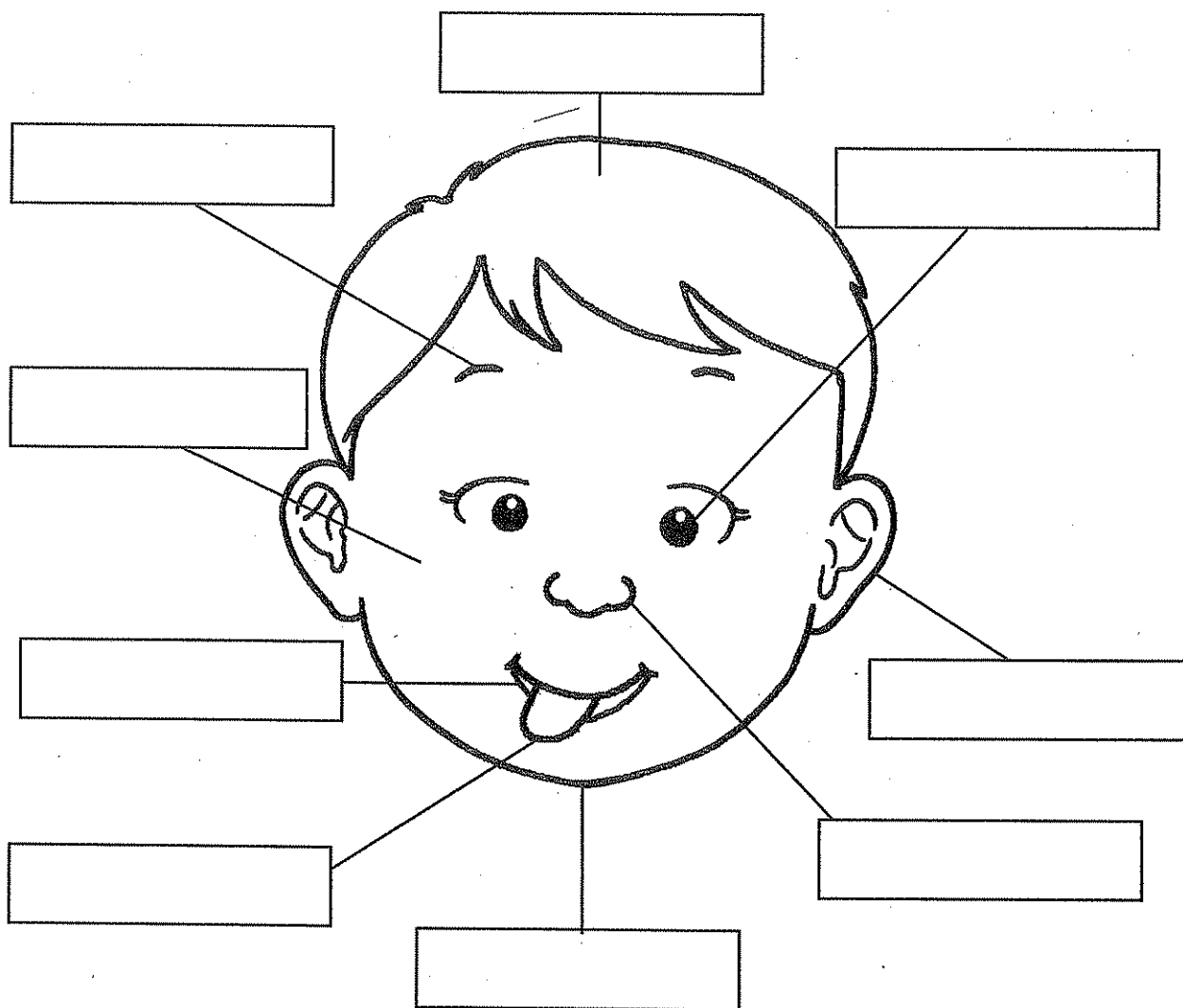
Point to each part and say the name.



Head



Name the parts of the face.



eyebrow
eye
hair

ear
mouth
cheek

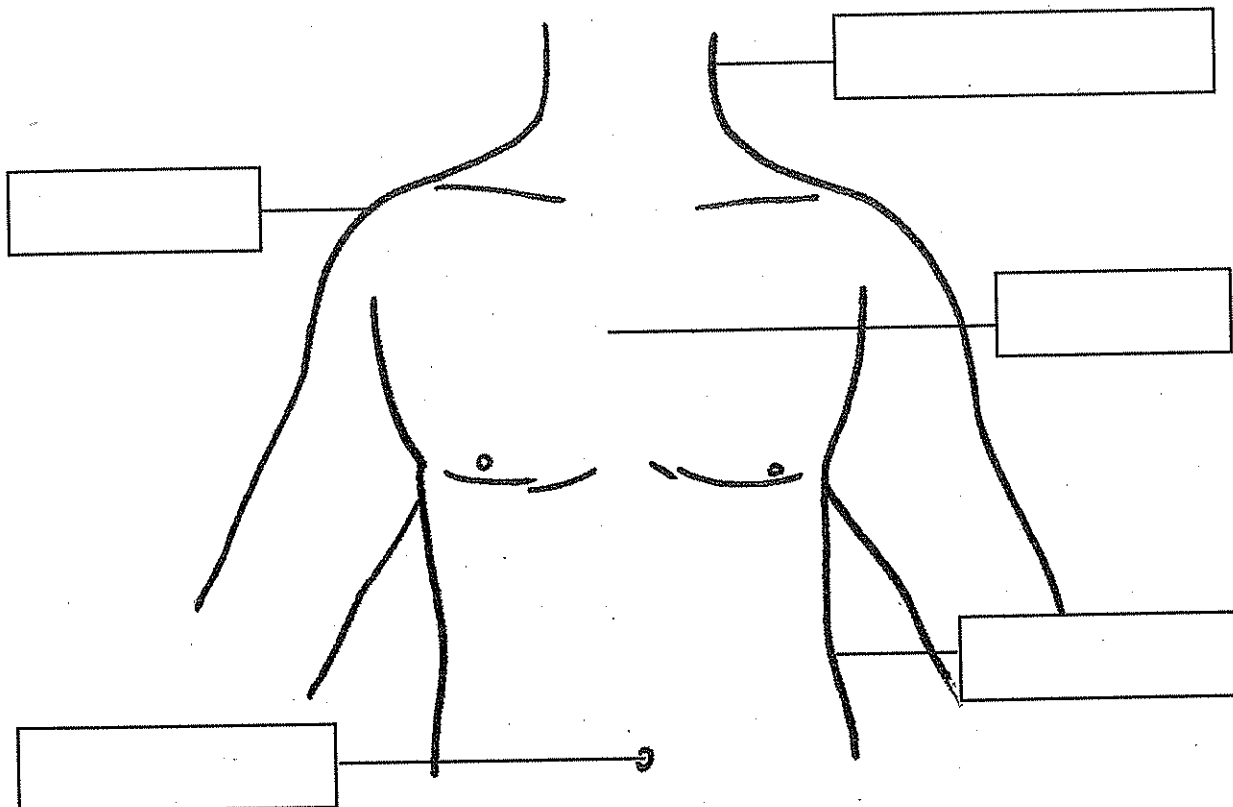
nose
tongue
chin



Trunk



Name the parts of the trunk.



navel
chest

shoulder
waist

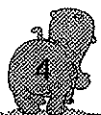
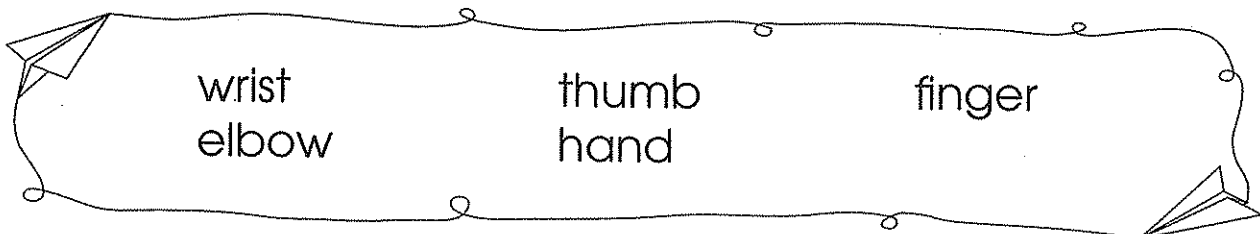
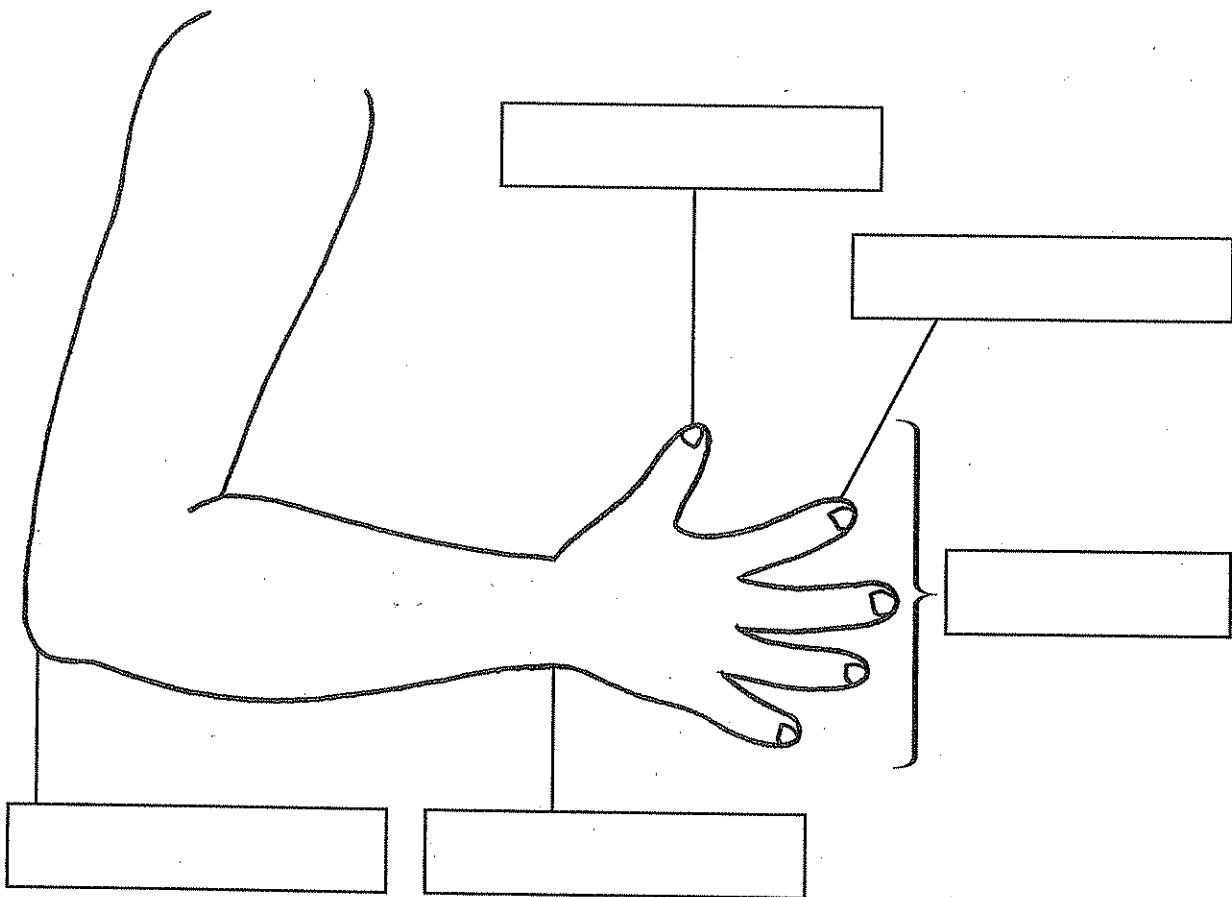
neck



Arm



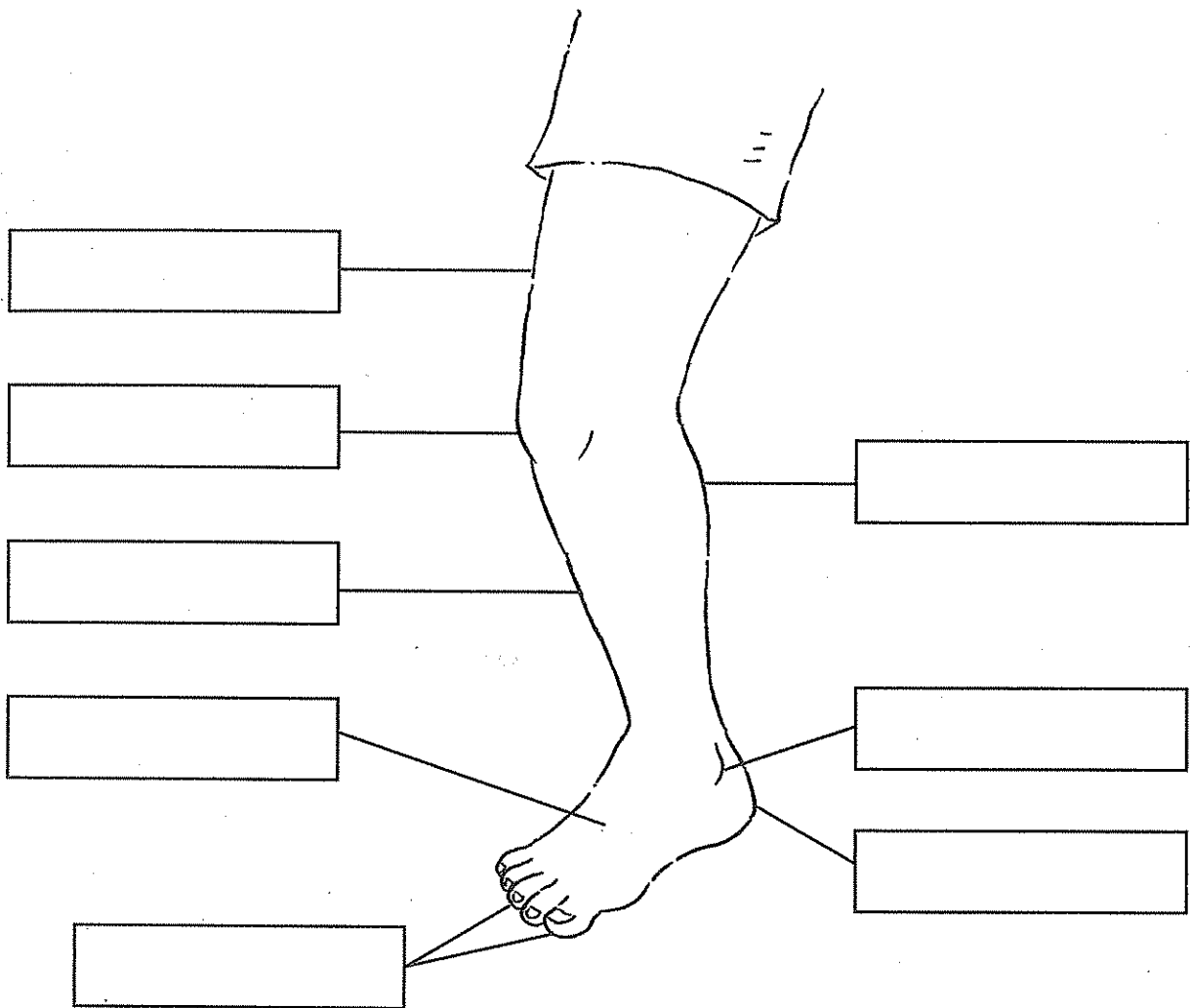
Name the parts of the arm.



Leg



Name the parts of the leg.



knee
toes
calf

ankle
foot
shin

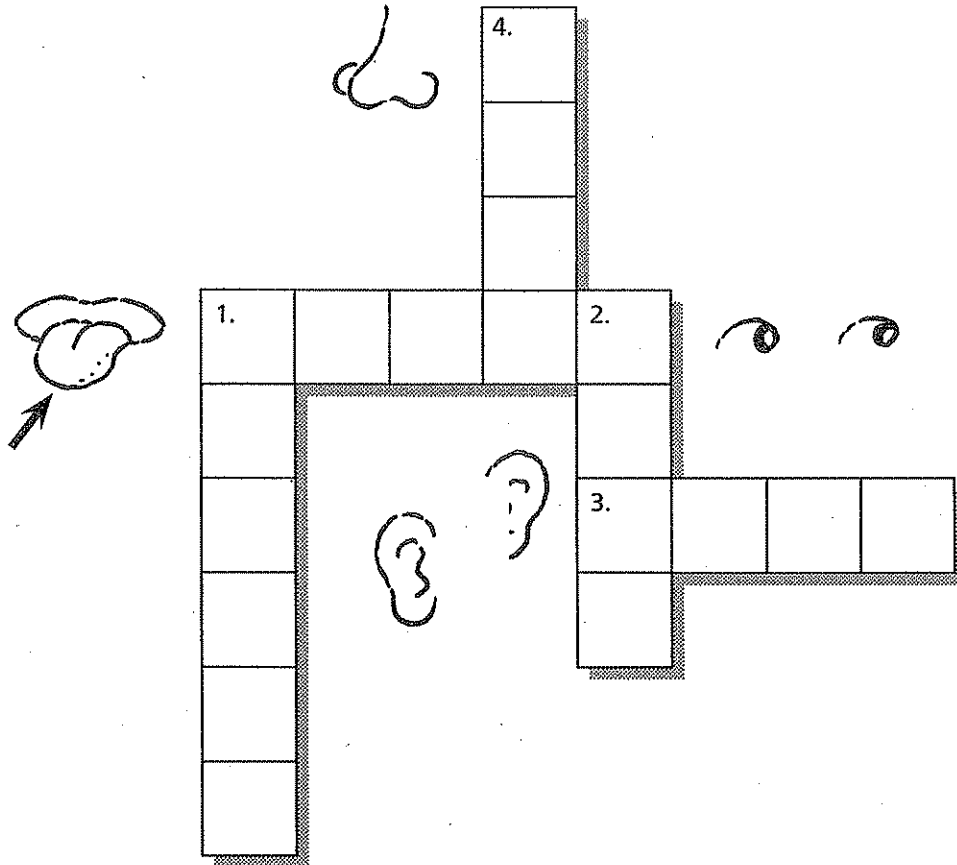
heel
thigh



Parts of our body



Complete the crossword puzzle.



Across:

1. Our body is made up of _____ main parts.
3. I hear with my _____.

Down:

1. I taste with my _____.
2. I see with my _____.
4. I smell with my _____.



Our hands



Fill in the missing letters to complete the word.



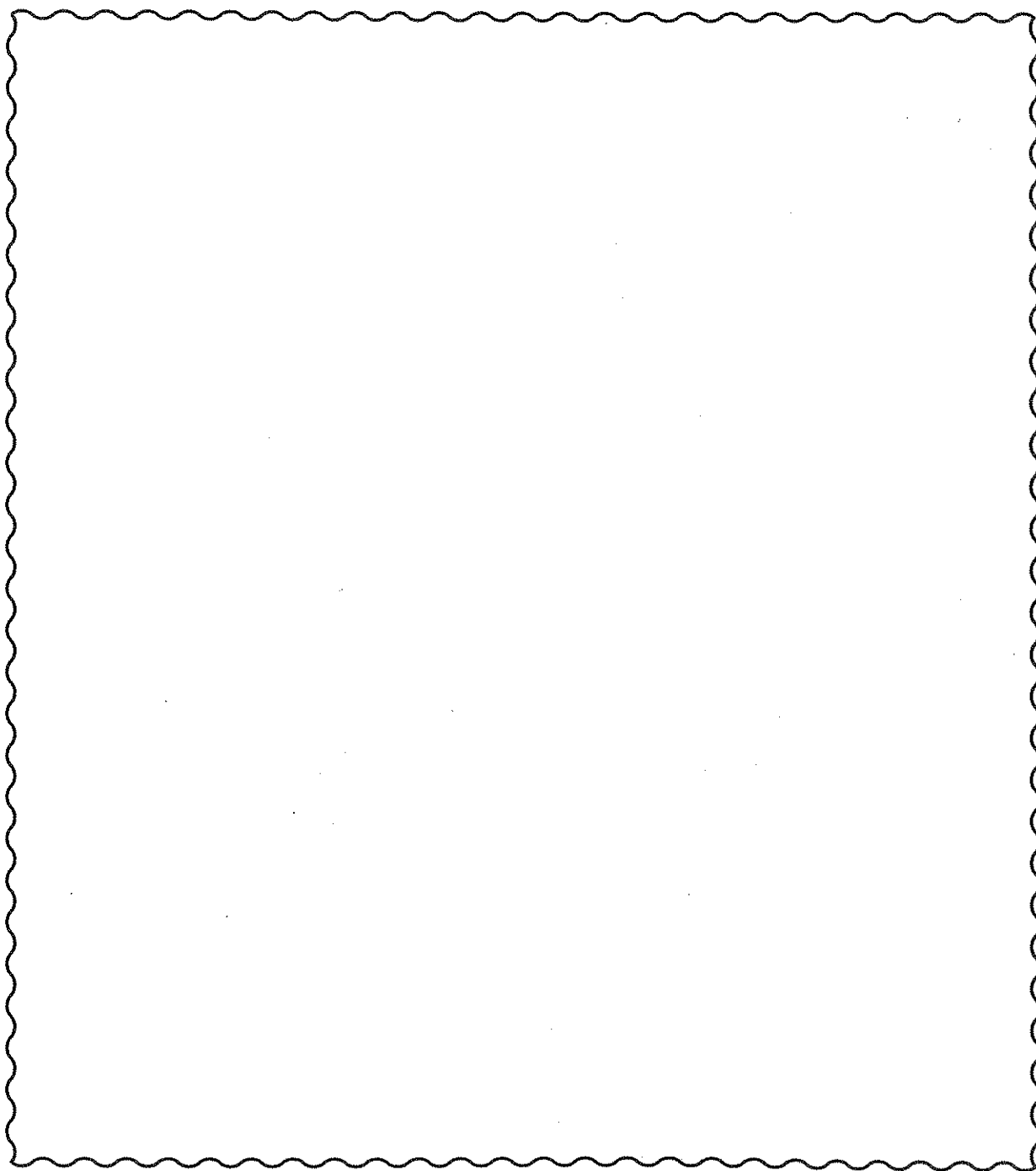
I w _ _ _ _ with my hands.



Our hands



Place your left hand on this page.
Draw the outline of your hand with a pencil.



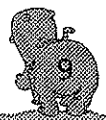
Our legs



Fill in the missing letters to complete the word.



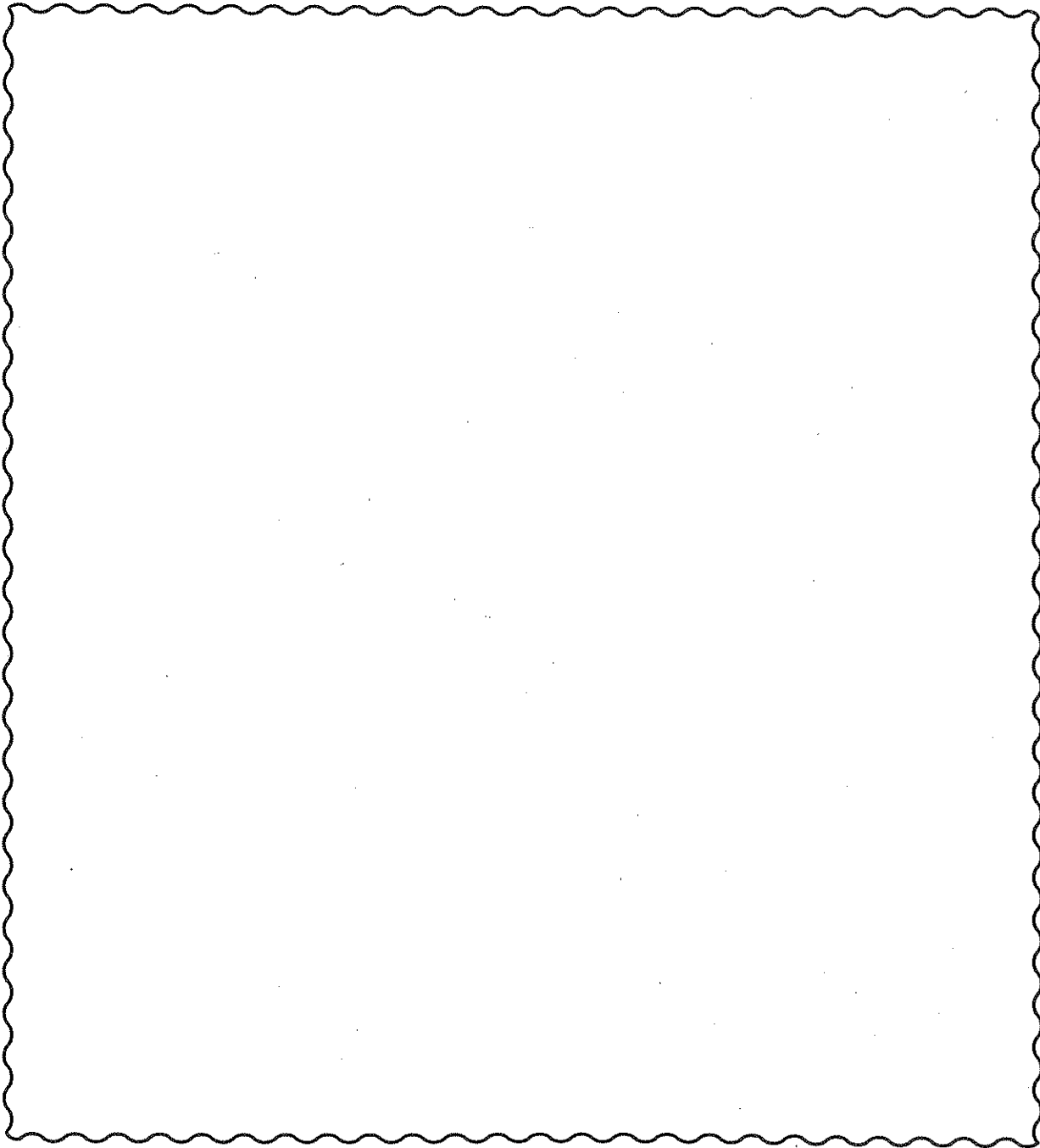
I w _ _ _ with my legs.



Our feet



Put your left foot on this page.
Draw the outline of your foot with a pencil.



Body parts



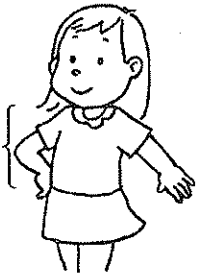
Match each body part with the correct sentence.



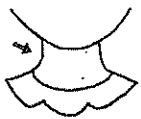
I allow the arm to bend.



I allow the leg to bend.



I keep the head warm.



I support the head.



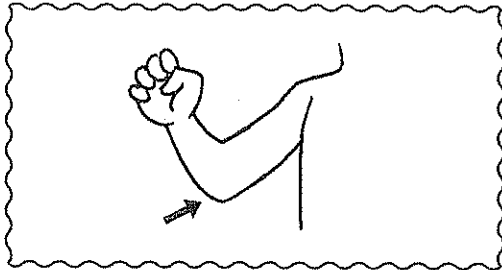
The arms and legs are joined to this part.



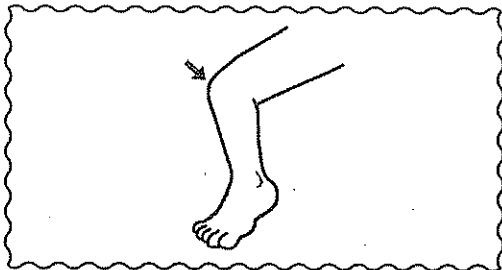
More body parts



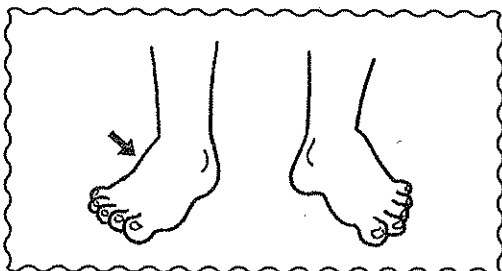
Match each body part with its name.



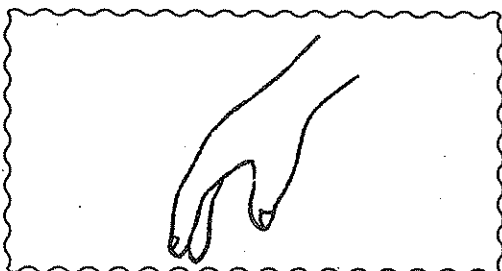
● knee



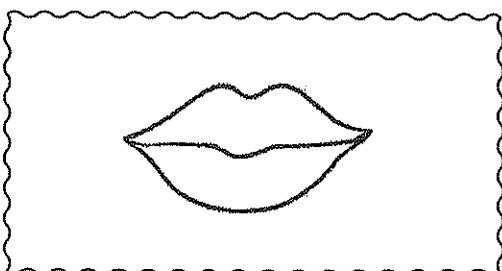
● elbow



● hand



● mouth



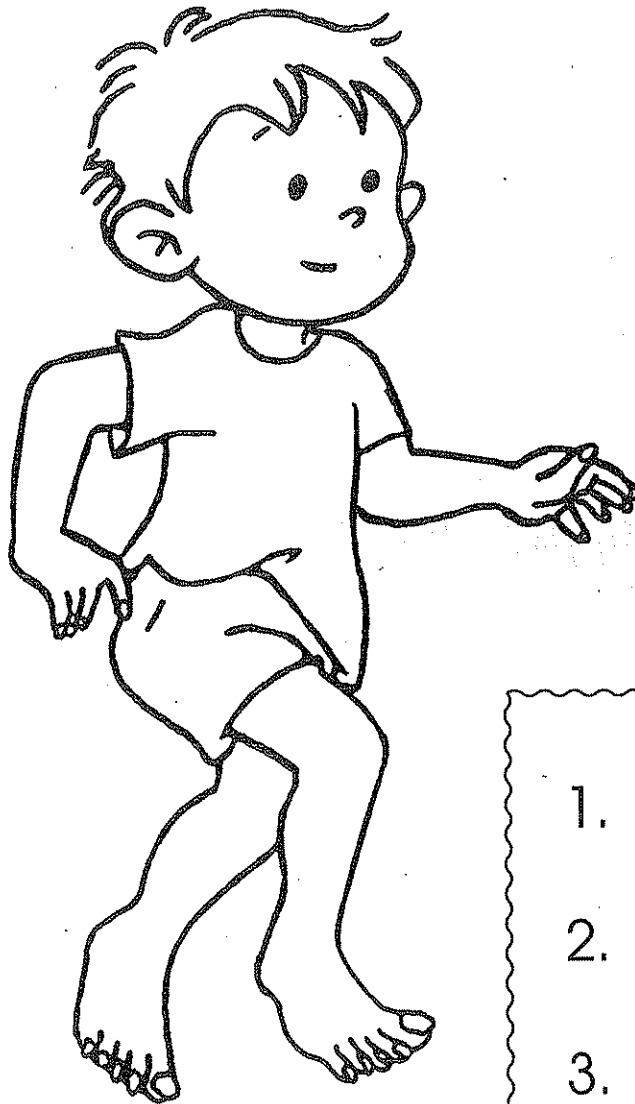
● foot



Which parts should I trim?



Some parts of our body grow faster than other parts.
We need to trim them regularly to keep them clean and neat.
Which parts of our body are they? Write them in the blanks.



1. _____
2. _____
3. _____



Fingerprint



Do you see the lines on your fingers?

The mark made by the pattern of lines is called a fingerprint.

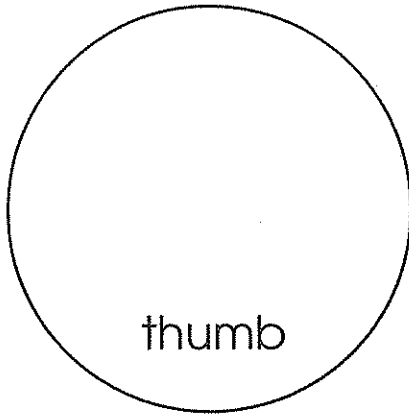
Did you know that nobody in this world has the same fingerprint as you?



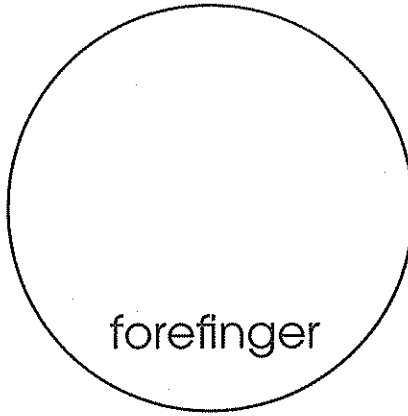
Our fingerprints



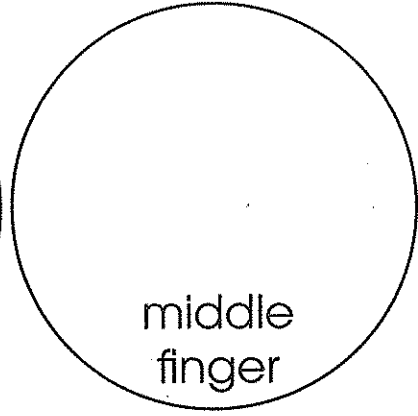
With an inkpad, print each finger in the circles.



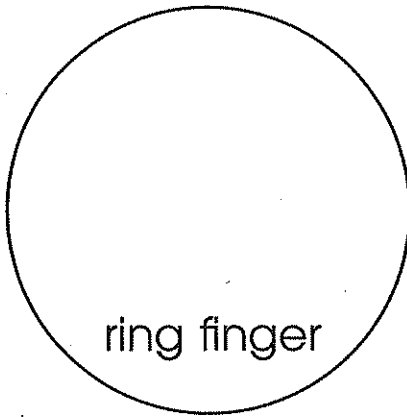
thumb



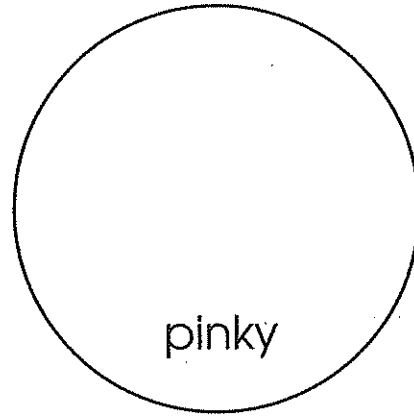
forefinger



middle
finger



ring finger

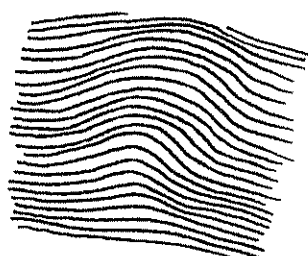


pinky

Now compare your fingerprints with the pictures below.
Which fingerprint matches yours? Circle it.



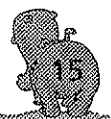
loop



arch



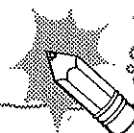
whorl



Growing up



We grow every day. We grow bigger, taller, stronger and heavier.



Fill in each blank with the correct word.

toddler
child

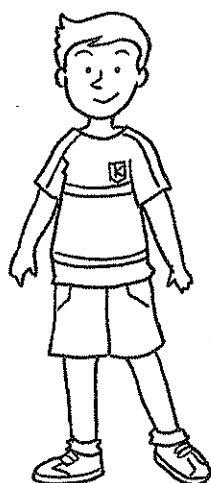
baby
teenager

adult







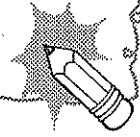




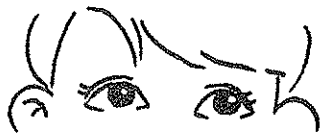
Our sense organs



We have five sense organs — eyes, ears, nose, tongue and skin.



Point to each picture and read the sentence.



Our eyes help
us to see.



Our nose helps
us to smell.



Our ears help
us to hear.



Our tongue helps
us to taste.

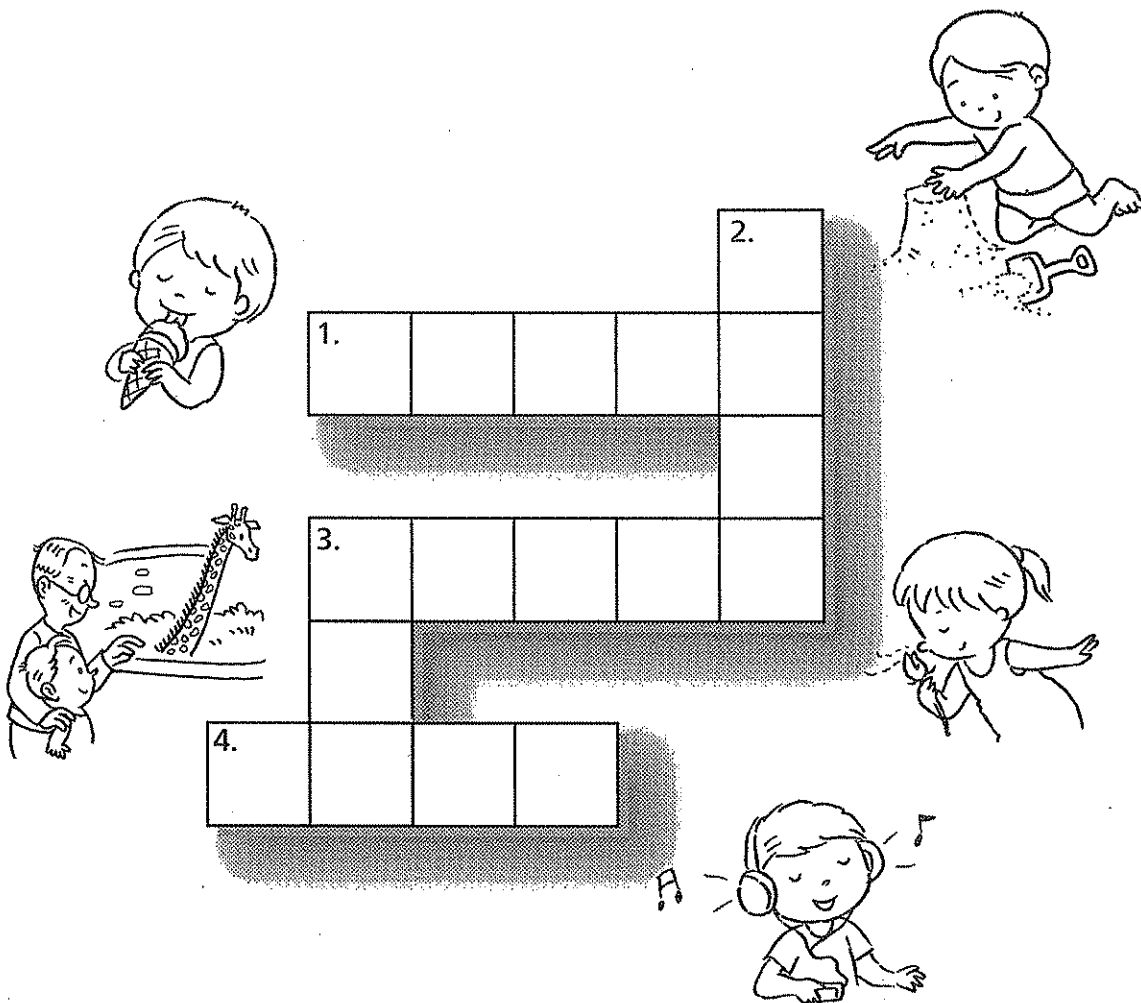


Our skin helps
us to feel.



Senses

Complete the crossword puzzle.



Across:

1. I _____ with my tongue.
3. I _____ with my nose.
4. I _____ with my ears.

Down:

2. I _____ with my skin.
3. I _____ with my eyes.

More senses



Match to complete each sentence.

I can feel ●

the black
car with
my eyes.



I can see ●

the rock
with
my skin.



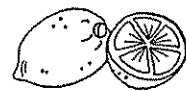
I can smell ●

the music
with my
ears.



I can hear ●

the sour lemon
with my
tongue.



I can taste ●

the flowers
with my
nose.



Our eyes



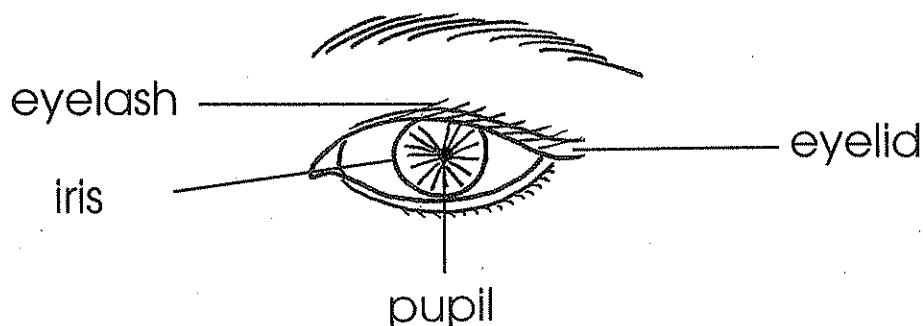
Our eyes help us to see. They are made up of the pupil, iris, eyelid and eyelashes.

The pupil is a black dot in the middle of the eye. Light enters the eye through the pupil.

The iris is the part around the pupil.

The eyelid keeps the eye clean and moist. It also protects the eye from injury and bright light.

Eyelashes keep dust out of our eyes.

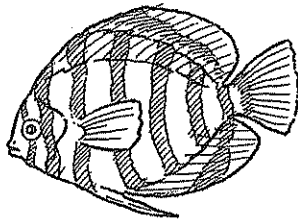


Our eyes help us to see

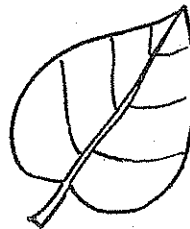
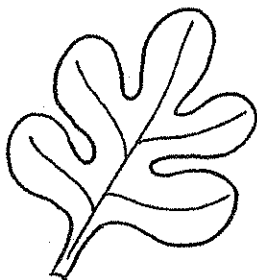


Our eyes help us to see shapes and sizes of objects.

1. Circle the bigger fish.



2. Circle the heart-shaped leaf.

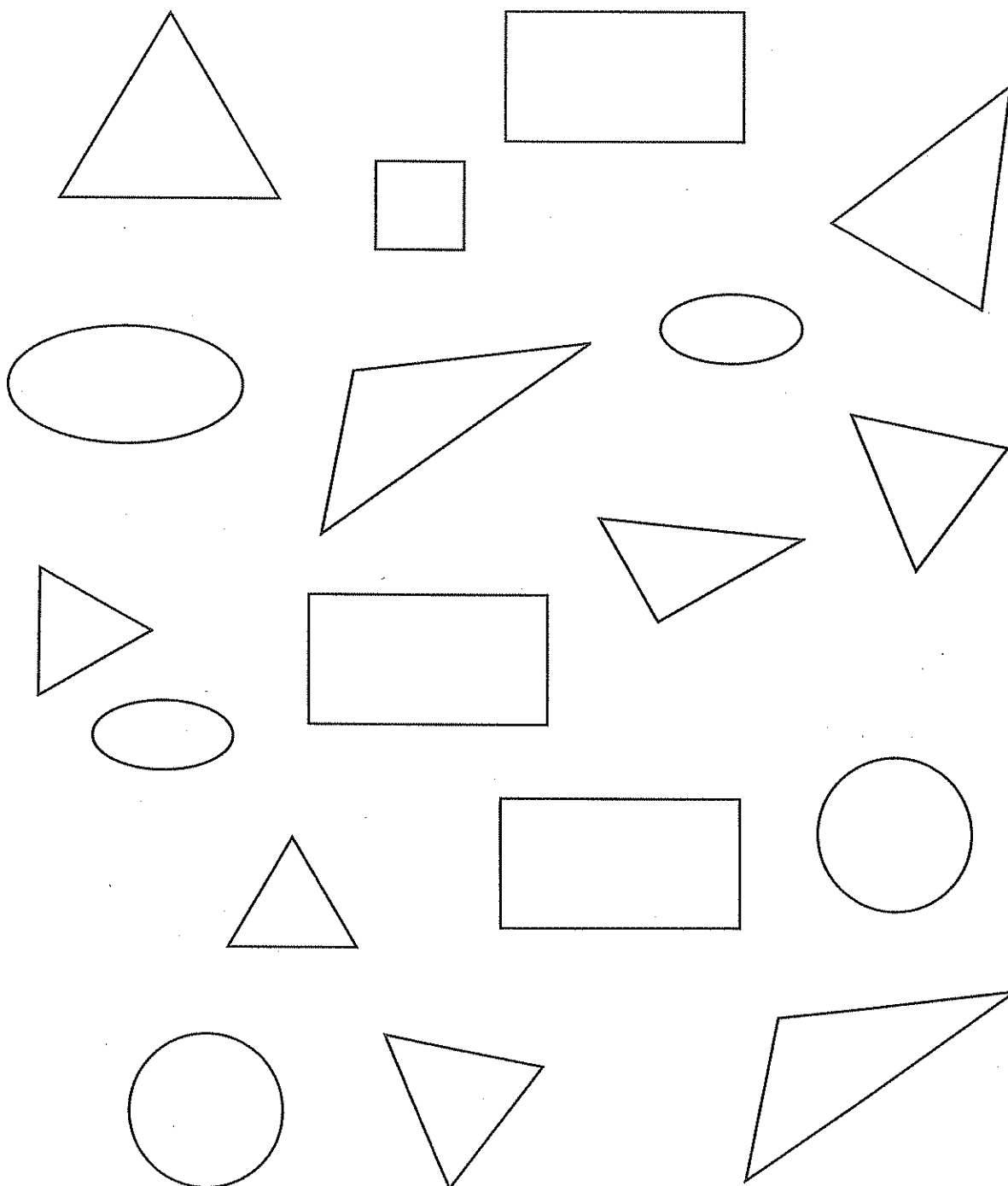


3. Circle the smaller animal.



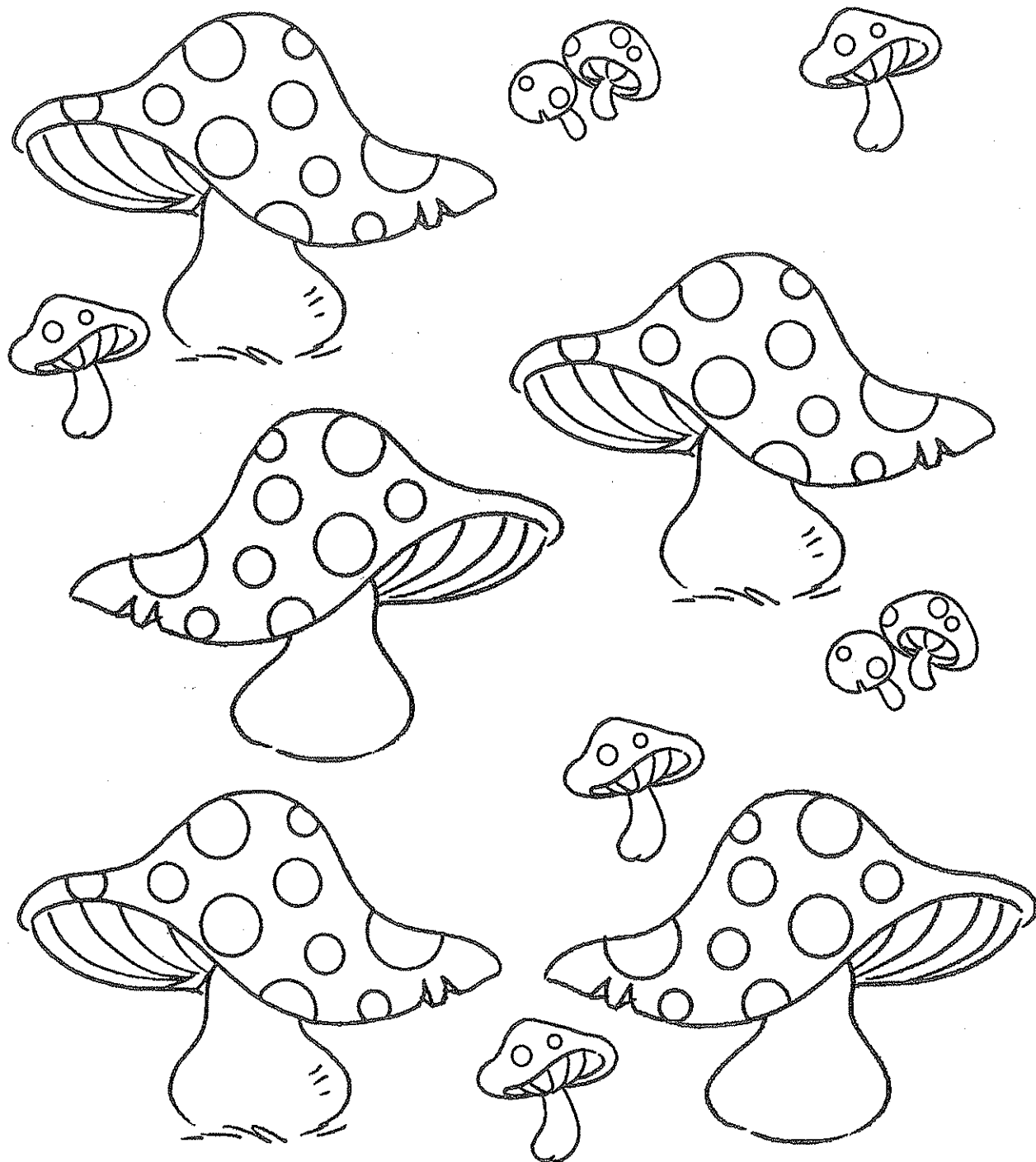
More about our eyes

Our eyes also help us to see colours.
Colour all the triangles blue.





Colour the big mushrooms red.



Taking care of our eyes

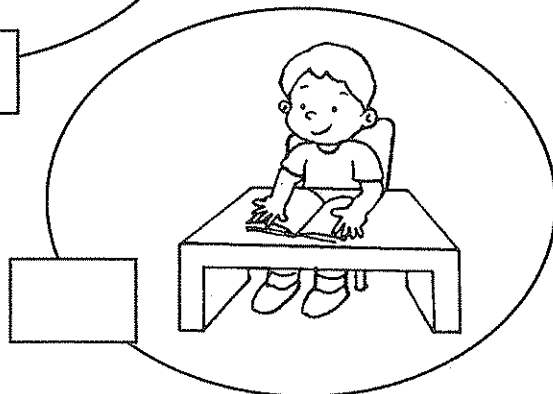
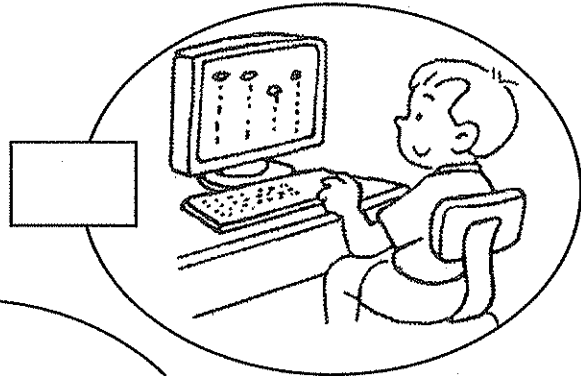
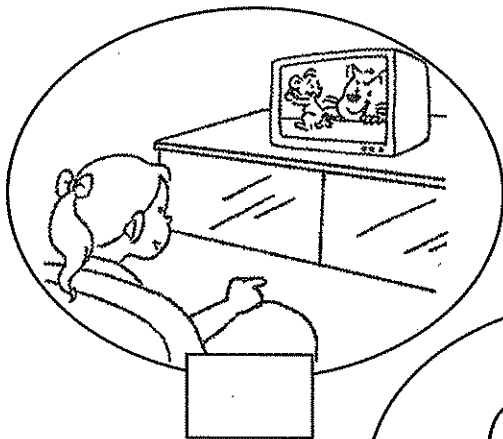


We need our eyes to see. We need to take good care of our eyes.

If we do not take care of our eyes, we have to wear spectacles. We may even become blind.



Put a tick (✓) in the box if the picture shows the child taking good care of his/her eyes.



Our ears

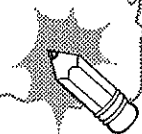
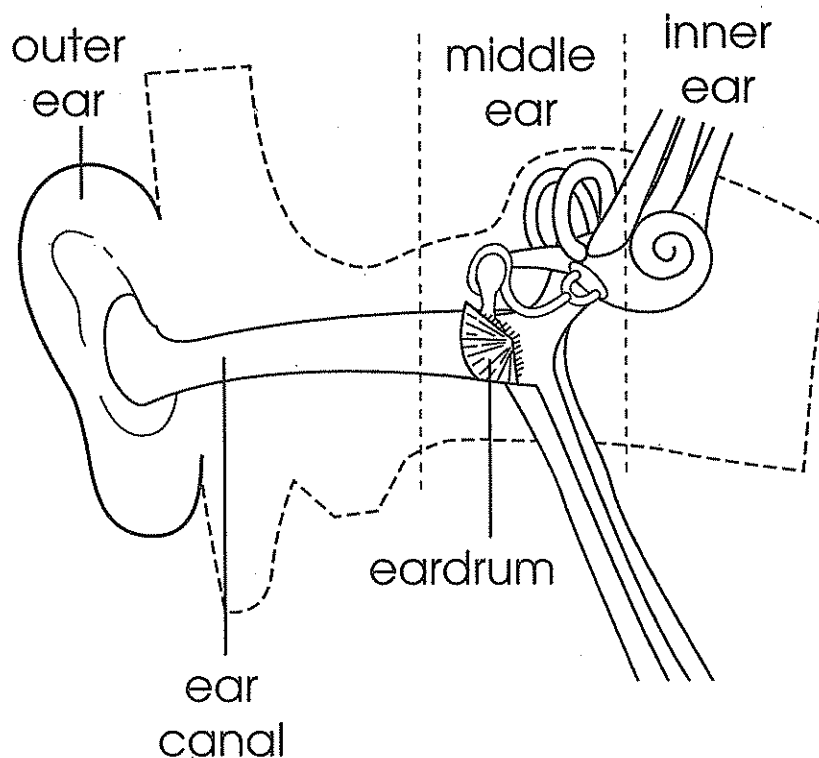


Our ears help us to hear. They are made up of the outer ear, the middle ear and the inner ear.

The outer ear is the part that you can see. It collects sounds.

The middle ear contains the eardrum. We should not put anything into our ears. If the eardrum is damaged, we will not be able to hear anything.

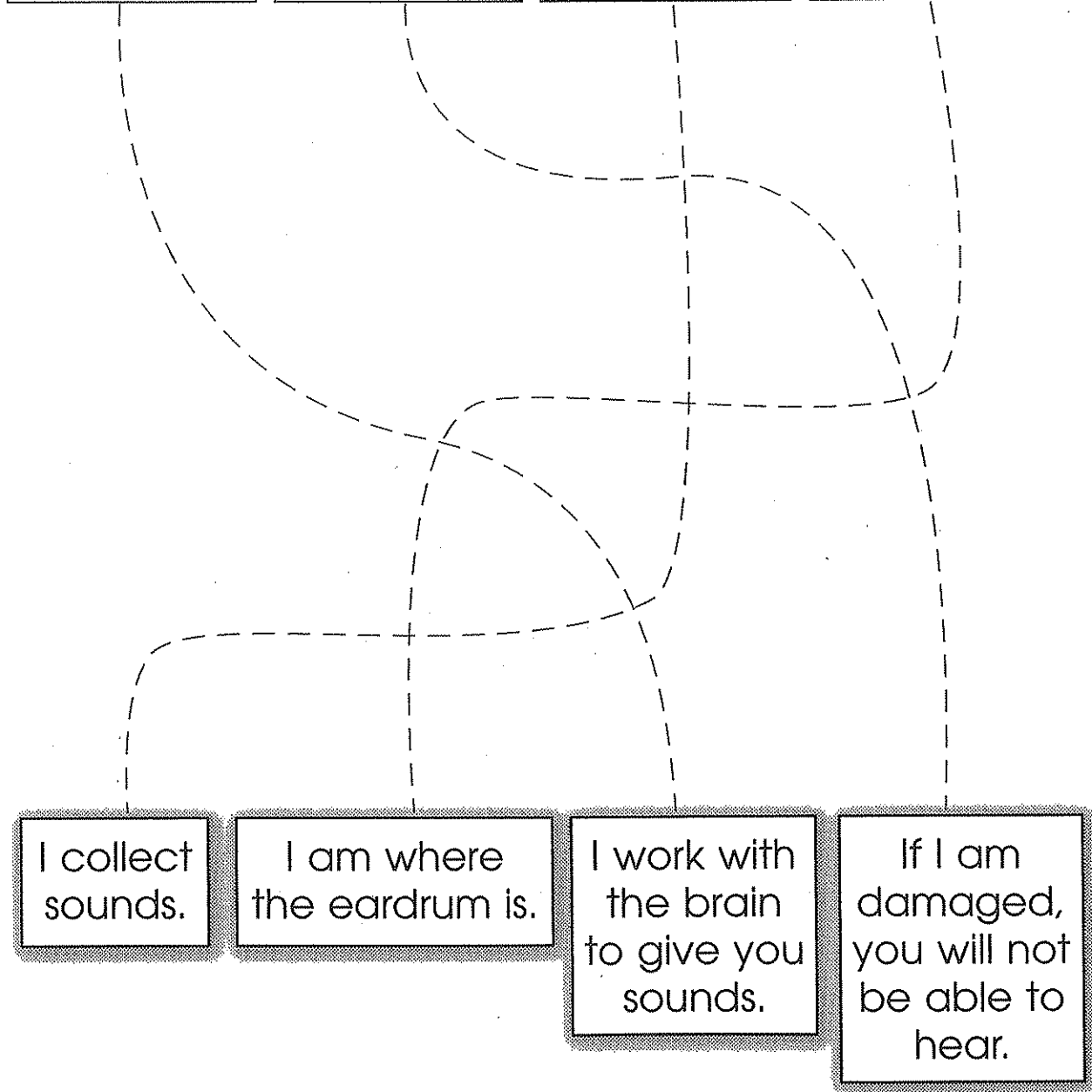
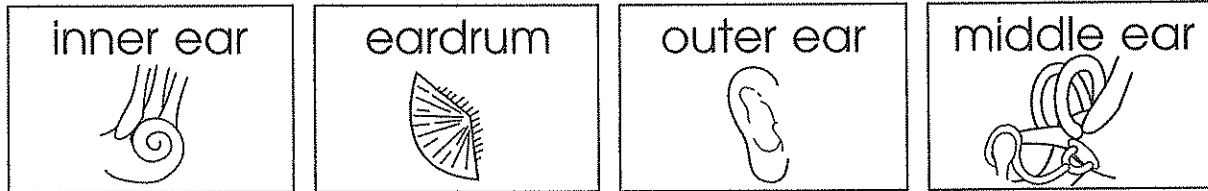
The inner ear works with the brain to help us understand the sounds we hear.



Parts of our ears



Match each ear part with its use.



Sounds we hear



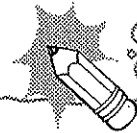
We use our ears to hear sounds around us. Colour the pictures that show the use of the ears.



Sounds

We can hear different kinds of sounds — loud or soft, high or low, pleasant or unpleasant, far or near.

We can also hear noises, voices and music.



Look at each picture. Then circle the correct answer.



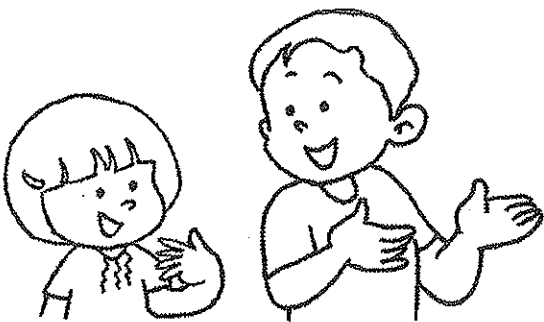
music

noise



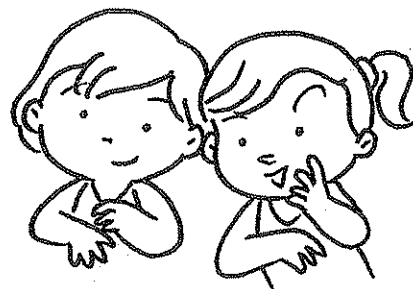
loud

soft



music

voices



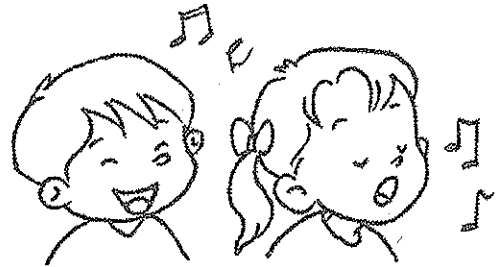
far

near



loud

soft



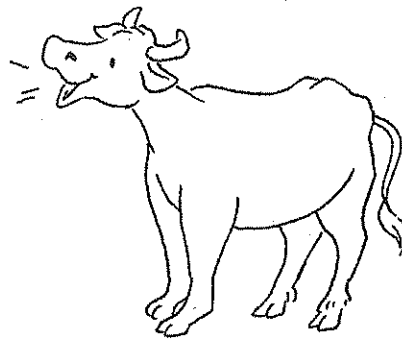
music

noise



high

low



high

low



pleasant

unpleasant



pleasant

unpleasant

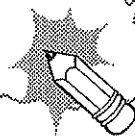
Our nose



Our nose helps us to smell. It has two holes called the nostrils.

The nose has a lot of short nostril hairs that trap dirt and dust. The nose also moistens and cleans the air we breathe in before it moves into our lungs.

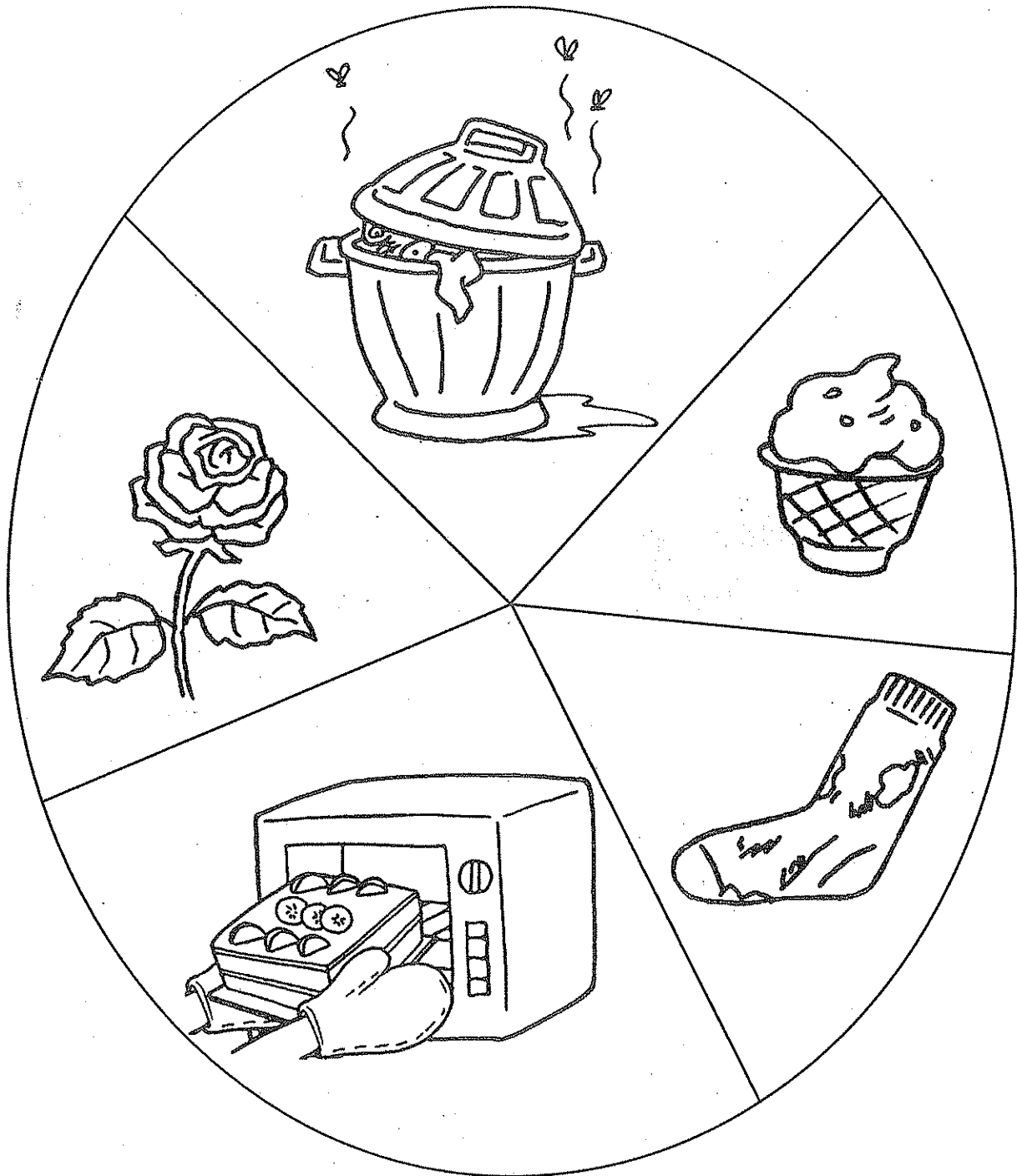
We can smell different kinds of smell. However, when we have a cold, we cannot smell very well.



Do they smell nice?



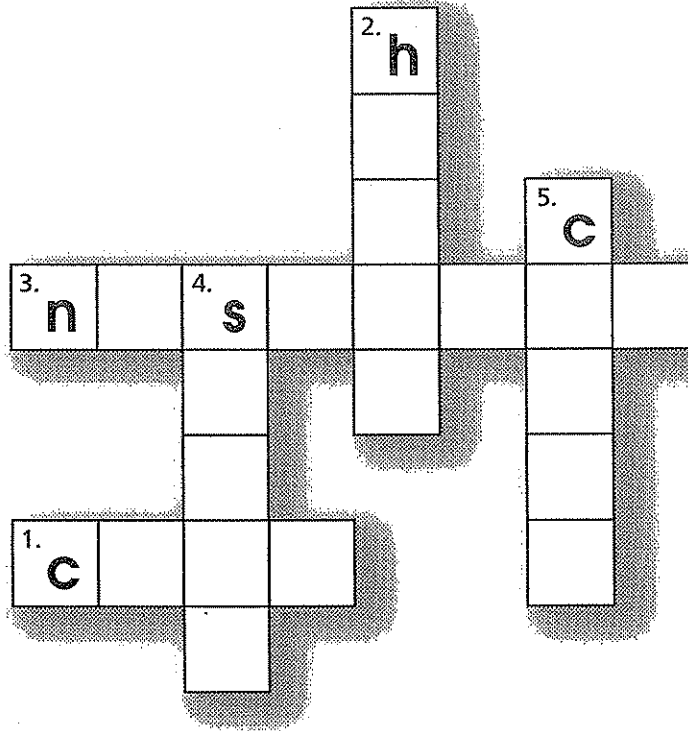
Colour the things that smell nice.



How do our noses work?



Complete the crossword puzzle.



Across:

1. When we have a _____, we cannot smell very well.
3. We have two _____ on our nose.

Down:

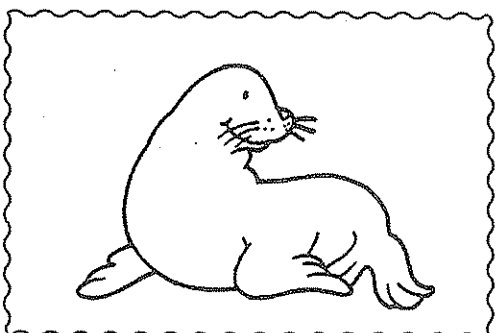
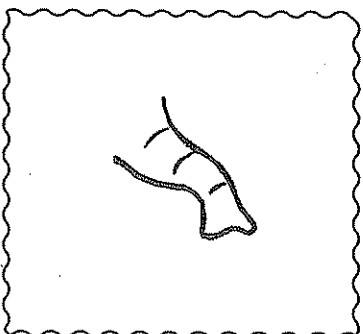
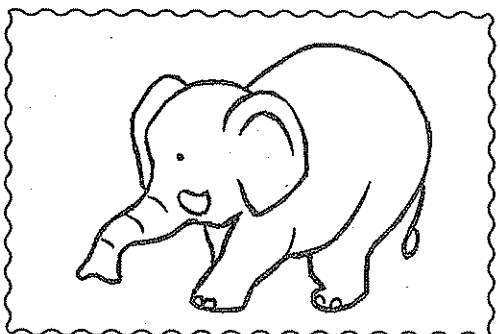
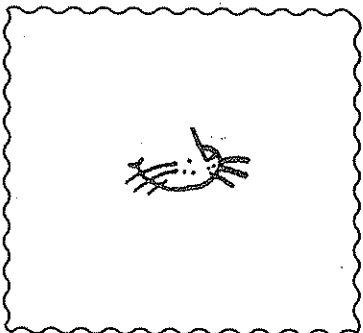
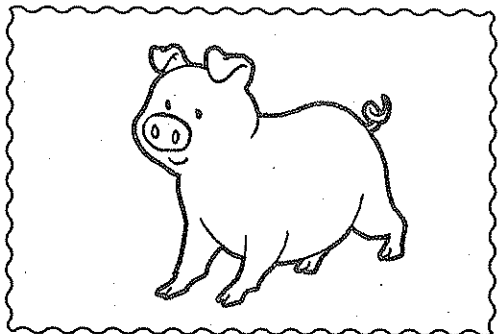
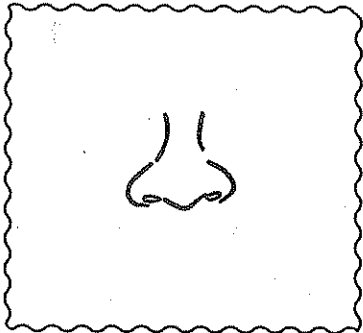
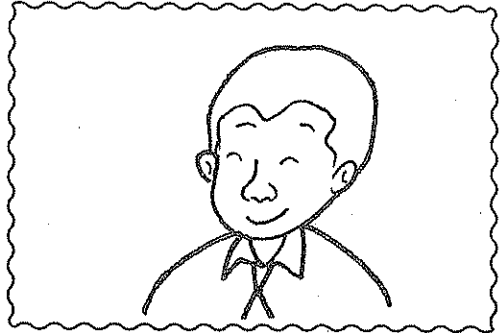
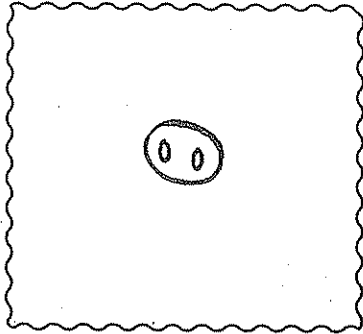
2. The nose has _____ to trap dust.
4. Our nose helps us to _____.
5. The nose can _____ the air we breathe in.



Whose nose is this?



Match each nose with the correct picture.

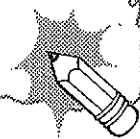
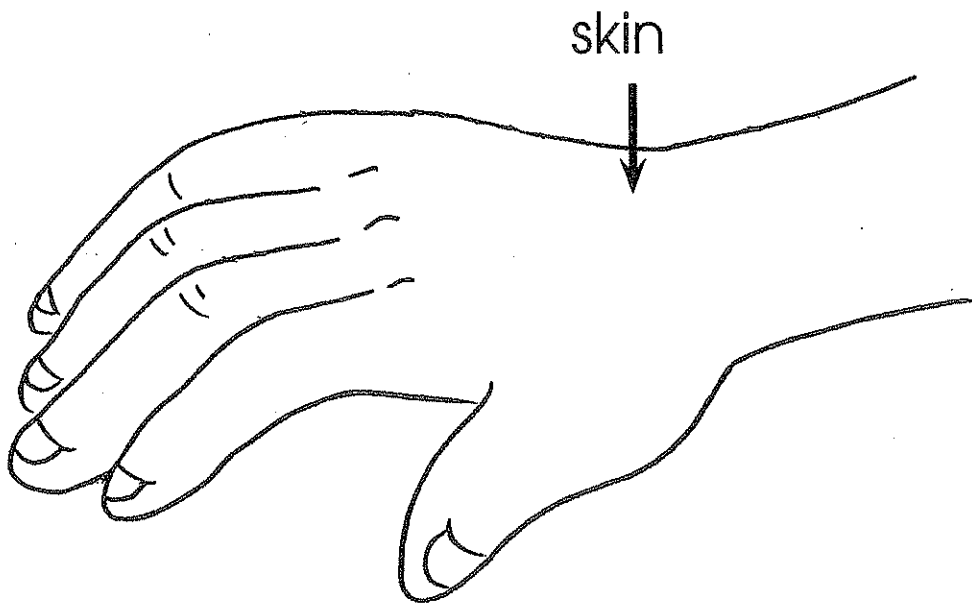


Our skin



Our skin helps us to feel. We can feel if something is hot or cold, rough or smooth, soft or hard, sharp or blunt.

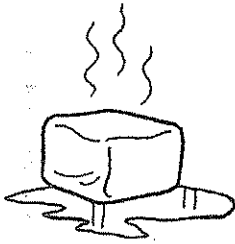
The skin is the biggest organ in our body. It covers and protects everything inside our body. The skin also prevents germs from entering our body and protects us from any bumps, cuts or scratches.



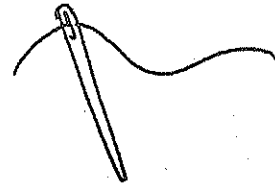
How does it feel?



Fill in each blank with the correct word from the box.



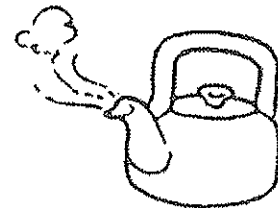
The ice feels _____.



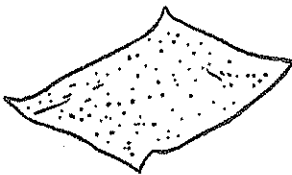
The needle feels _____.



The pillow feels _____.



The kettle feels _____.



The sandpaper feels

_____.

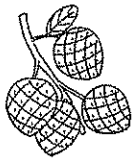
Skin of fruits



All fruits have different types of skin. The skin of each fruit can be smooth or rough.

Look at each fruit. Then write their names in the correct column.

lychee



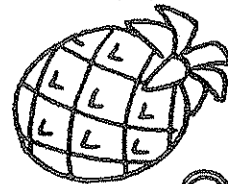
pear



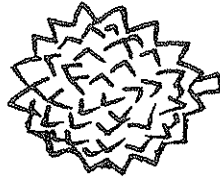
cherry



pineapple



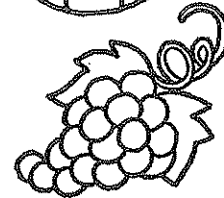
apple



durian



strawberries



grapes

Fruit with rough skin	Fruit with smooth skin

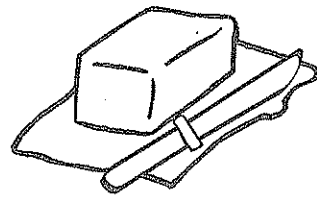
Feel them



How do the things below feel? Circle the word that correctly describes it.



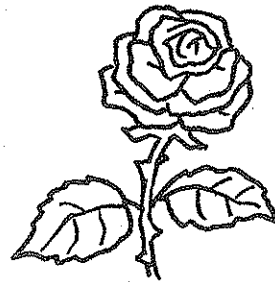
soft / hard



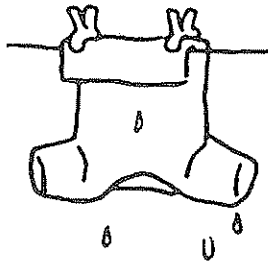
oily / sticky



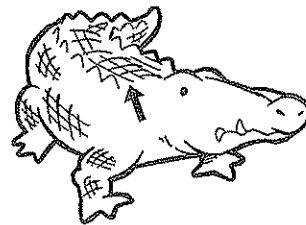
hot / cold



blunt / thorny



wet / dry

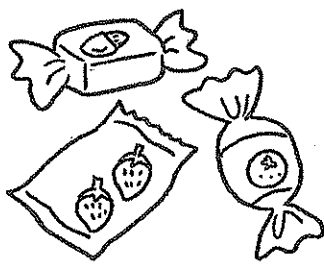
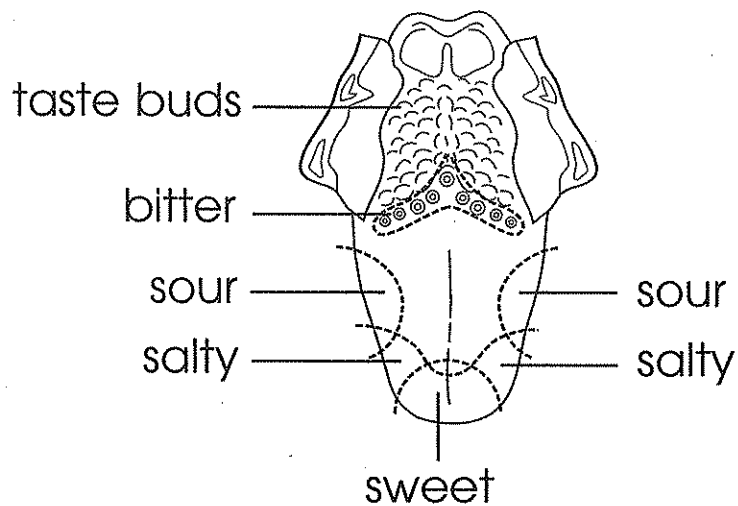


smooth / rough

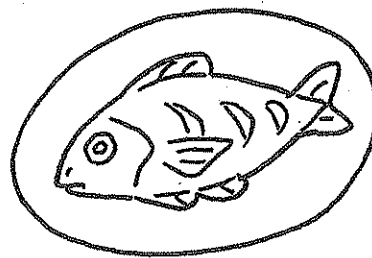


Our tongue

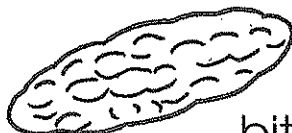
The tongue helps us to taste. It tells us if something has a taste or no taste. The little bumps on our tongue are called the taste buds. These taste buds help us to know if something tastes sweet, bitter, salty or sour.



sweet



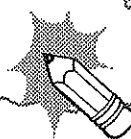
salty



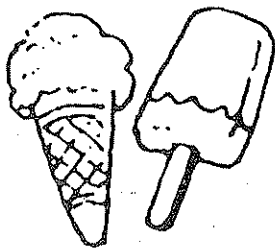
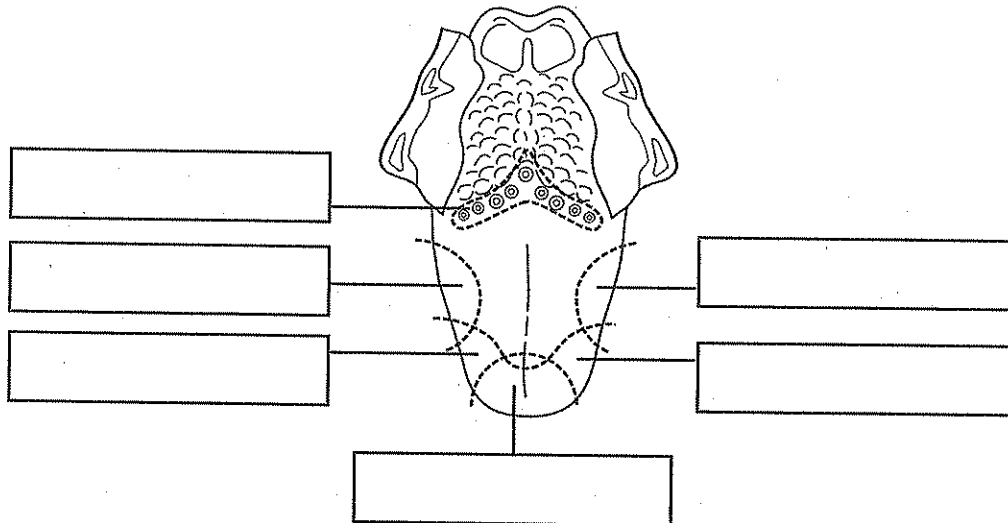
bitter



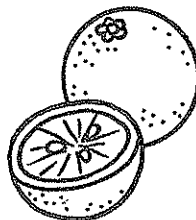
sour



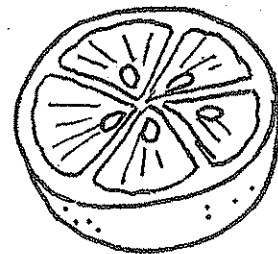
Where do we taste each food? Write down the names of each food in the correct boxes.



ice cream



lime



lemon



fries



noodles



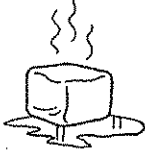
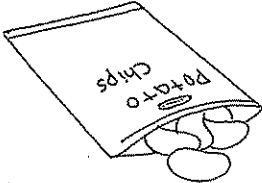
pills

More about our tongue



Our tongue can also help us to feel if the food is hot or cold, hard or soft, crispy, lumpy or smooth.

Colour the picture that matches the word on the left.

Feel	Food	
hot		
cold		
hard		
soft		
crispy		

Good hygiene



It is important to keep ourselves clean from sweat, dirt, body odour and germs. We bathe regularly to wash away dirt and sweat.

We should also keep ourselves neat and tidy at all times.



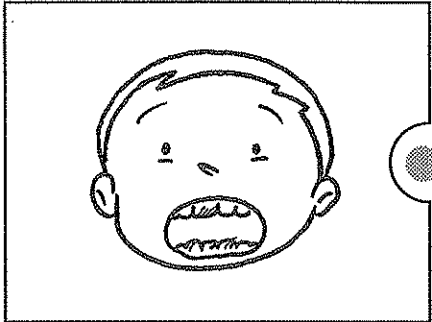
Which pictures show good hygiene? Colour them.



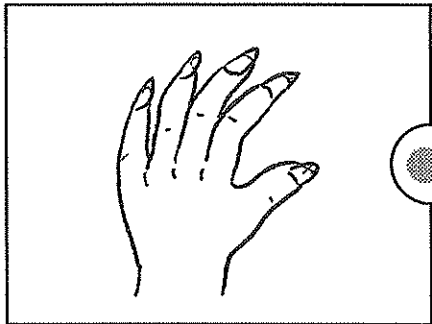
Why must I keep myself clean?



Match each picture with the correct sentence.



● Dirt and germs will hide under my nails if I do not trim them.



● My teeth will decay if I do not brush my teeth.



● My head will feel itchy if I do not wash my hair.

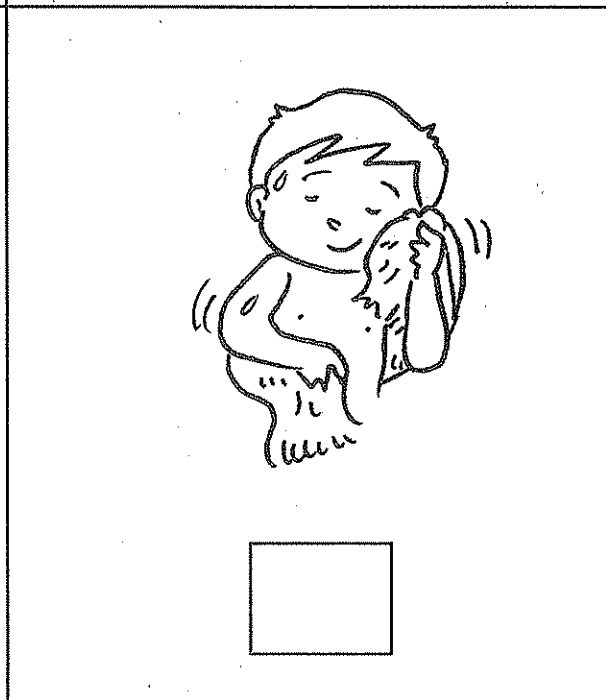
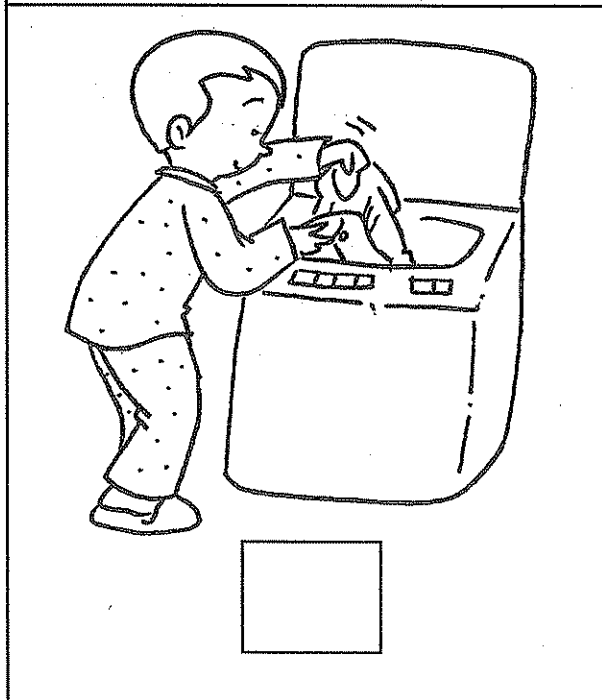
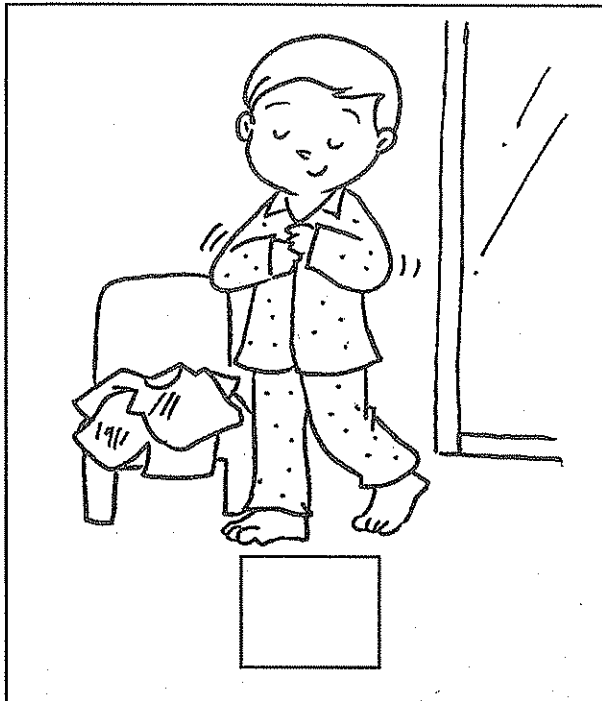


● I will smell if I do not bathe after exercising.

More on good hygiene



Arrange the pictures in the correct sequence by writing 1, 2, 3 and 4 in the boxes.



What do I use?



Fill in each blank with the correct answer.

1. I trim my _____



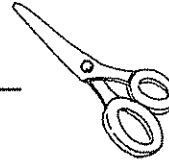
with a _____



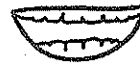
2. I cut my _____



with a pair of _____



3. I brush my _____



with a _____



4. I wipe my _____



with a _____



5. I wash my _____



with _____



Good habits



Fill in each blank with 'before' or 'after'.

1. I brush my teeth

_____ eating.

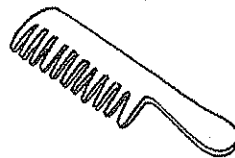


2. I flush the toilet

_____ using it.

3. I comb my hair

_____ going to school.



4. I bathe _____
exercising.

5. I wash my hands

_____ eating my food.



6. I wash my hands

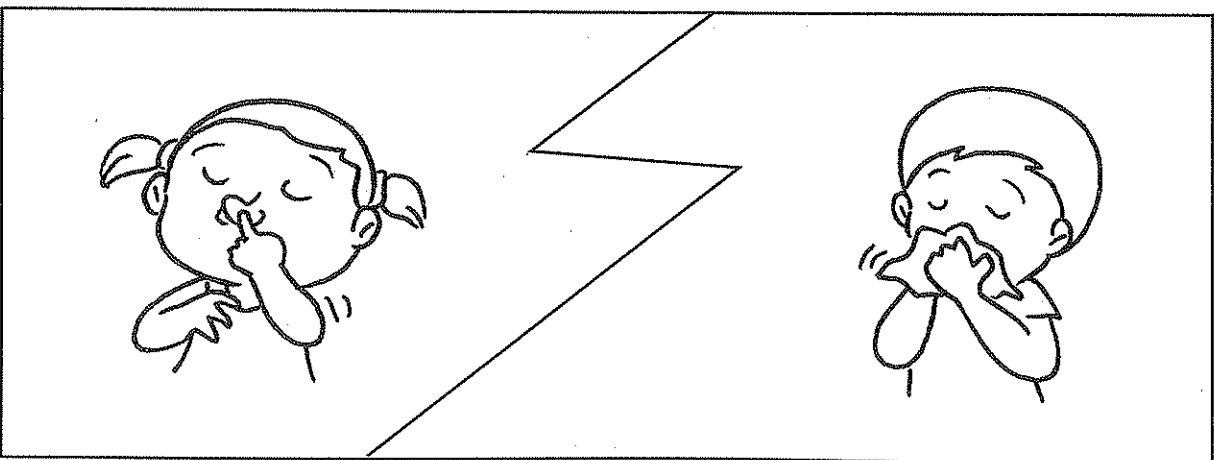
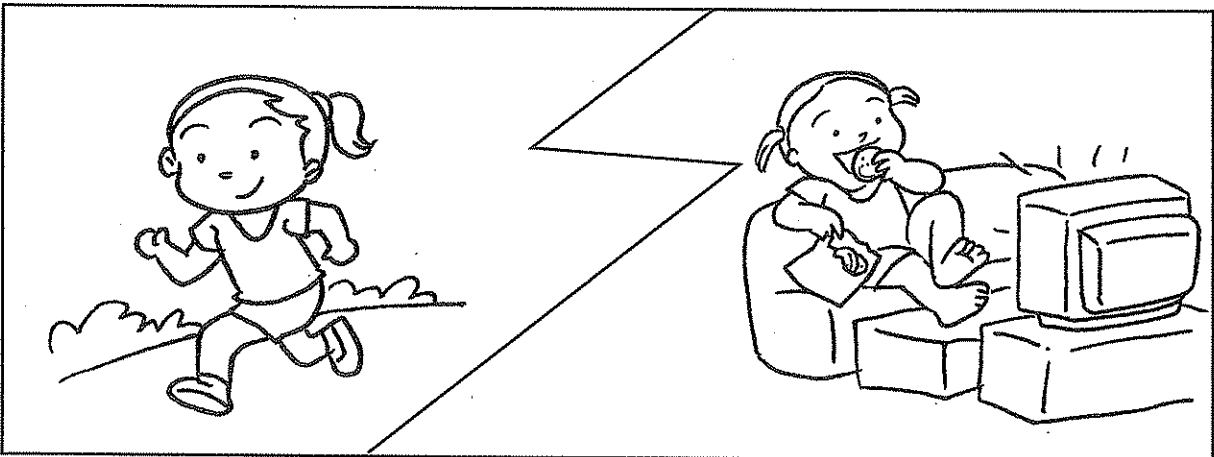
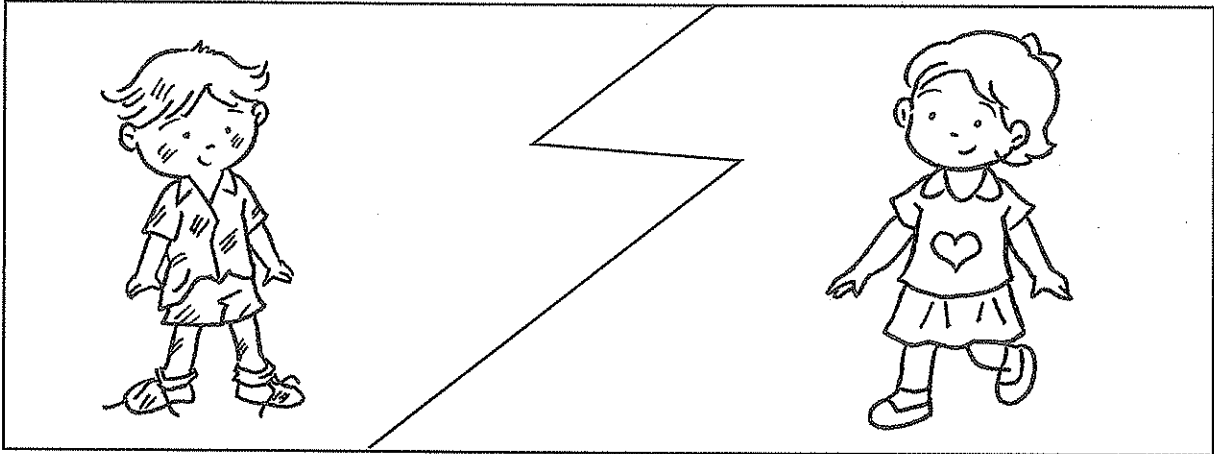
_____ blowing my nose.



More good habits



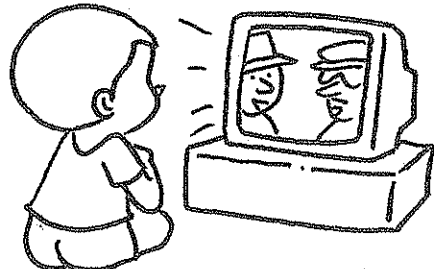
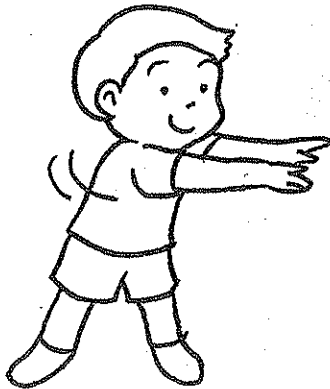
Colour the child who has the correct habit.



What I do



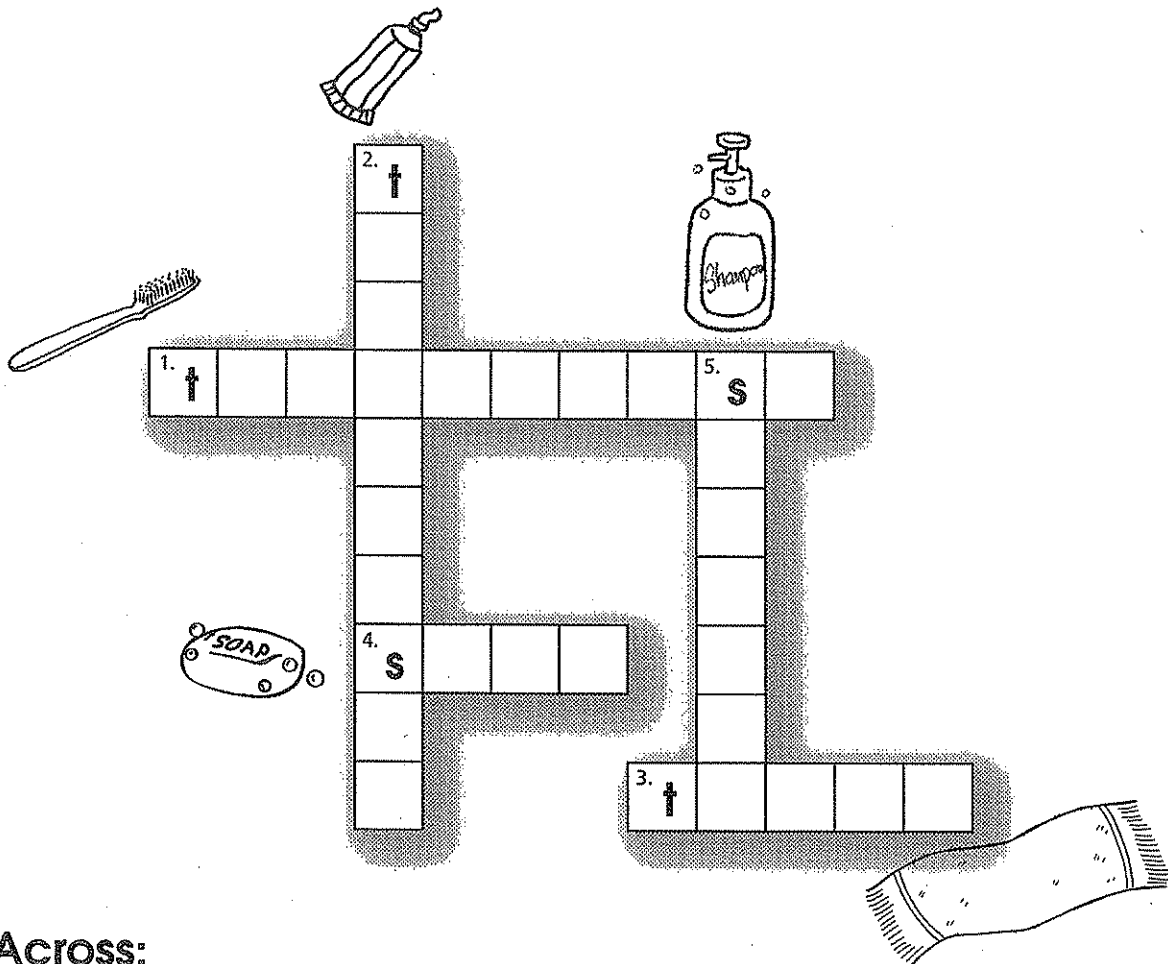
What do you do before going to school?
Circle them.



What am I?



Complete the crossword puzzle.



Across:

1. You brush your teeth with this.
3. You use this to dry your body after bathing.
4. You use this to wash away the dirt on your hands and your body.

Down:

2. It contains fluoride which helps fight against tooth decay.
5. You use this to wash your hair.

Keep the teeth clean



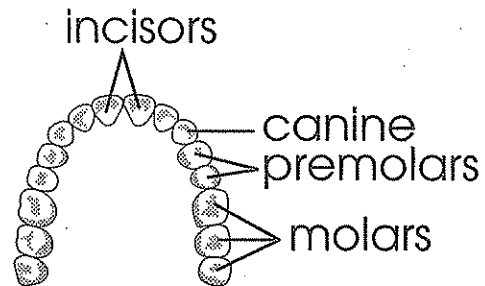
We use our teeth to tear,
cut and chew our food.

The incisors are used for
cutting food.

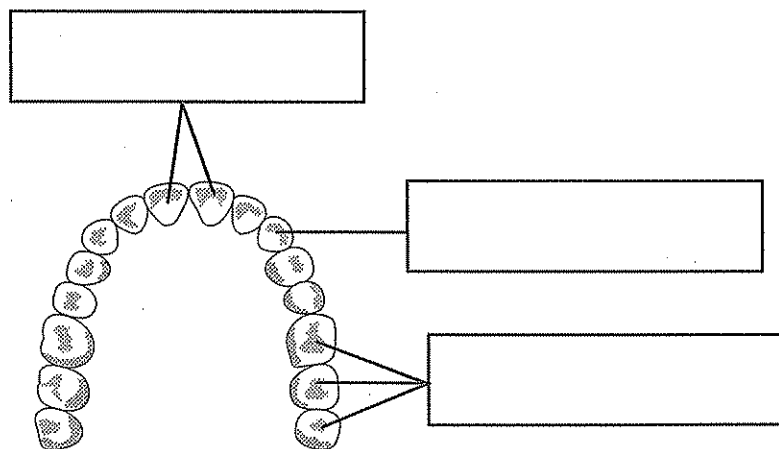
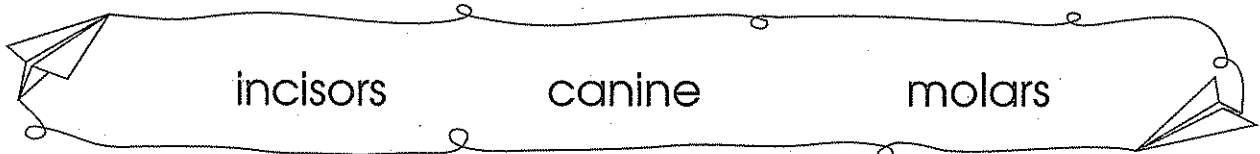
The canines are used for
tearing food.

The molars and premolars
are used for chewing food.

We must brush and floss our teeth regularly to keep
away bad breath and to prevent tooth decay.



Label the teeth using the words from the box.



Exercise



Exercise is good for our body. It keeps us healthy and strong. Exercise also helps our heart and lungs to work better.

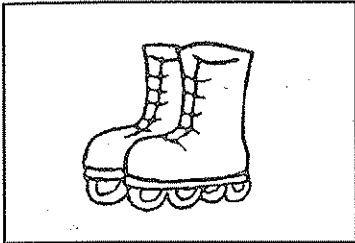
Exercises like dancing, walking, jogging and cycling are activities that can make us stronger. It is good to include about 30 minutes of exercise every day.



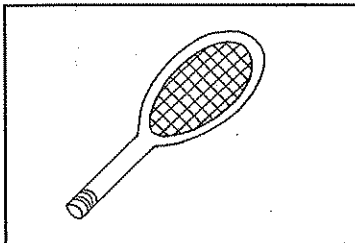
Sports equipment



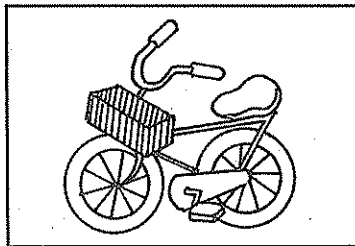
Match each equipment with the correct sport.



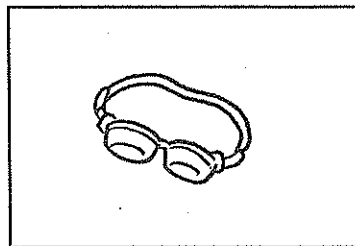
● tennis



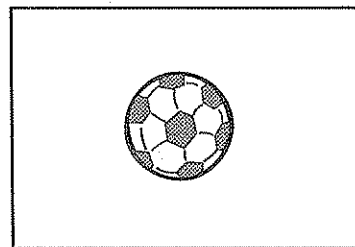
● cycling



● rollerblading



● football



● swimming



Healthy food



Food helps us to grow. Eating the right types of food makes us strong and healthy. If we do not eat enough or the right types of food, we will become thin, weak or sick.

Eating too much food can make us fat. To stay healthy, we should eat different types of food. We should also drink at least 8 glasses of water a day.



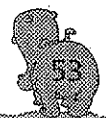
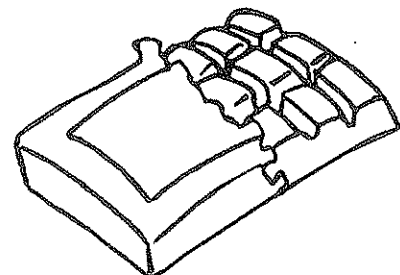
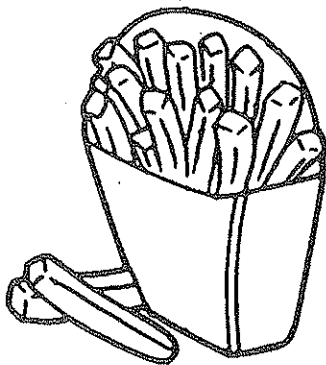
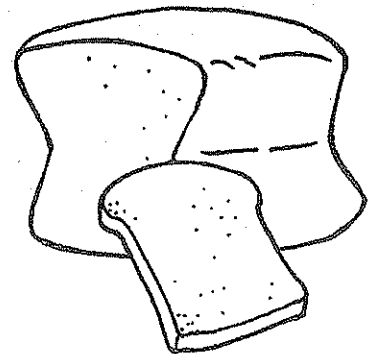
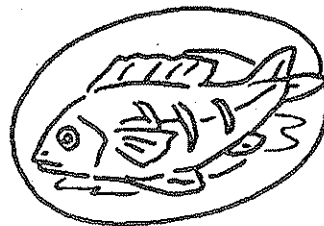
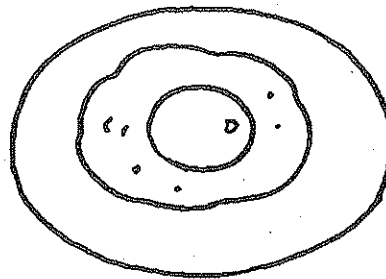
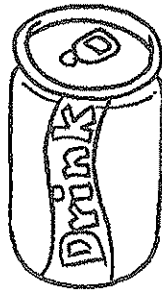
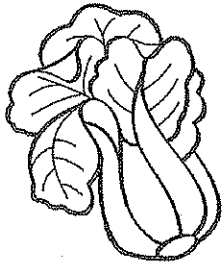
How many glasses of water should we drink a day?
Colour them.



What must I eat?



Colour the types of food that are good for you.



Types of food

Name the types of food below.

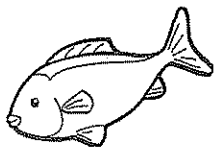
Energy-giving food

These foods give us energy.



Bodybuilding food

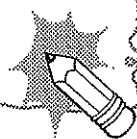
These foods help us to grow stronger and bigger.



potato
bread
rice

chicken
butter
peas

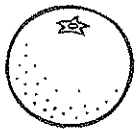
egg
fish





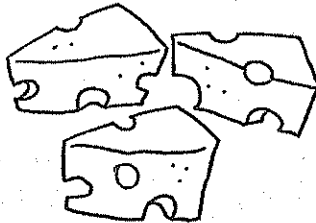
Fruits and vegetables

These foods give us vitamins and help us to fight germs.



Dairy food

These foods give us strong bones and teeth.



broccoli	tomato	cheese	cabbage
yoghurt	orange	milk	



Choosing the right food



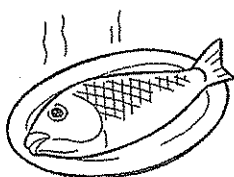
Where does each food belong?
Group them correctly.



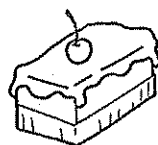
ice cream



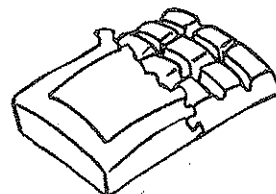
apple



fish



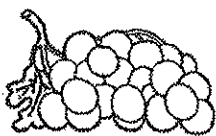
cake



chocolate



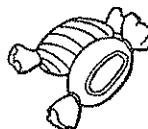
egg



grapes



milk



sweets

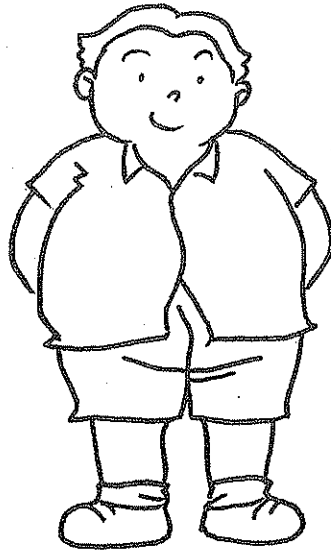


fizzy drink

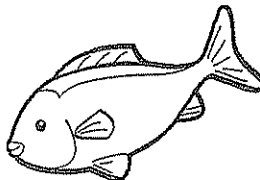
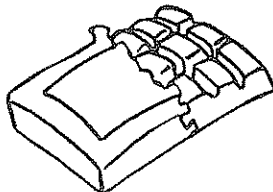
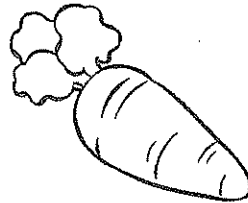
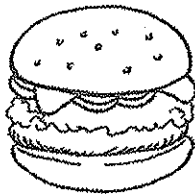
Foods that we should eat/drink less of	Foods that we should eat/drink more of

More healthy food

Look at the picture below.
Which boy is heavier? Circle him.

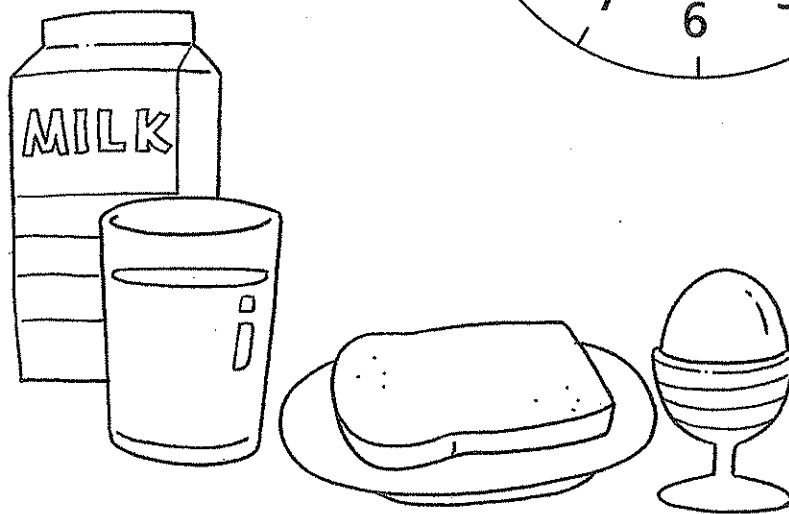
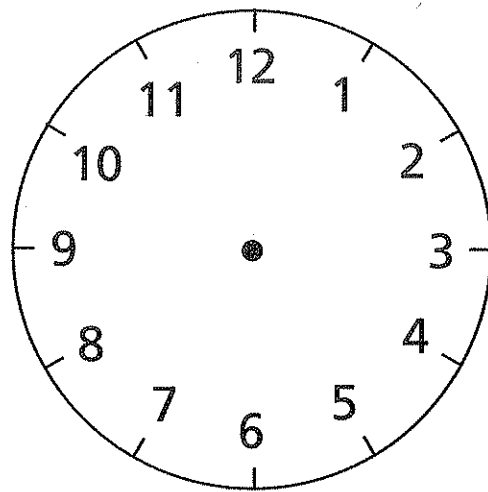


What foods should the heavier boy avoid? Cross ☐ them out.

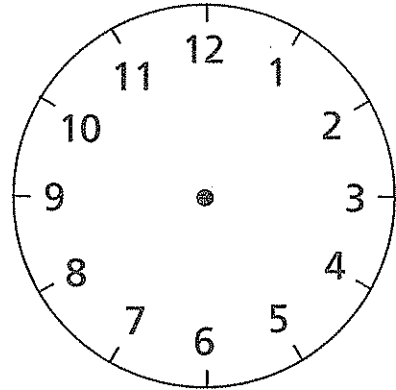
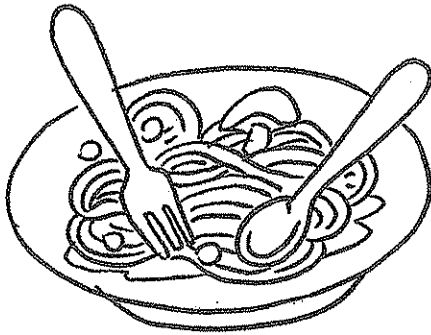


Meal times

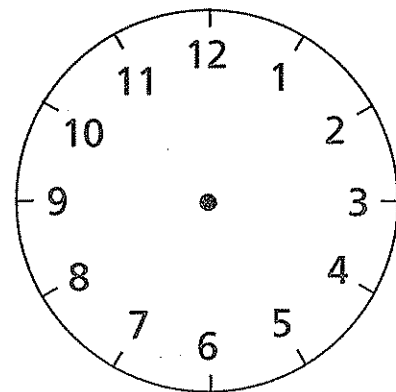
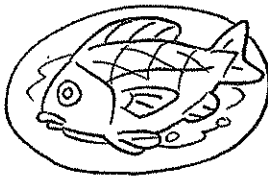
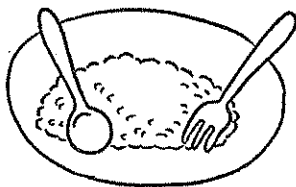
We should eat three proper meals a day to stay healthy.
Draw in the hands of the clock to show the time you take
your meals.



I have my breakfast at _____ in
the morning.



I have my lunch at _____ in the afternoon.



I have my dinner at _____ in the evening.

Three meals of the day



Fill in each blank with the correct answer.

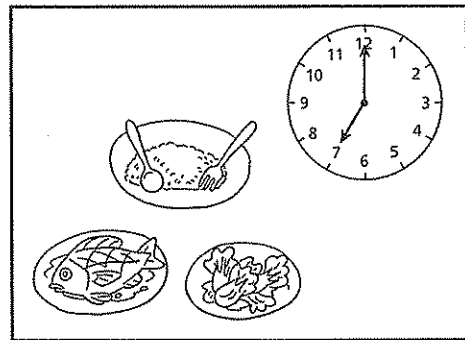
breakfast

lunch

dinner

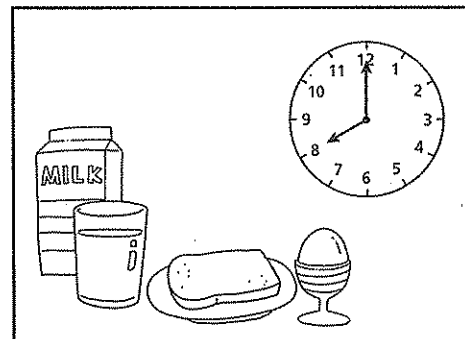
I have my _____

at seven o'clock.



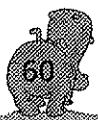
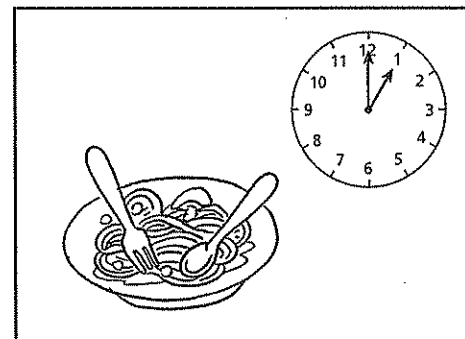
I have my _____

at eight o'clock.



I have my _____

at one o'clock.

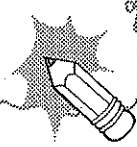
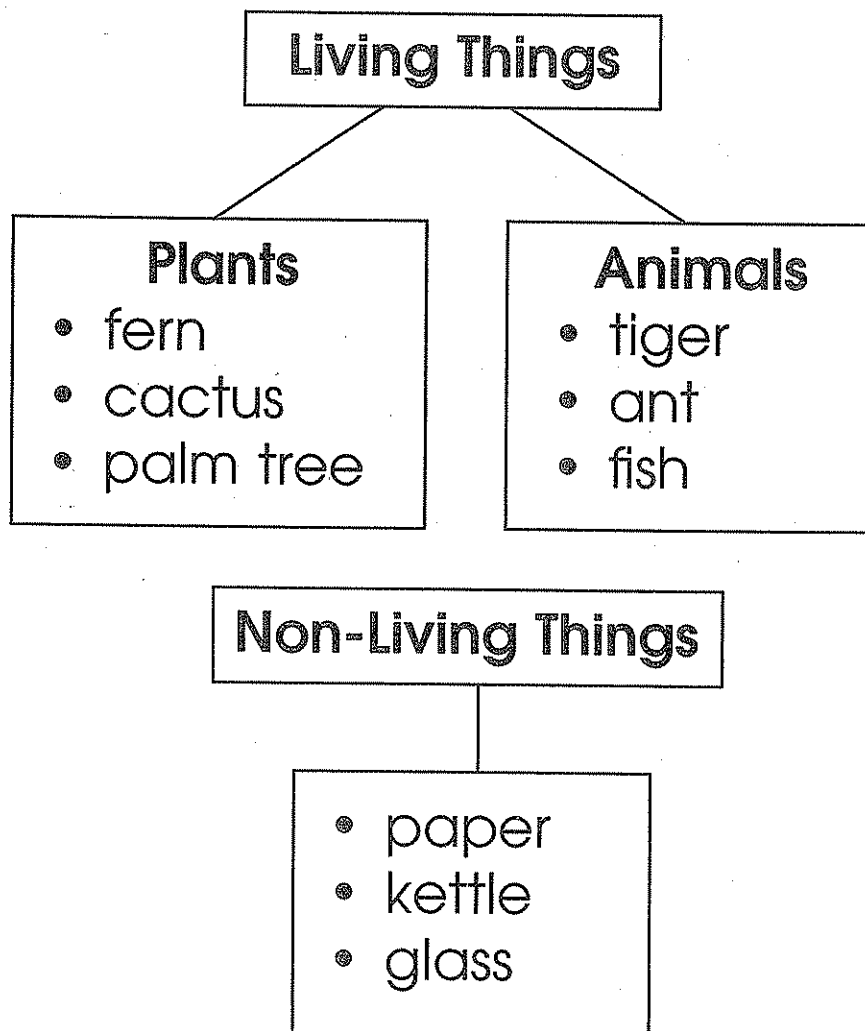


Living and non-living things



Plants and animals are living things. They need food, air and water. Without them, all living things will die.

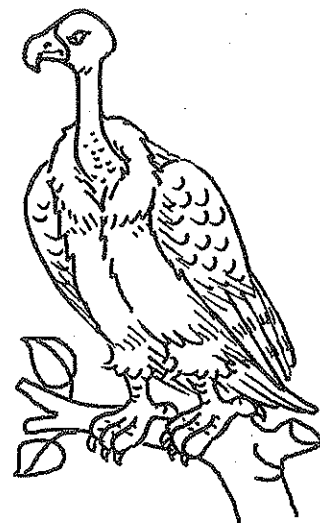
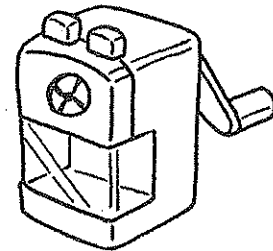
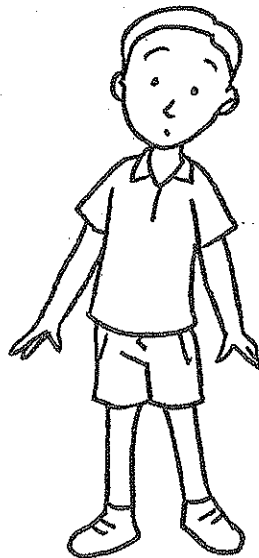
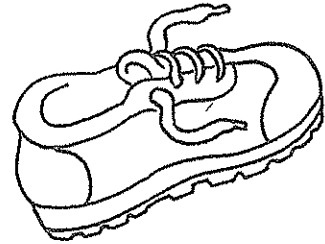
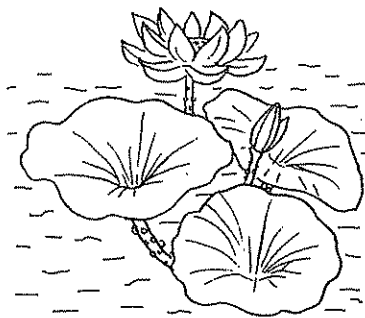
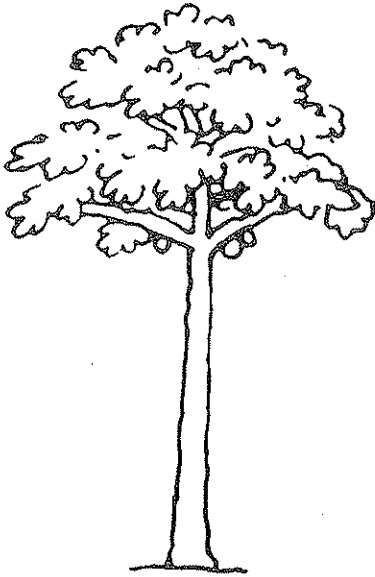
Non-living things are things that are not alive. They do not need food, air and water.



Living or non-living thing?



Colour the living things red.
Colour the non-living things green.

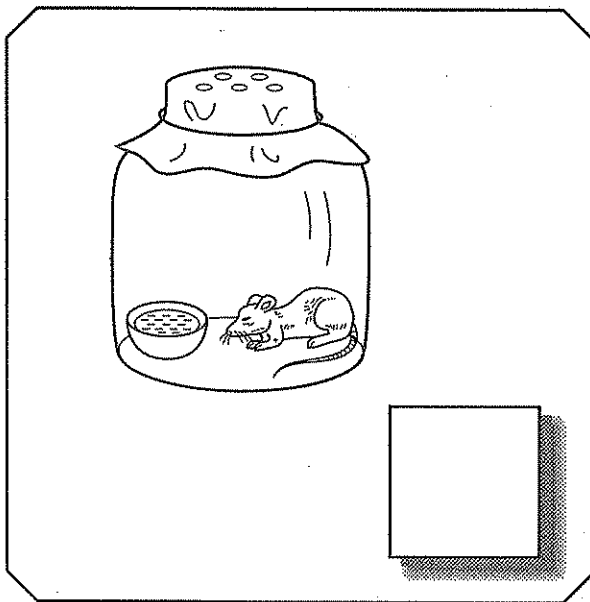
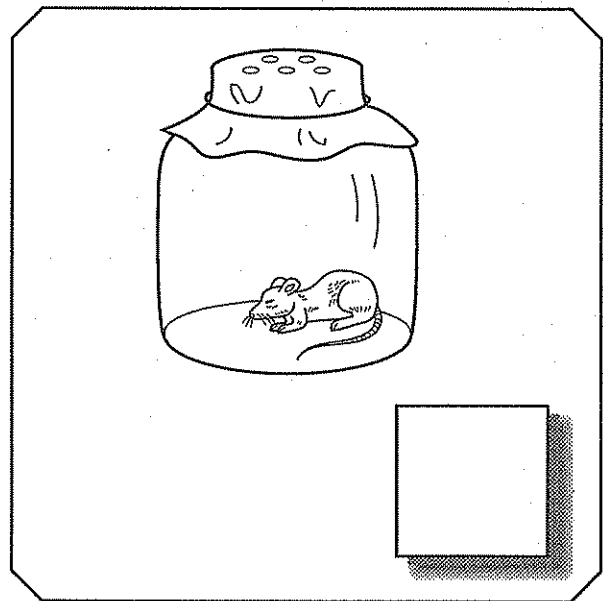
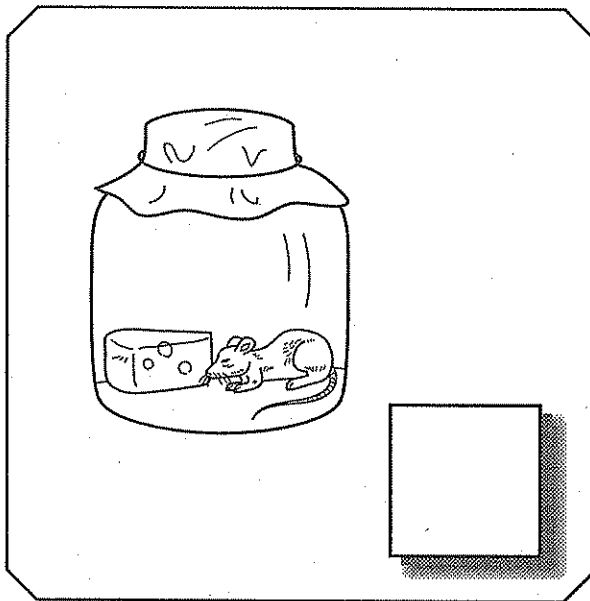


What will happen?



Living things can live for a few days without water or food.
They die very quickly without air.

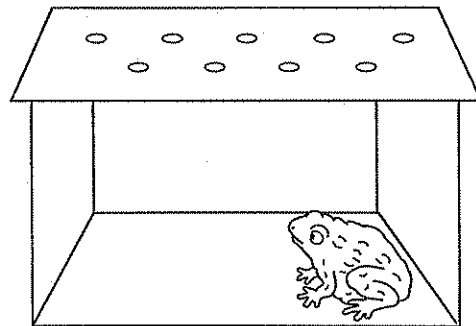
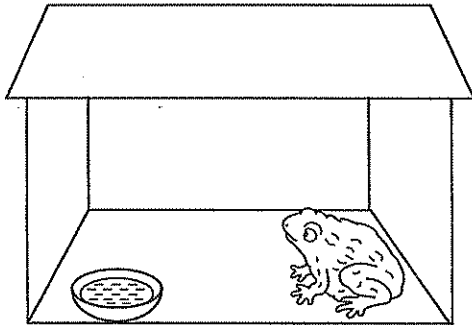
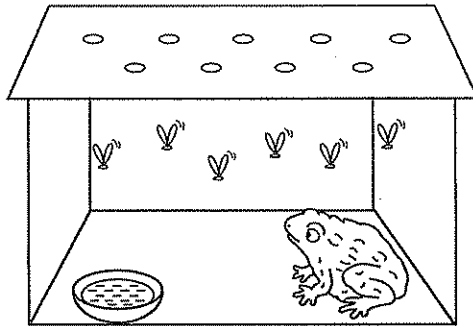
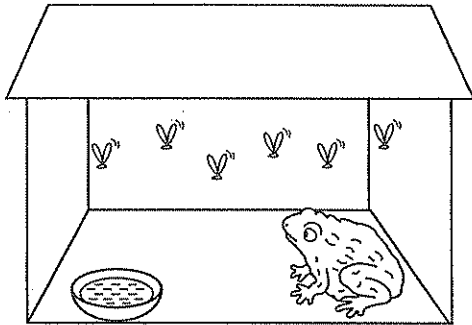
Tick the box to show which rat will die most quickly.



Which toads will die?



Cross ☐ out those toads that will die after 2 weeks.



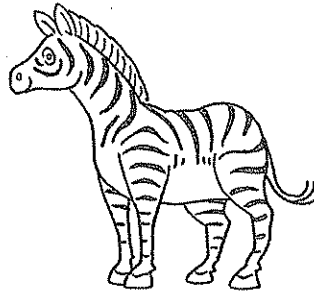
Living things



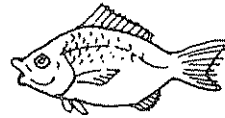
Group the living things correctly.



cotton plant



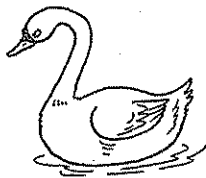
zebra



fish



orchid



swan



rose plant



ant



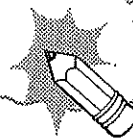
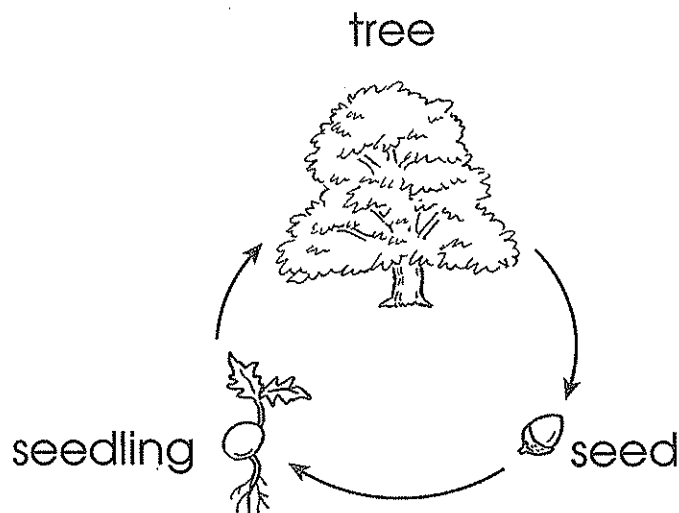
coconut tree

Plants	Animals

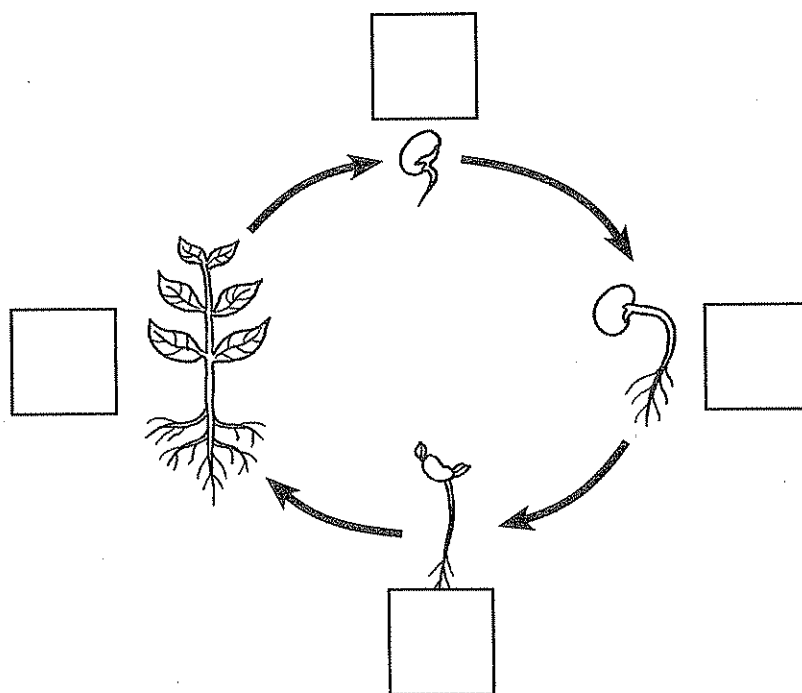
Living things grow



Living things can grow. Non-living things cannot grow.



How does a plant grow? Write 1, 2, 3 and 4 in the correct boxes.

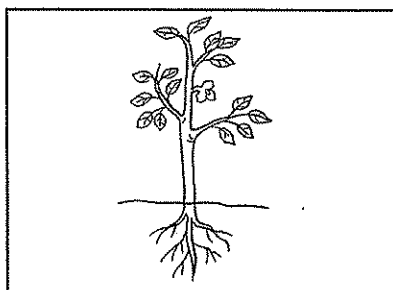
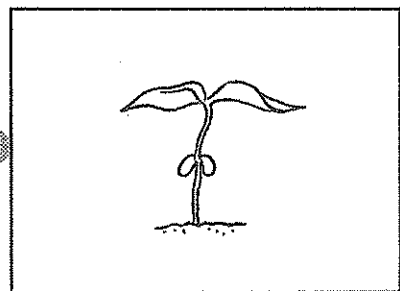
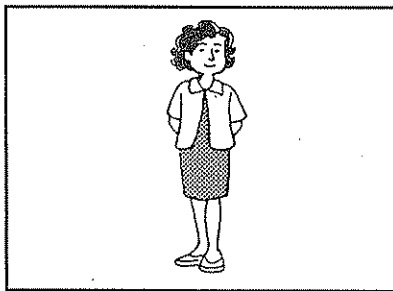
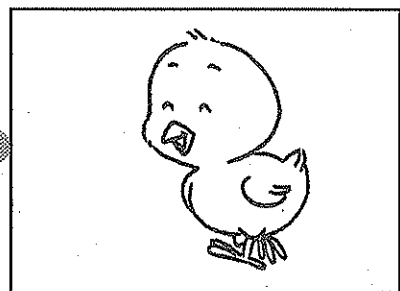
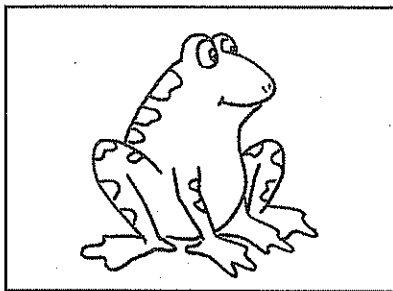
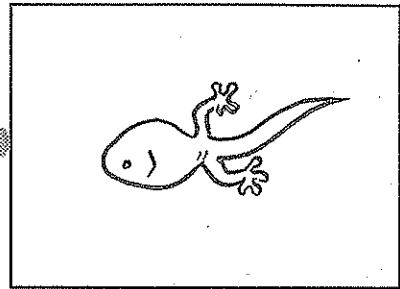
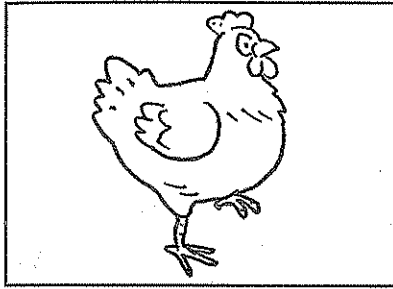


Living things and their young



Living things have young.

Match each living thing with its/her young.



Young animals



Find and circle the name of each young animal in the puzzle.



puppy

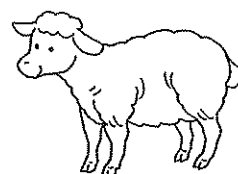


calf

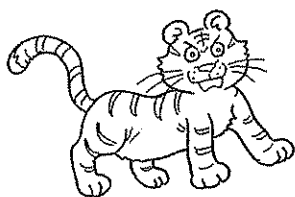


kitten

p	b	s	c	t	y	n
u	f	k	x	u	m	i
p	k	i	t	t	e	n
p	s	d	v	j	l	m
y	c	l	e	a	r	p
w	t	r	h	j	f	v
i	c	a	l	f	l	q
d	u	y	a	m	n	c
r	b	j	m	f	d	t
c	m	k	b	a	z	y



lamb



cub



kid

How things move?



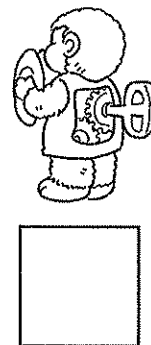
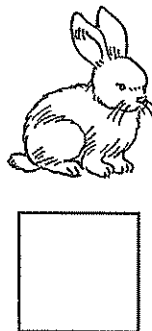
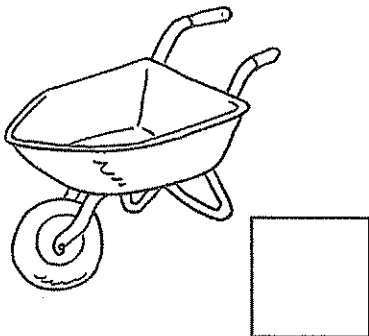
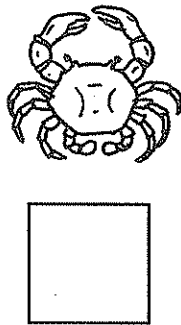
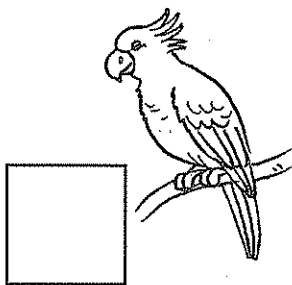
Living things can move on their own. Animals and humans move to look for food, run from danger and seek shelter. They move by walking, running, crawling, swimming, hopping or flying.

Non-living things cannot move on their own. They need to be pushed, wound or pulled. Batteries can be used to make them move.



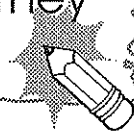
Look at each picture.

Write 'l' for living things and 'n' for non-living things in the boxes.

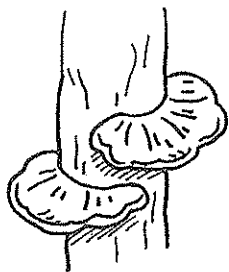


Fungi

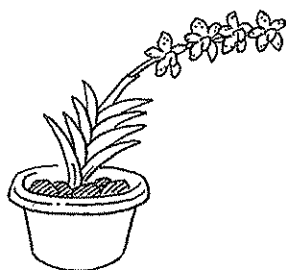
Fungi are a group of living things that look like plants, but they cannot make their own food. They depend on other things for food.



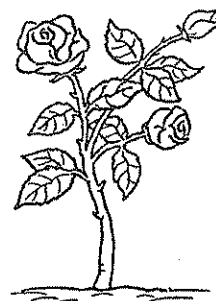
Colour the fungi brown.



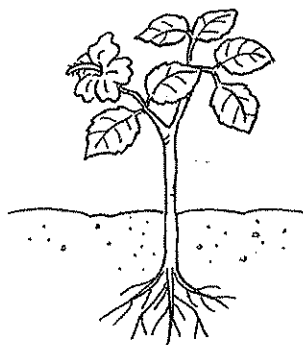
bracket fungi



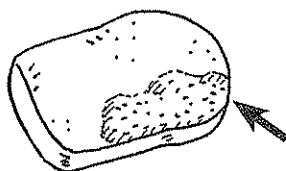
orchid plant



rose plant



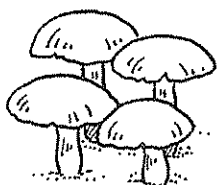
hibiscus plant



mould



mushroom



toadstools



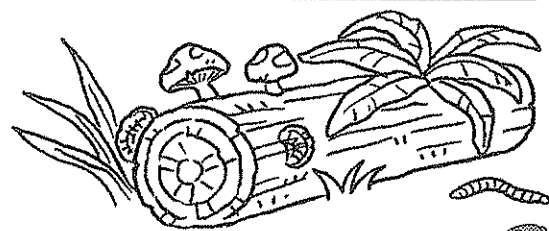
Jew's ears

Find and circle the name of each fungus in the puzzle.

mushroom
white fungus
mould

toadstool
bracket fungus

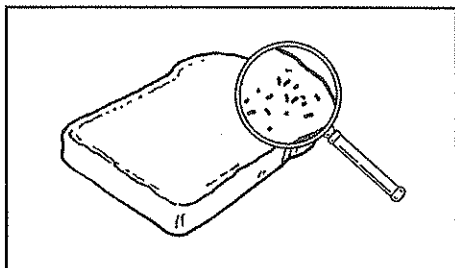
m	o	u	l	d	m	w	r	p	t	b	o	d
u	w	i	u	i	t	s	f	l	g	r	k	e
s	s	j	h	j	j	m	w	s	e	a	x	s
h	d	n	b	n	v	s	b	j	v	c	n	g
r	f	b	d	g	d	d	j	g	h	k	g	h
o	c	d	c	v	e	f	o	b	j	e	v	j
o	u	v	h	t	o	j	m	f	b	t	d	k
m	g	c	k	e	o	g	d	e	d	f	c	l
w	w	h	i	t	e	f	u	n	g	u	s	z
e	y	f	t	c	j	h	l	w	d	n	p	x
r	g	s	b	n	g	j	d	f	r	g	j	v
t	b	w	d	l	b	k	k	u	g	u	d	b
t	o	a	d	s	t	o	o	l	m	s	c	n



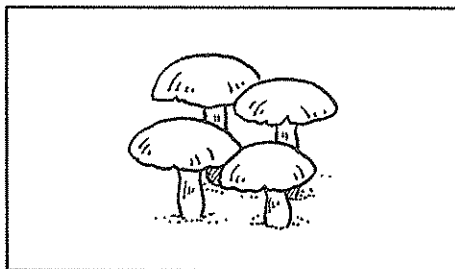
More about fungi



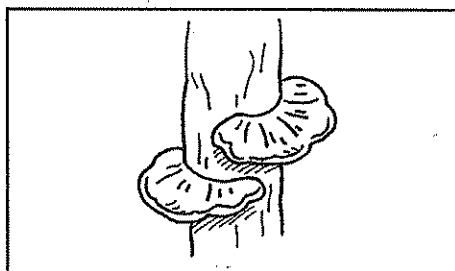
Match each picture with its name.



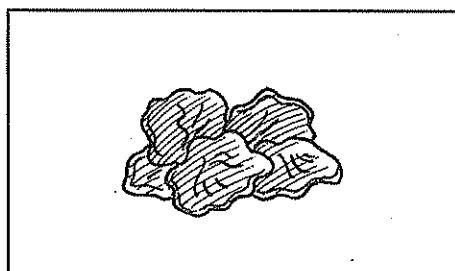
bracket fungi



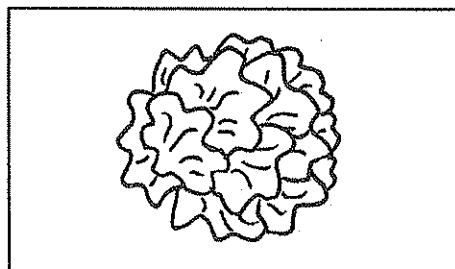
mould



Jew's ears



white fungi

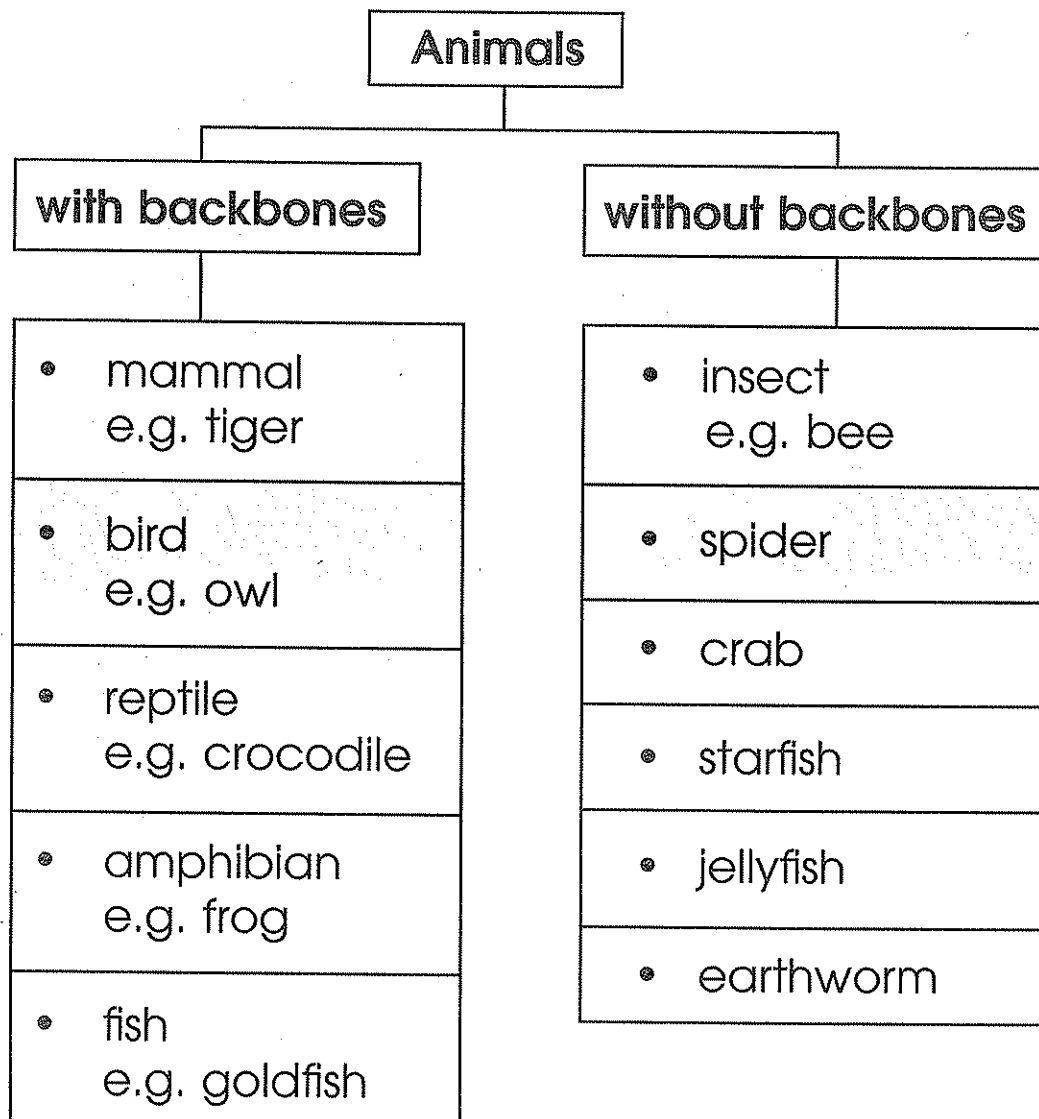


toadstools

Animals



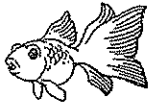
The animal kingdom is made up of many kinds of animals. We can put them into two groups — those with backbones and those without backbones.



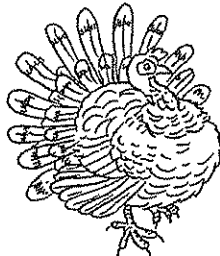
Types of animals



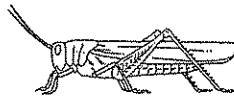
Group these animals correctly.



goldfish



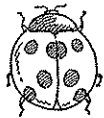
turkey



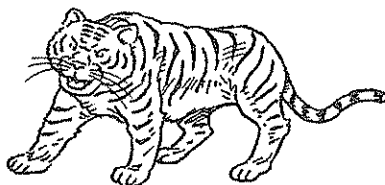
grasshopper



housefly



ladybird



tiger



frog



dragonfly

Animals with backbones	Animals without backbones

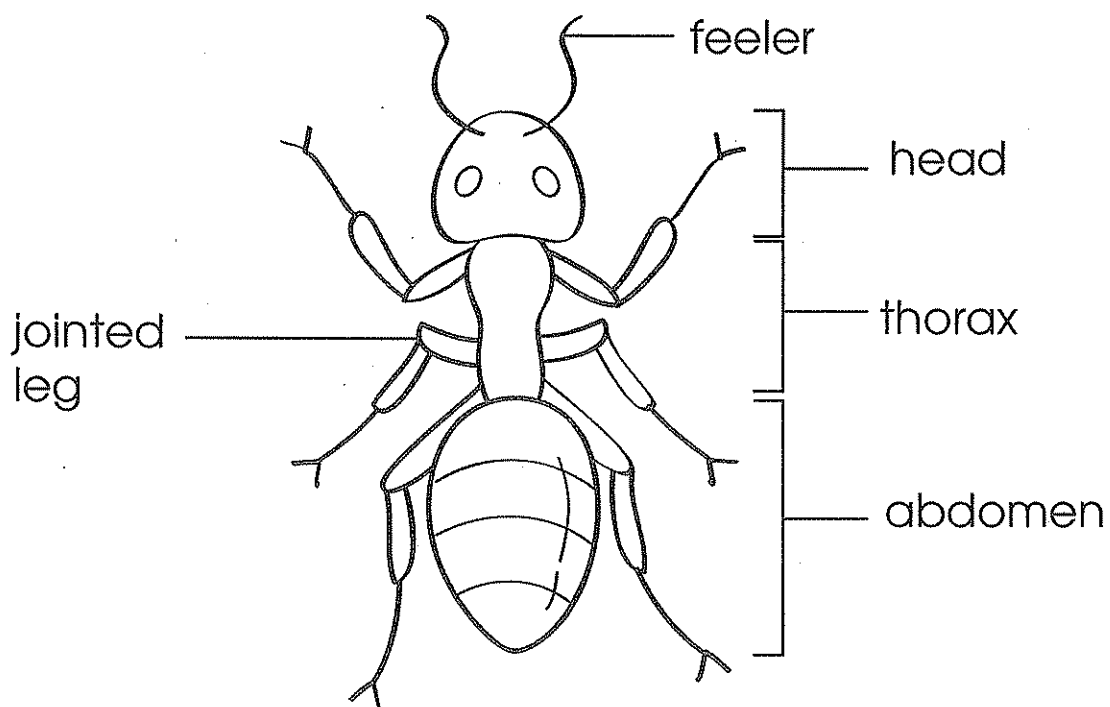
Insects



The animal kingdom is made up of many kinds of animals. The largest group of animals on earth is the insects.

Although insects are small in size, they are great in number.

All insects have three body parts — the head, thorax and abdomen. They also have six jointed legs and two feelers to smell, taste and feel. Some insects have wings.



More insects



Fill in each blank with the correct word from the box.

ladybird

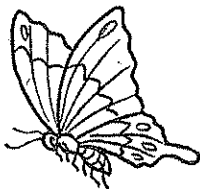
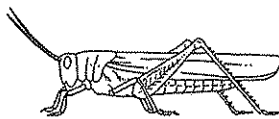
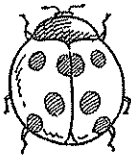
dragonfly

grasshopper

cockroach

mosquito

butterfly



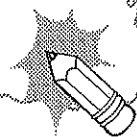
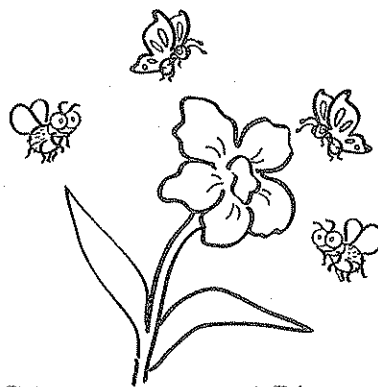
Types of insects



The mosquito sucks blood from people. Its bite makes our skin itch. The mosquito also spreads dengue fever that can make us very sick.

The butterfly and bee can be found near flowers. They collect nectar from flowers. Most butterflies have colourful wings. The bee makes honey. It lives in a beehive and can sting people or animals when it is in danger.

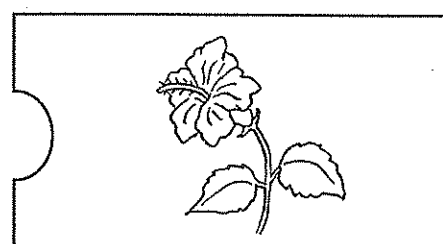
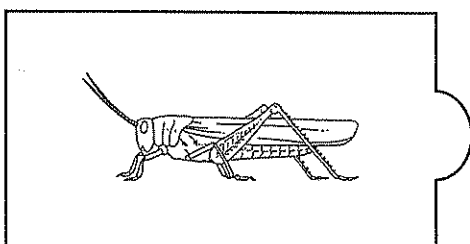
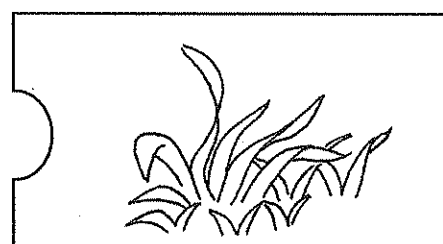
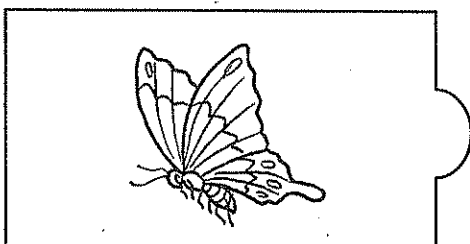
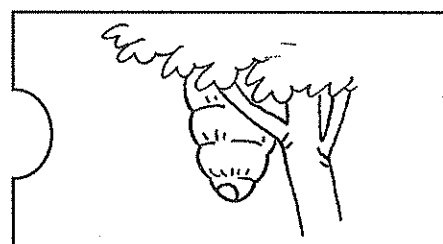
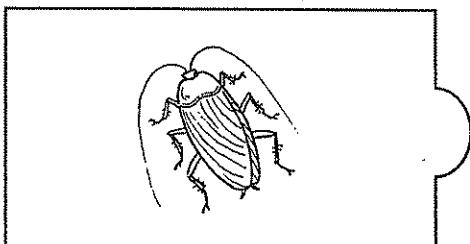
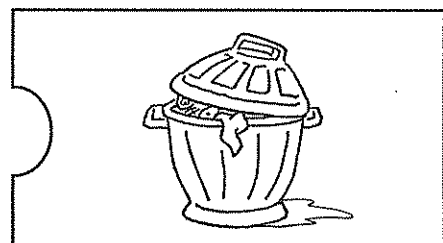
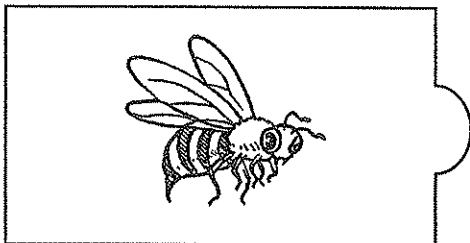
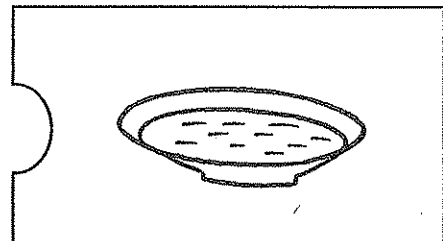
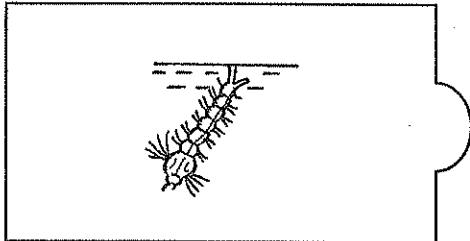
The cockroach can be found in and near rubbish bins. It feeds on food scraps. It can also make us sick.



Where can you find these insects?



Match each insect with the place where it can be found.



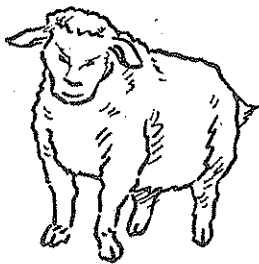
Mammals



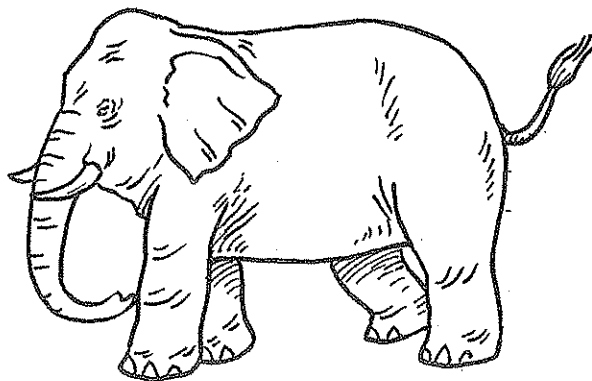
Mammals are warm-blooded animals. They give birth to their young alive. The baby grows in the body until it is ready to be born.

Some mammals give birth to one young at a time, while some give birth to many at a time. The female feeds her young with milk.

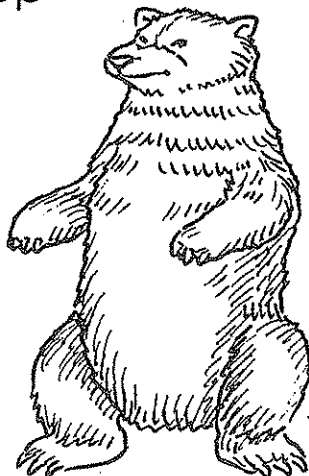
The parents will feed, care and protect their young until they can take care of themselves.



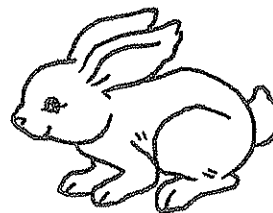
sheep



elephant



bear



rabbit

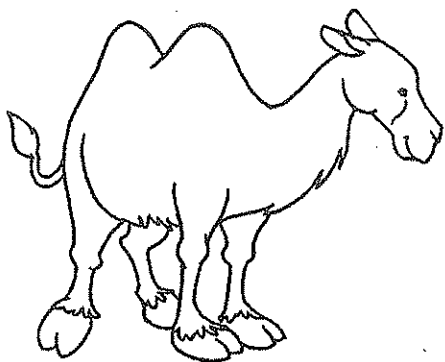


More mammals



Fill in each blank with the correct word from the box.

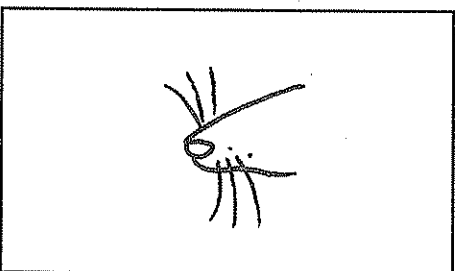
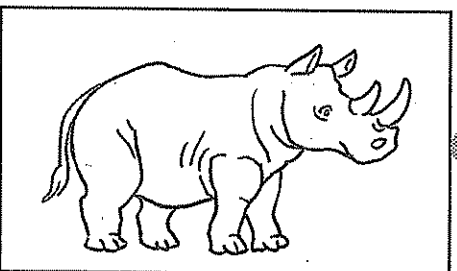
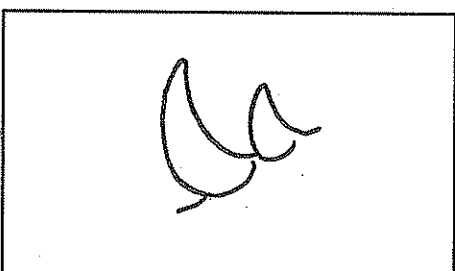
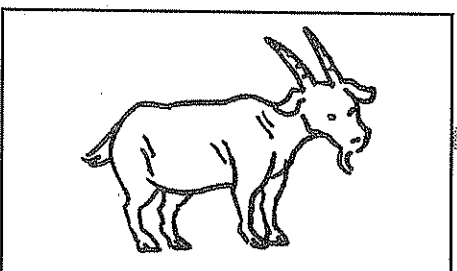
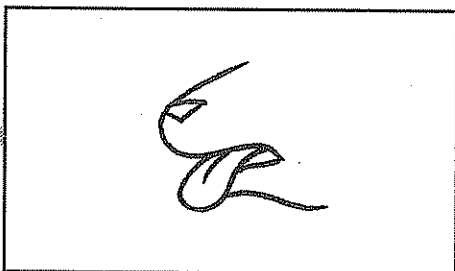
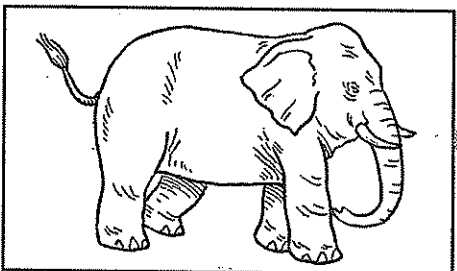
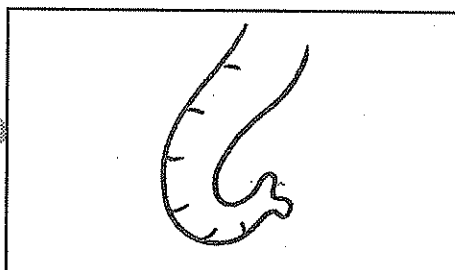
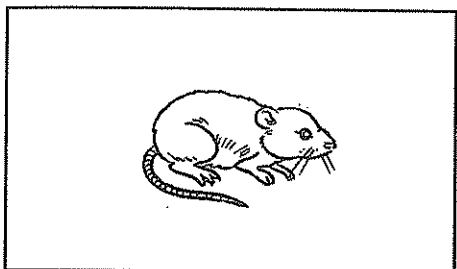
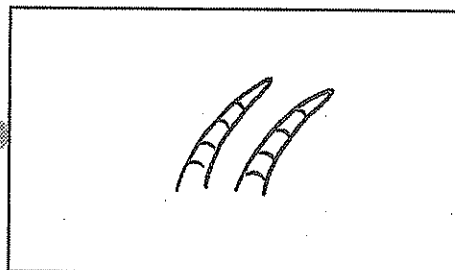
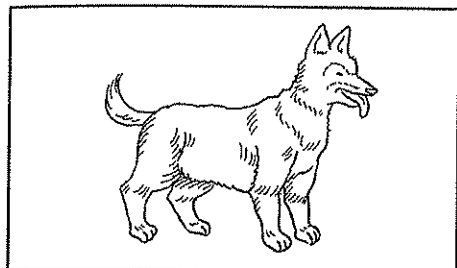
monkey man camel panda



Body parts of mammals



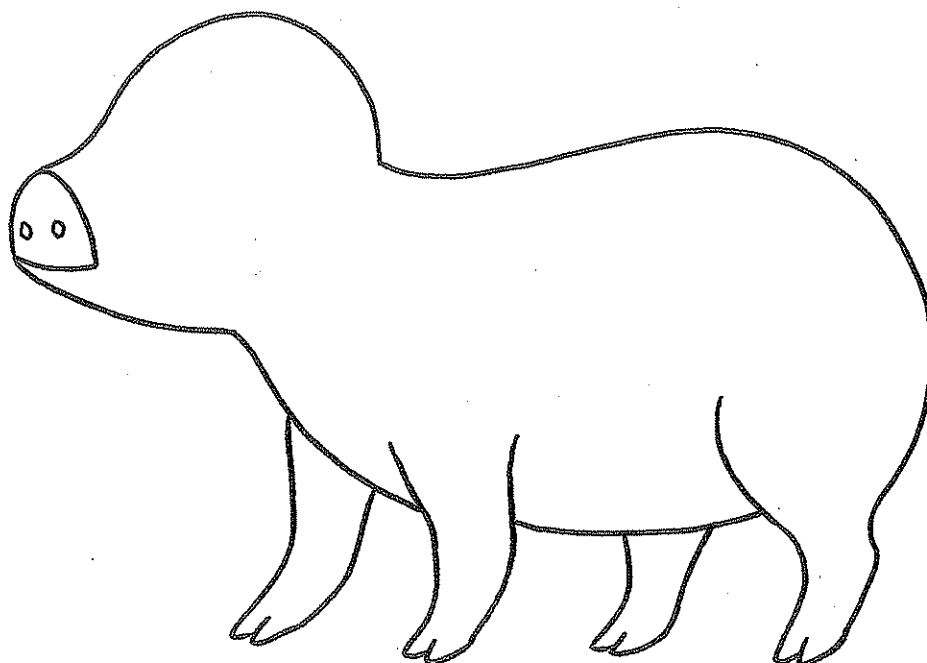
Match each animal with its body part.



What am I?



Draw in the missing body parts to complete the picture.
What animal is this?



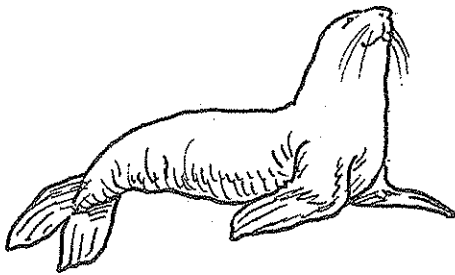
This is a _____.



Sea mammals



There are some mammals which live in the ocean. They have flippers and tails to help them swim.

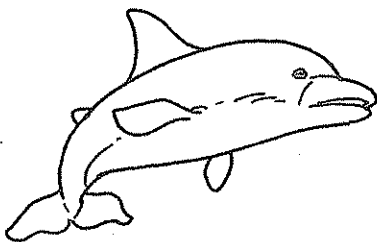


seal

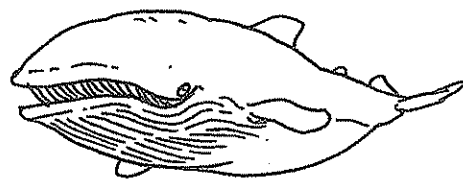


walrus

Dolphins and whales are also mammals. They can swim deep in the ocean. The blue whale is the biggest mammal on earth.



dolphin



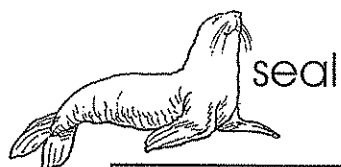
blue whale



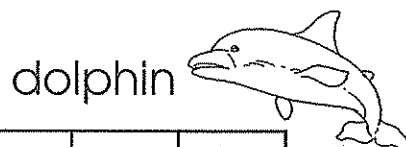
More sea mammals



Find and circle the name of each sea mammal in the puzzle.



seal



dolphin

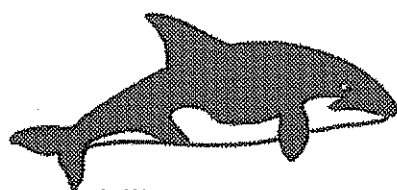
r	r	f	g	h	j	s	s	k
f	e	t	v	y	h	e	q	i
d	u	g	o	n	g	a	t	l
o	q	e	r	t	y	l	d	l
l	t	s	v	v	h	d	x	e
p	r	c	e	j	j	t	o	r
h	d	w	h	a	l	e	r	w
i	c	r	v	e	l	y	k	h
n	b	h	j	y	j	i	m	a
t	u	a	m	l	k	i	o	l
s	e	a	l	i	o	n	p	e



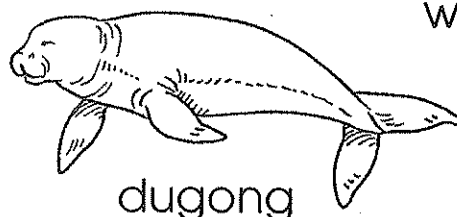
sea lion



whale



killer whale



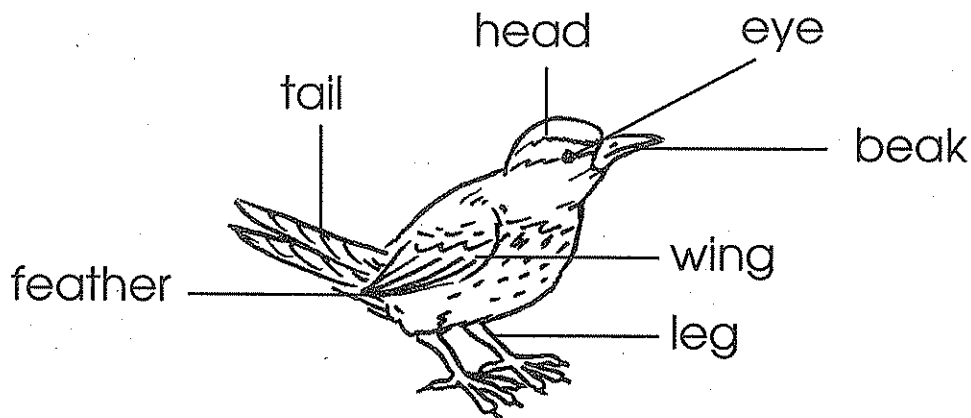
dugong

Birds



All birds have feathers, two wings, two legs and a beak or bill. All birds lay eggs.

Some birds are colourful but some are not. Some birds can fly but some cannot. Birds like parrots and cockatoos are kept as pets.



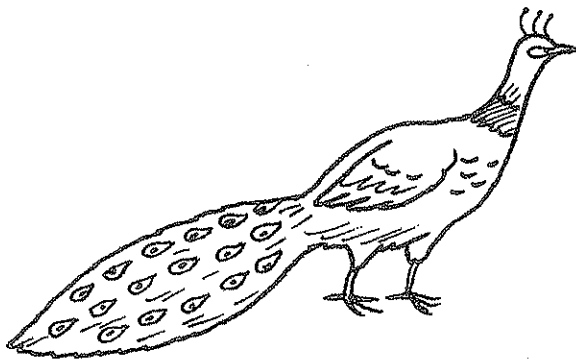
Birds that can fly	Birds that cannot fly	Colourful birds
sparrow hummingbird eagle owl crow	ostrich emu kiwi penguin	peacock toucan parrot kingfisher



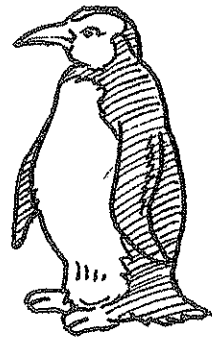
More birds



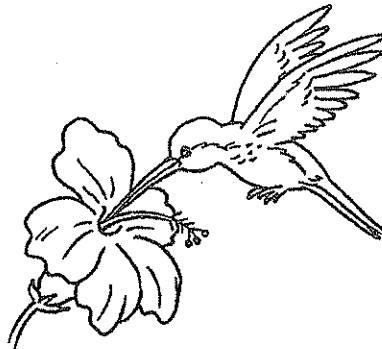
Colour the birds that cannot fly brown.
Colour the birds that can fly orange.



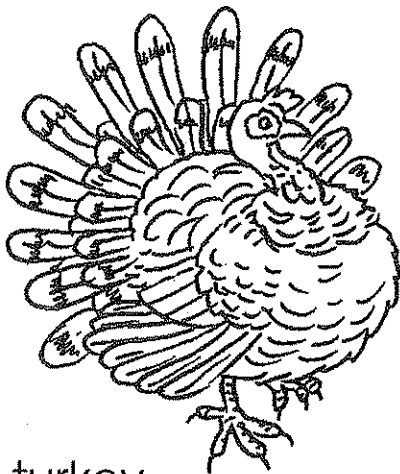
peacock



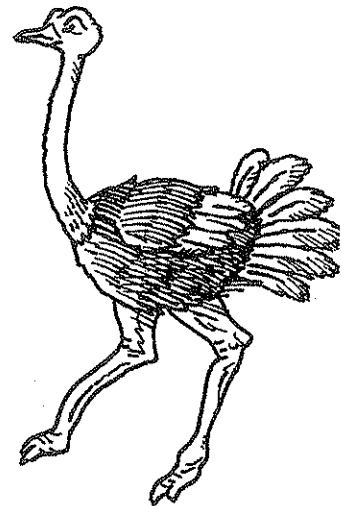
penguin



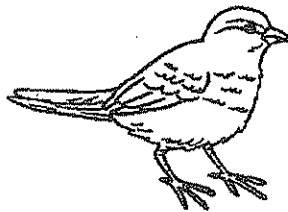
hummingbird



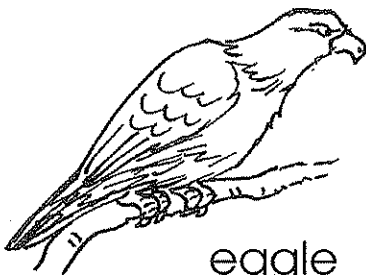
turkey



ostrich



sparrow



eagle



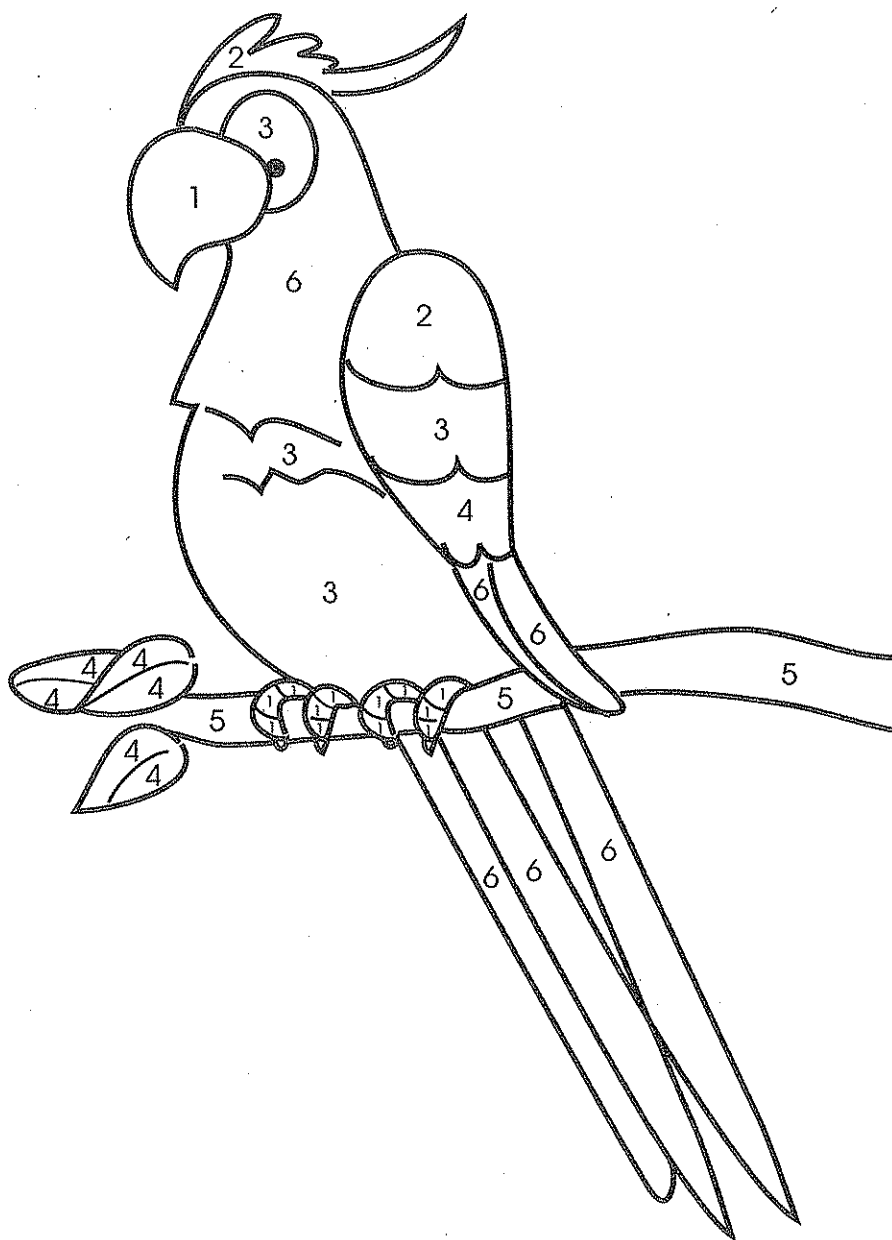
owl

The macaw



Some birds, usually the male birds, have colourful feathers to attract a companion. Sometimes, the male birds also dance around and make a lot of noise to attract the female birds.

Use the code to colour the macaw.



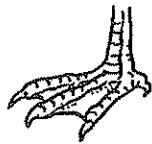
- 1 — black
- 2 — yellow
- 3 — blue
- 4 — green
- 5 — brown
- 6 — red



Bird's feet



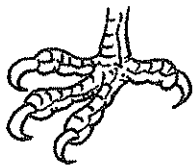
A bird's feet often tell you what the bird can do.



Ducks and seagulls have webbed feet for swimming.



Chickens use their strong feet to scratch the dirt and leaf litter to look for seeds and insects.



Hawks, eagles, and owls use large claws (talons) to capture, kill and carry prey with their feet.



Warblers, thrushes and wrens have flexible toes, with one pointing backwards for perching on branches.



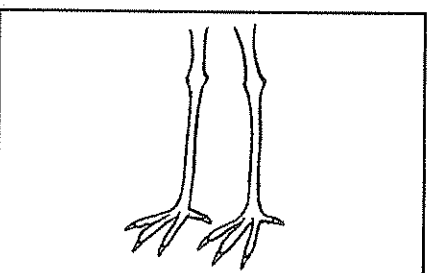
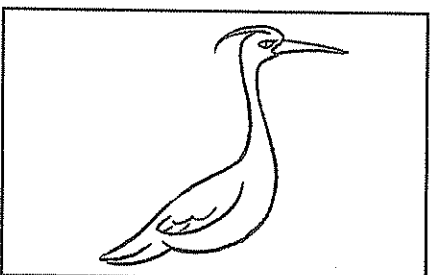
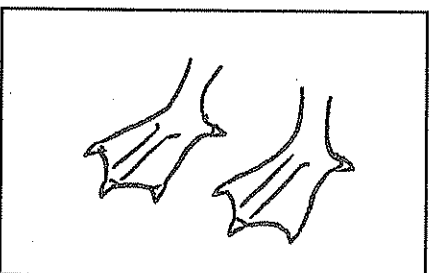
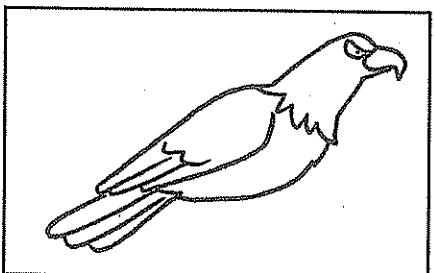
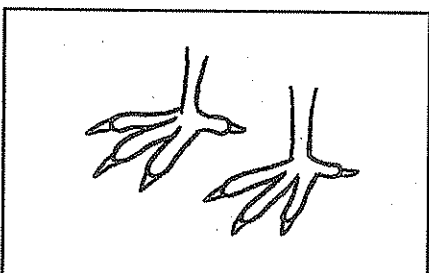
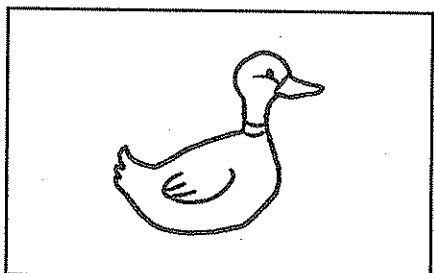
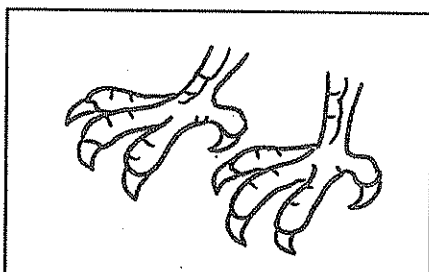
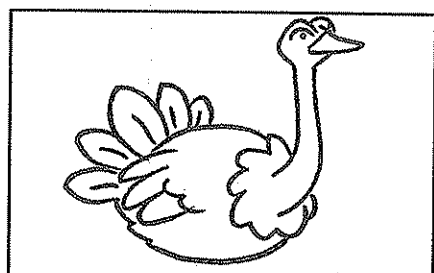
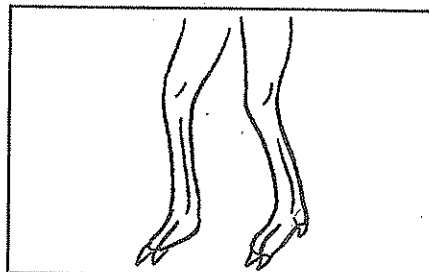
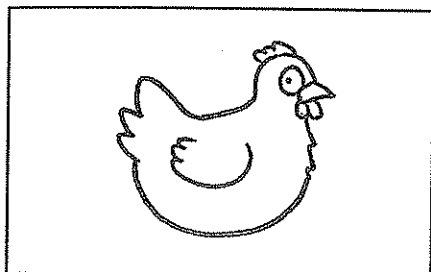
Hérons have wading feet to let them walk on soft sand near the water to look for food.



More bird's feet



Match each bird with its feet.



Beak or bill

Birds do not have teeth. They have a beak. This is the hard and pointed part of its mouth. All birds have different types of beaks to suit their feeding habits.



eagle
(flesh-eating)



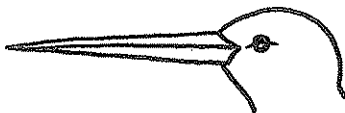
duck
(straining)



kingfisher
(spearing)



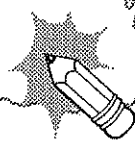
chick
(insect-eating)



hummingbird
(probing)



parrot
(seed-eating)



Which bird does éach beak belong to?

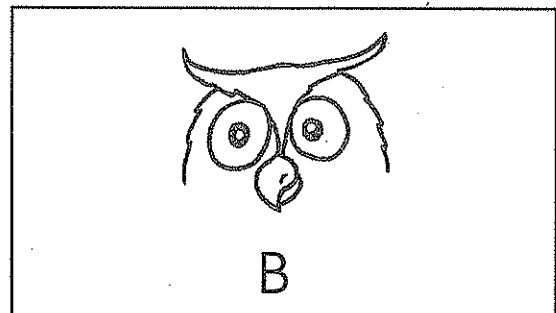
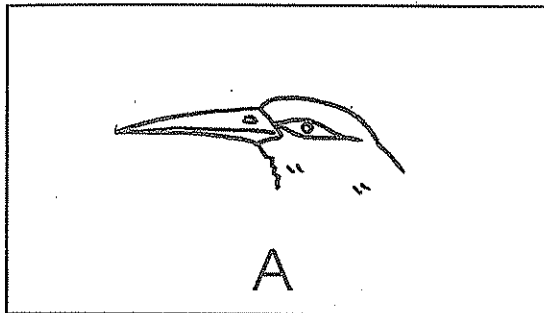
Fill in each blank with the correct word from the box.

duck

kingfisher

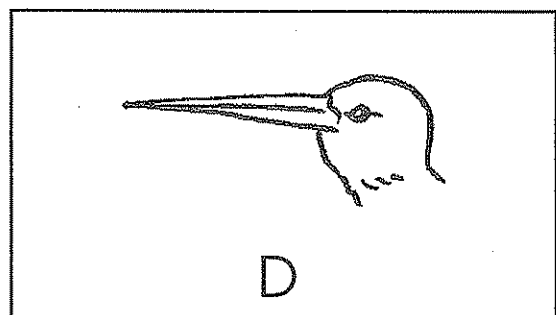
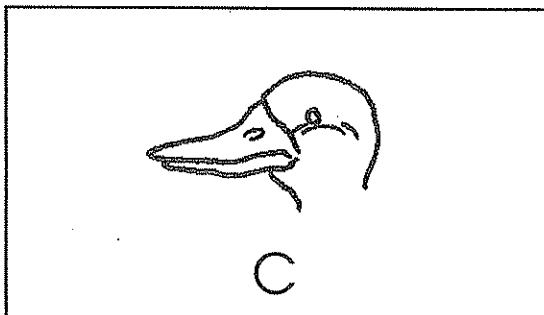
hummingbird

owl



Beak A belongs to the _____.

Beak B belongs to the _____.



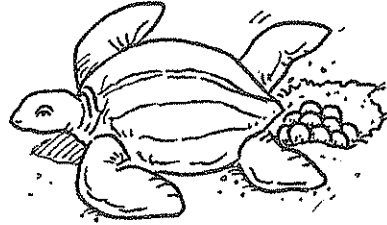
Beak C belongs to the _____.

Beak D belongs to the _____.

Reptiles



Lizards, turtles, snakes and crocodiles are reptiles. They have dry scaly skin. Some reptiles lay eggs. Some reptiles live on land and some live in water.



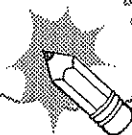
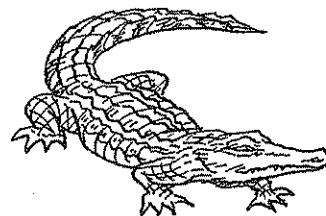
The house lizard is a useful animal. It feeds on insects in the house.



The terrapin is a small turtle. It lives on land and in water. Some people keep it as a pet.



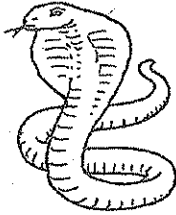
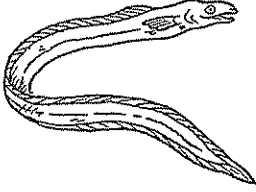
The crocodile lives in a swamp. It can also be found in the river or lake. It has a strong powerful tail. It feeds on fish and other animals.



More reptiles



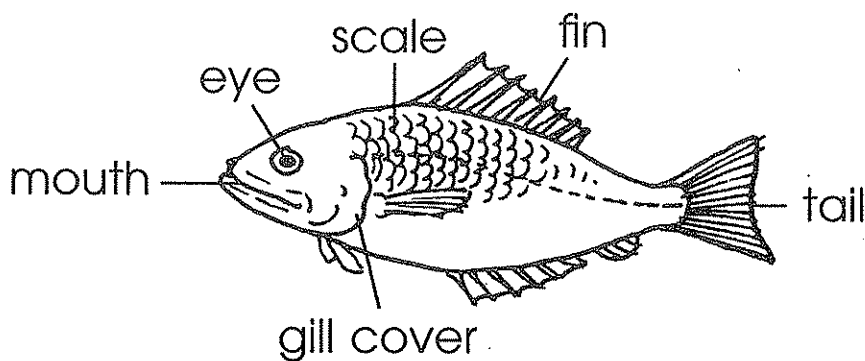
Colour the correct animal.

Name	Animal
cobra	  
tortoise	  
komodo dragon	  
crocodile	  

Fish



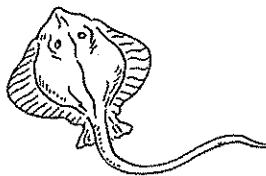
Fish live in water. Their bodies are covered with scales. They have fins and tails for swimming. They breathe through their gills. Most fish lay eggs. Some fishes, like the guppy and swordtail, give birth to their young.



These are fish too. They are found in the sea.



seahorse

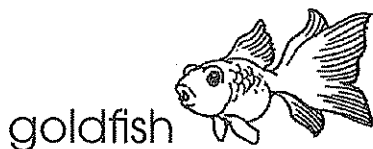


stingray

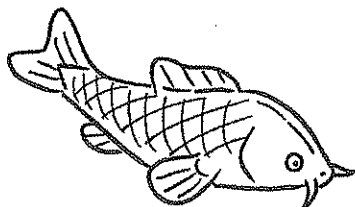


shark

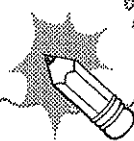
These fishes are kept as pets.



goldfish



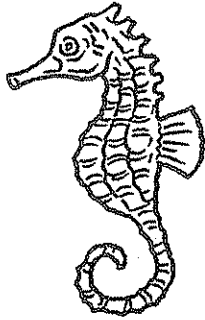
koi



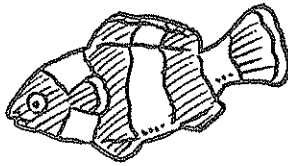
More fish



Colour the fish that are found in the sea.
Circle the fish that are kept as pets.



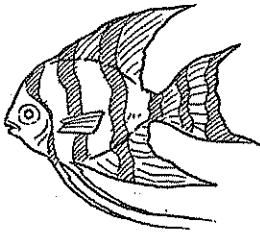
seahorse



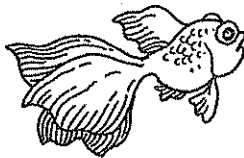
clownfish



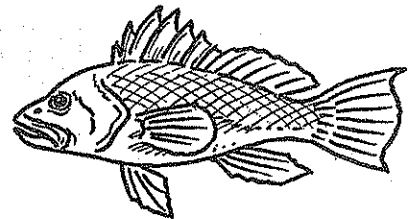
guppy



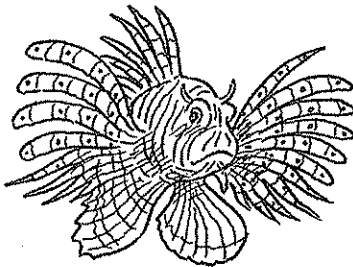
angelfish



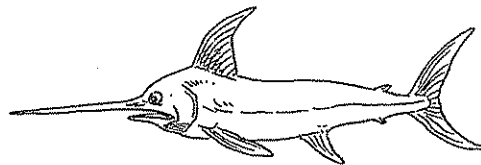
goldfish



seabass



lionfish



swordfish

Parts of a fish

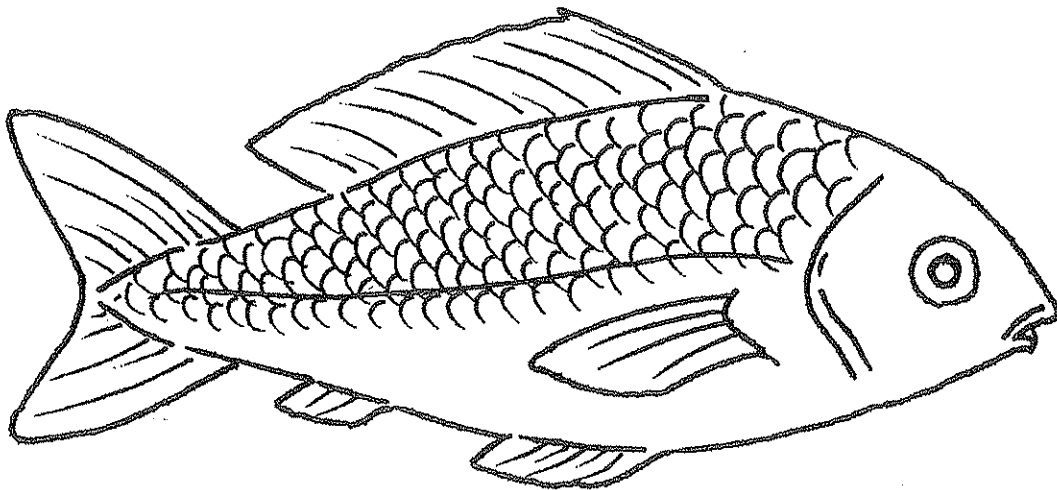


Match each part of the fish with its name.

tail

scale

mouth

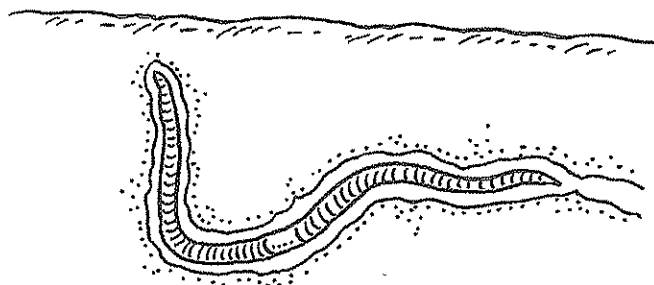


fin

gill cover

eye

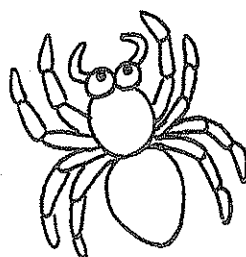
Other land animals



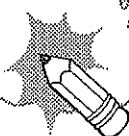
The earthworm is useful. It makes holes in the soil for the roots of plants to breathe. It also helps to fertilise the soil for plants to grow healthily.



The snail is a slow-moving animal. It feeds on grass and leaves.



The spider is not an insect. It has eight legs. Its body is divided into two parts. It does not have feelers. It can spin webs.



More land animals



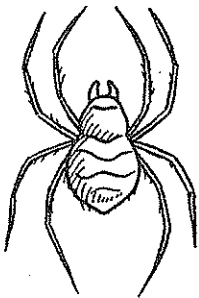
Match each animal with its name.



snail



earthworm



centipede



spider

Other sea creatures



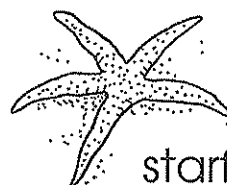
The crab, prawn, lobster, clam, oyster, coral, sea anemone, octopus, jellyfish and starfish live in the sea.



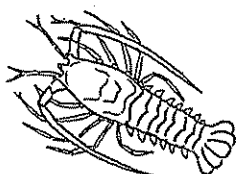
crab



prawn



starfish



lobster

The crab and lobster are covered with a shell and move about by crawling.

The clam and oyster live in a shell which can open and close.



clam



oyster

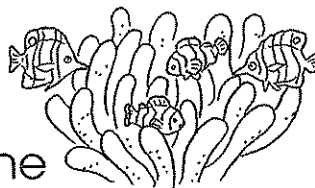


octopus

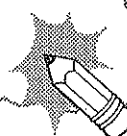
The octopus has eight tentacles. It uses them to catch food.

The jellyfish and sea anemone have poisonous tentacles.

sea
anemone



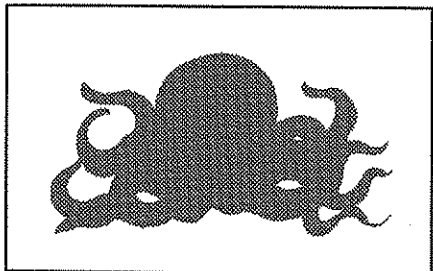
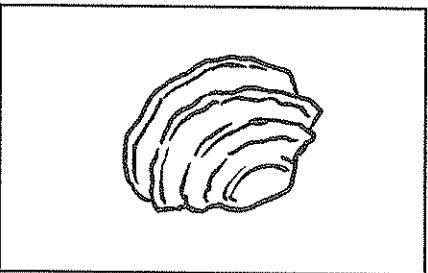
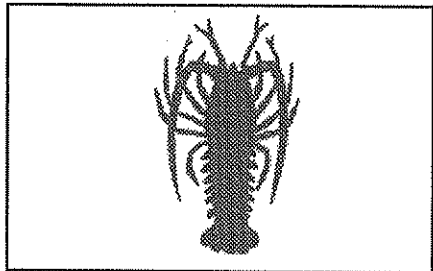
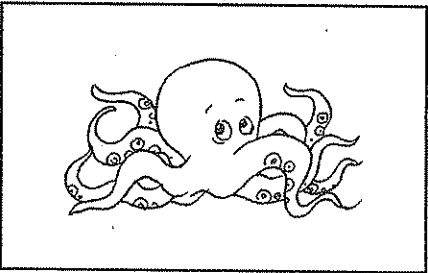
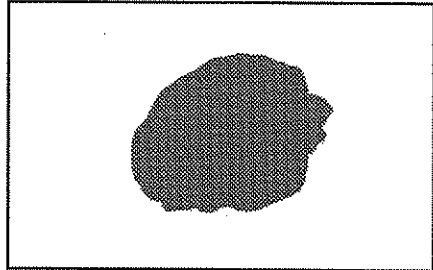
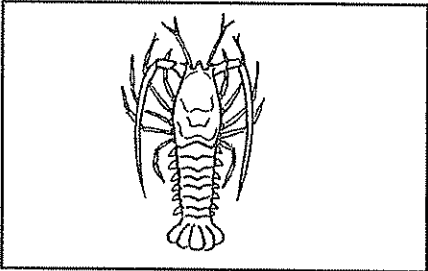
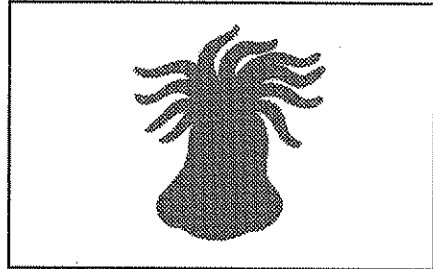
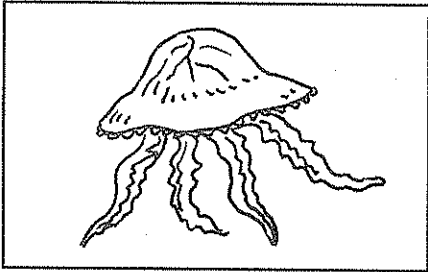
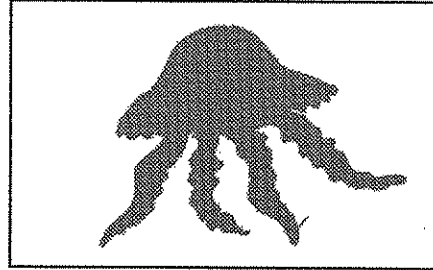
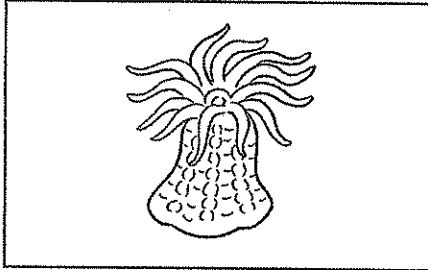
jellyfish



More sea creatures



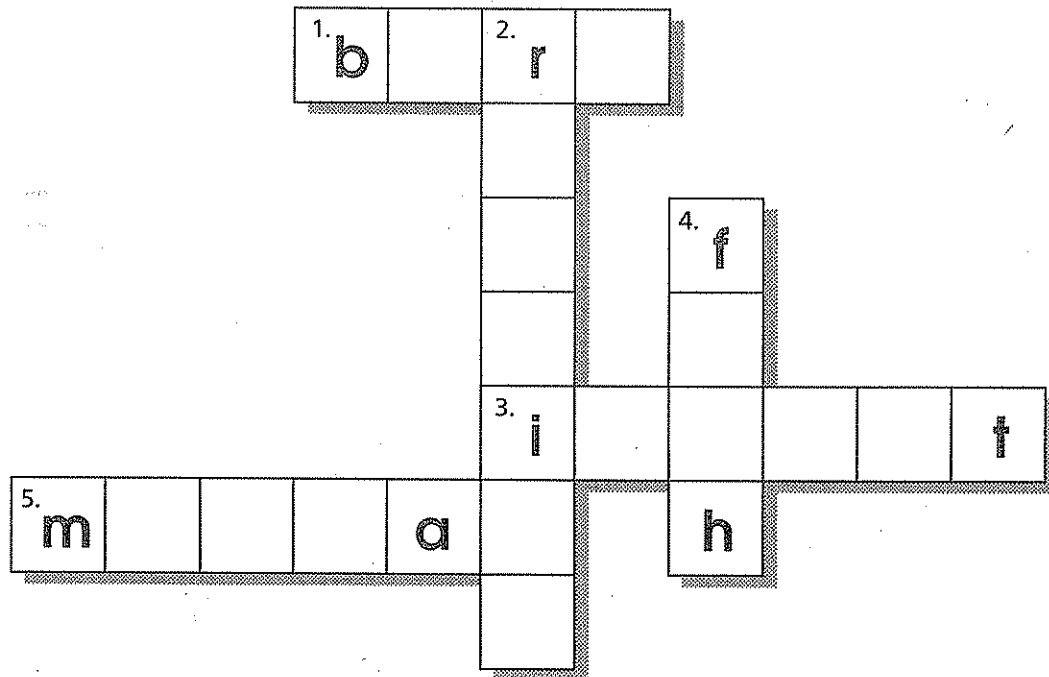
Match each sea creature with its shadow.



What are they?



Complete the crossword puzzle.



Across:

1. It has a pair of wings and a beak.
3. It has six legs.
5. It gives milk to its young.

Down:

2. It has dry scaly skin.
4. It has fins and a tail.

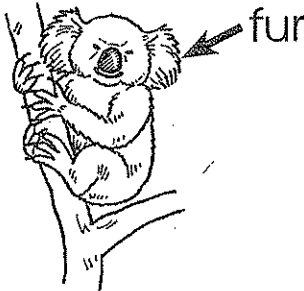


Body coverings



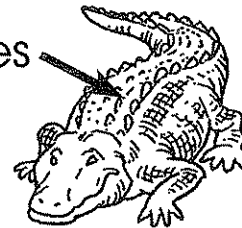
Most animals have different outer body coverings — feathers, hair, fur, scales and shells.

Mammals have an outer covering of hair or fur. The hairs or fur keep them warm.



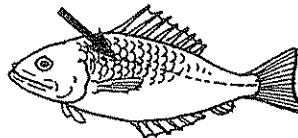
Birds have an outer covering of feathers. The feathers keep them warm and protect them from the rain.

scales

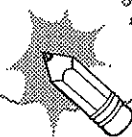
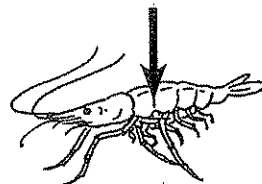
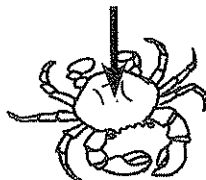


Reptiles and fish have scales to protect their bodies.

scales



Shellfish — snails, clams, mussels, crabs, prawns and lobsters — have shells. The shells protect their soft bodies.



What body covering do I have?



What body covering does each animal have?
Write the correct number in the boxes.

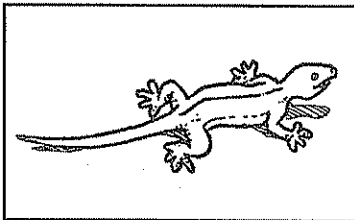
1 – feathers

2 – scales

3 – hair

4 – shell

1.



A lizard has .

2.



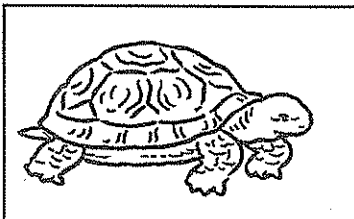
An owl has .

3.



A squirrel has .

4.

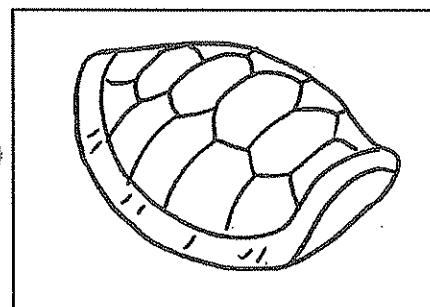
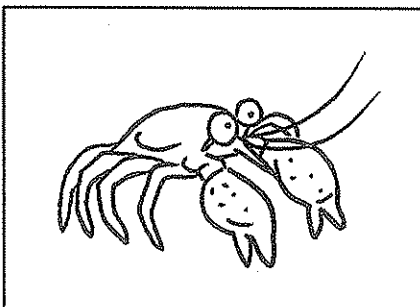
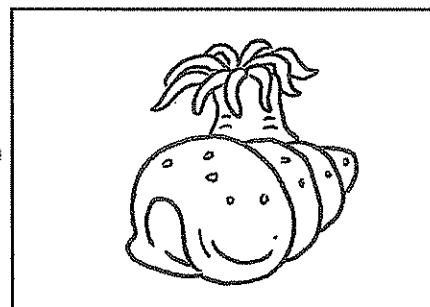
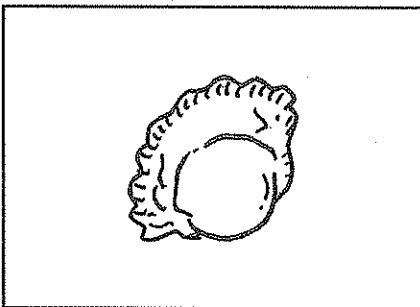
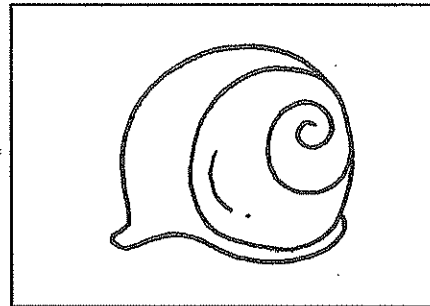
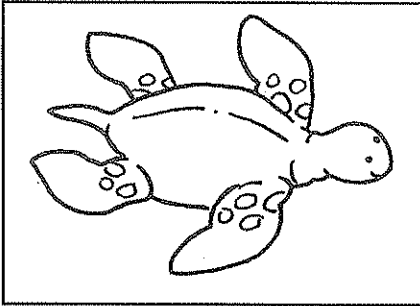
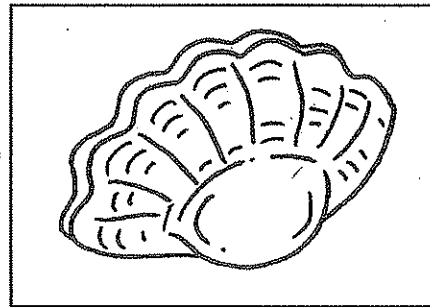
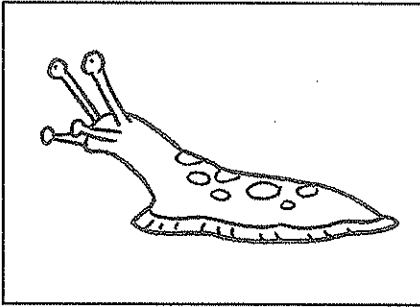


A tortoise has .

More body coverings



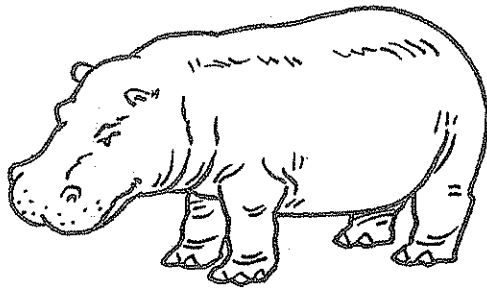
Match each animal with its body covering.



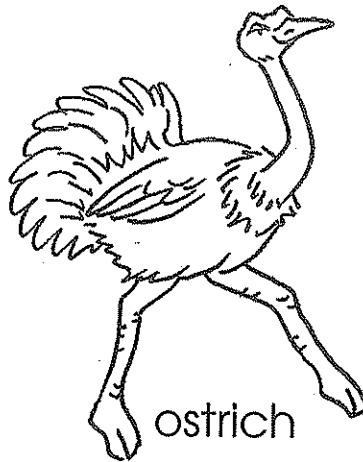
Big and small animals



Some animals are big and some are small.
Circle those that are big.
Colour those that are small.



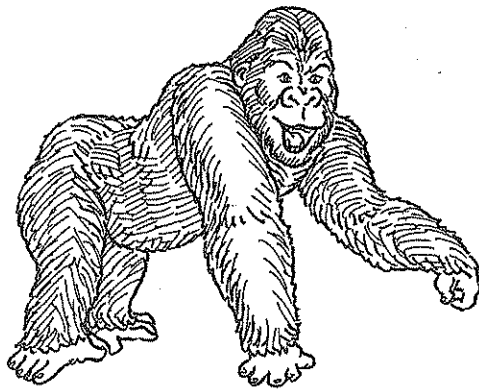
hippopotamus



ostrich



fish



gorilla



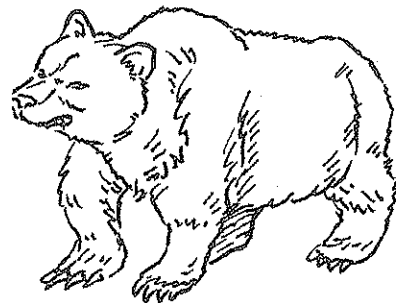
snail



rat



frog



bear

Nocturnal animals

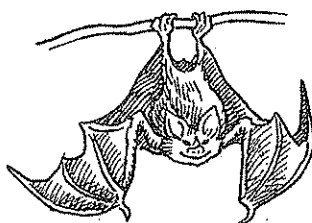


Nocturnal animals are active only at night. They sleep in the day and hunt for food at night.

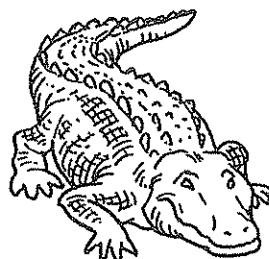
Owls, bats, crocodiles, snakes and tigers are nocturnal animals.



owl



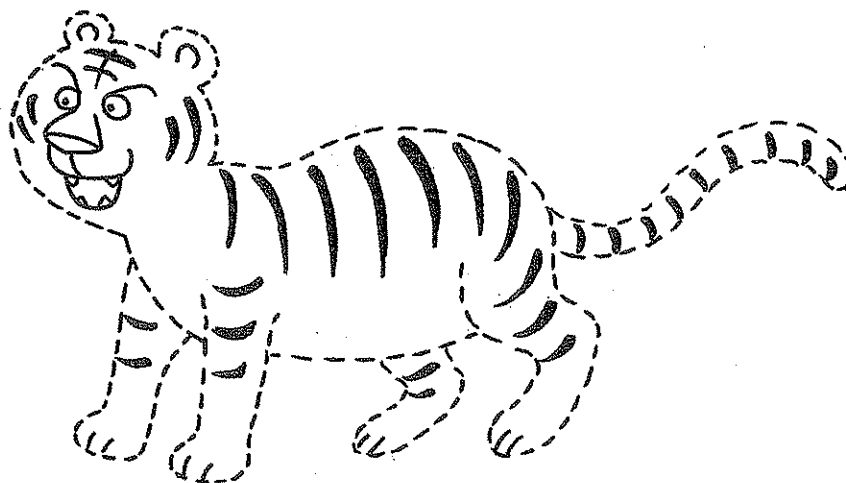
bat



crocodile



Trace the dotted lines to find the animal.



This is a nocturnal animal.

It is a _____.

Animal sounds



Animals make sounds.

A bird chirps.

A rooster crows.

A horse neighs.

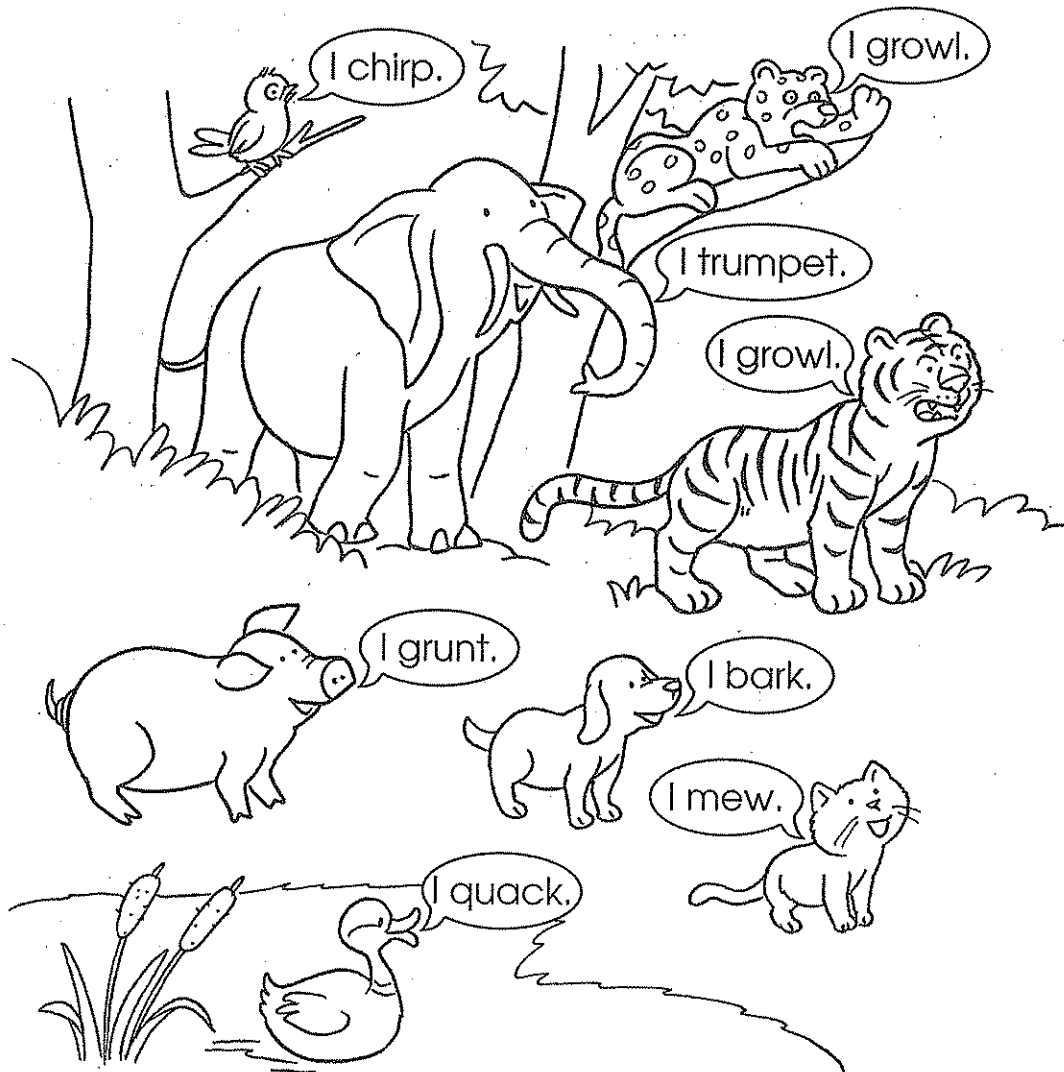
A dog barks.

A cat meows.

A cow moos.

A goat bleats.

A duck quacks.



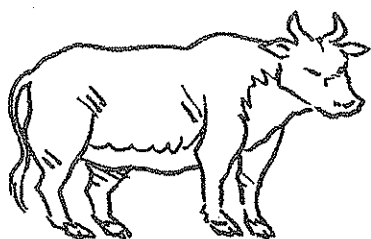
More animal sounds

Match each animal with the sound it makes.



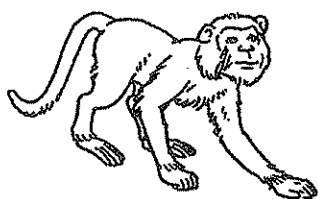
pigeon

chatters



cow

coos



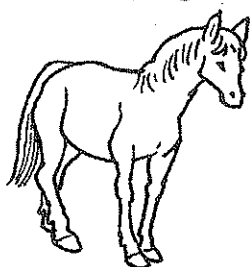
monkey

grunts



pig

neighs

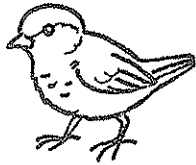


horse

moos

What sound does each animal make? Fill in each blank with the correct word from the box.

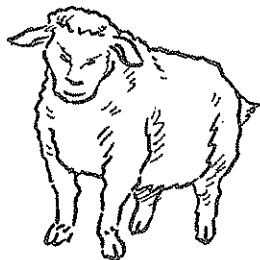
squeaks hoots bleats buzzes chirps







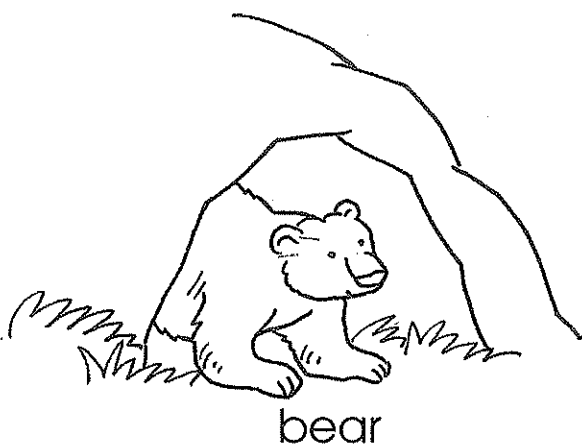




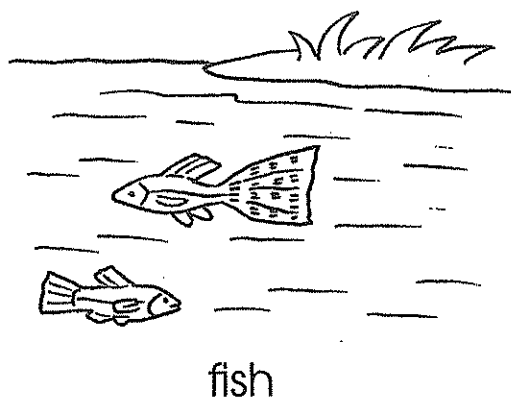
Animal homes

Animals look for homes. Their homes protect them from danger and the weather. They also find homes near food and water. The homes of animals are their habitats. Some animals live on land or in water and some animals live both on land and in water.

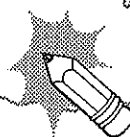
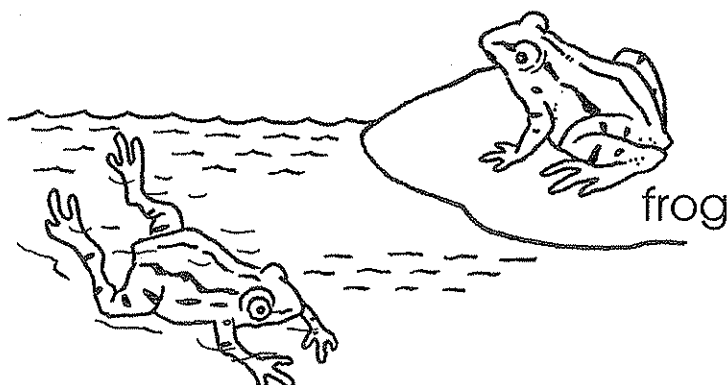
**Animal that lives
on land**



**Animal that lives
in water**

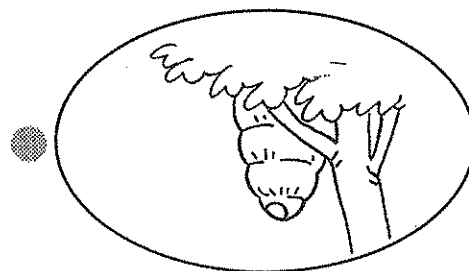
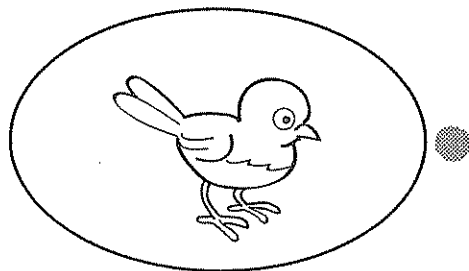
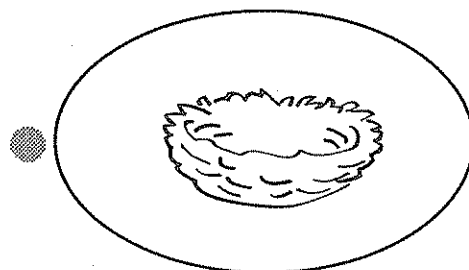
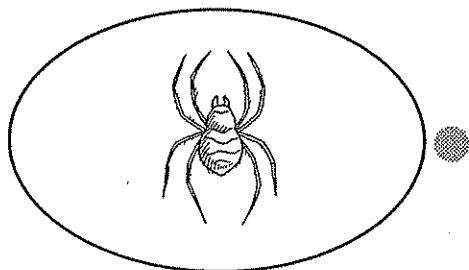
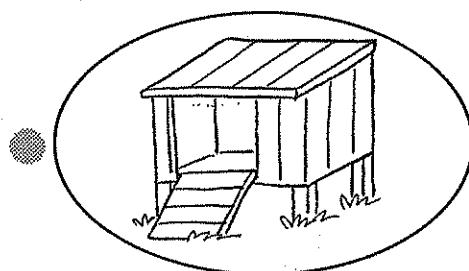
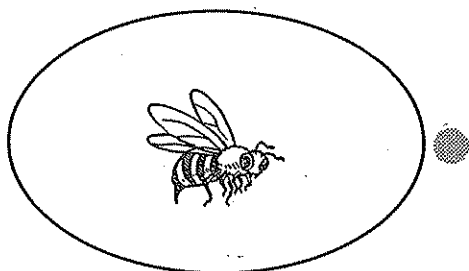
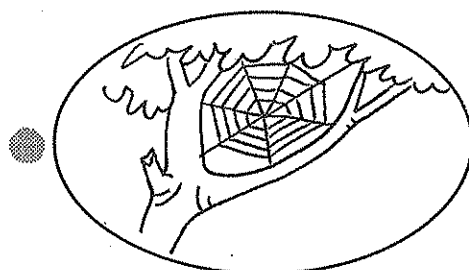
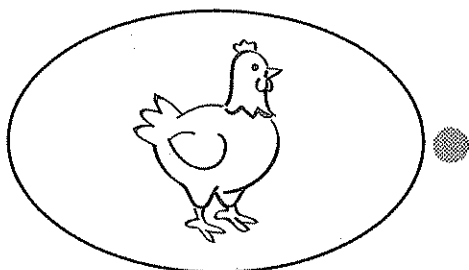
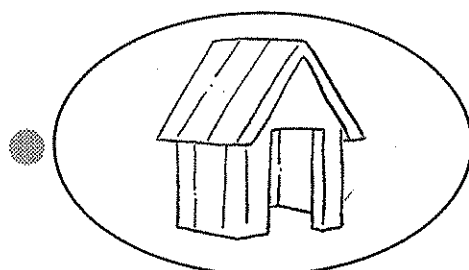
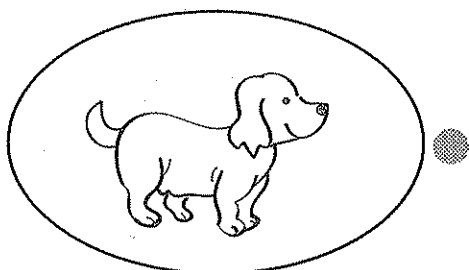


Animal that lives both on land and in water





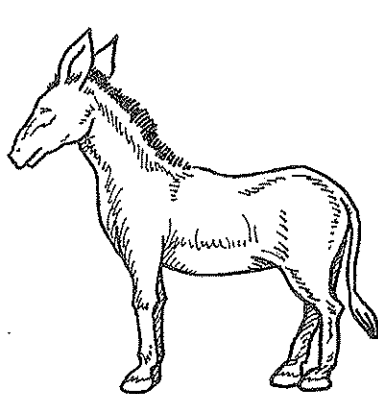
Match each animal with its home.



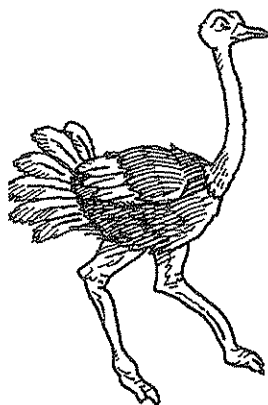
Animals that live on land



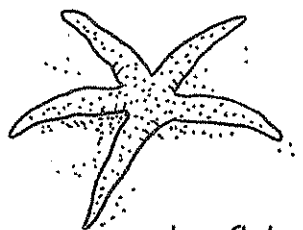
Which animals live on land?
Circle them.



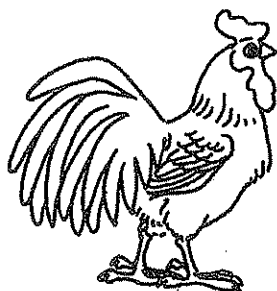
donkey



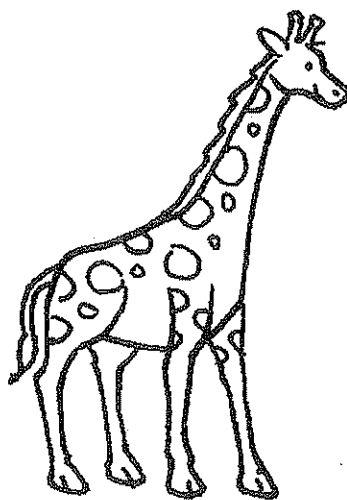
ostrich



starfish



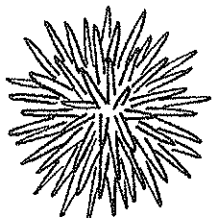
rooster



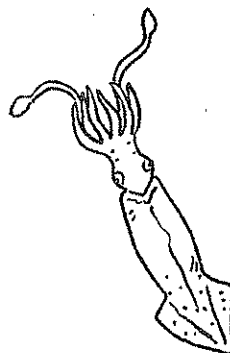
giraffe



toucan



sea urchin



squid

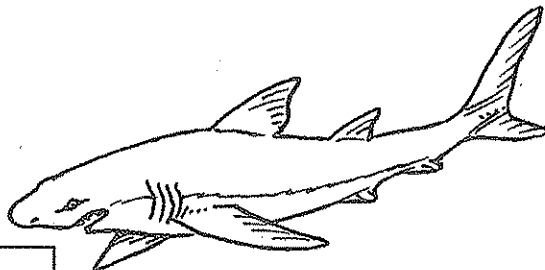
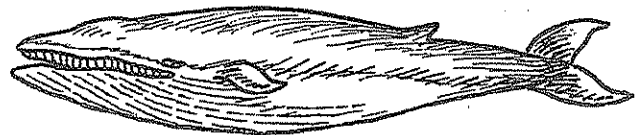
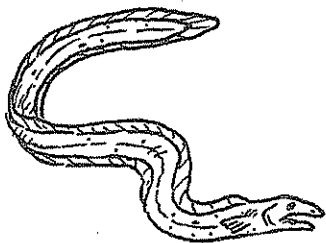
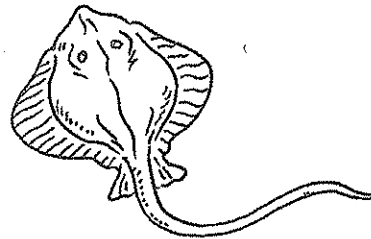
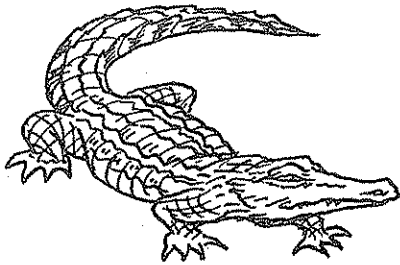
Animals that live in water



These are some animals that live in water.

Fill in each blank with the correct word from the box.

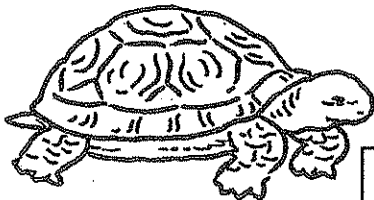
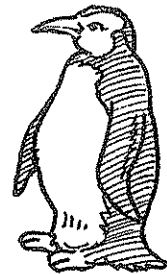
shark stingray whale crocodile eel



Animals that live on land and in water

These are some animals that live both on land and in water.
Fill in each blank with the correct word from the box.

toad tortoise penguin walrus seal



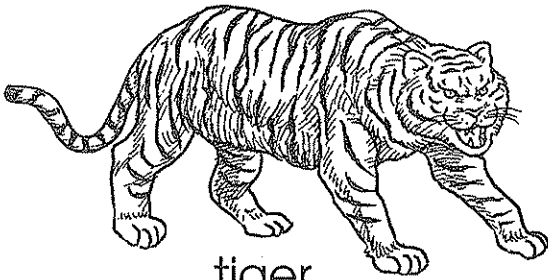
Farm and jungle animals



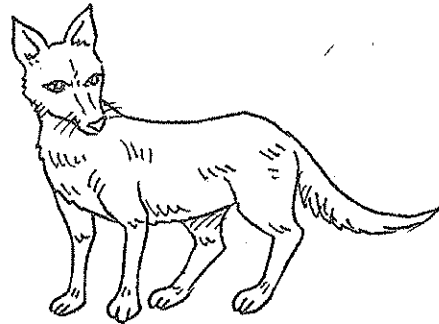
Some of these animals are found on the farm and some in the jungle.

Circle the animals that are found on the farm.

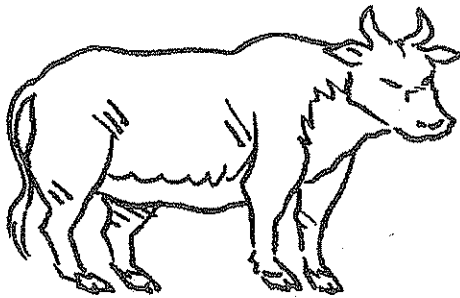
Colour the animals that are found in the jungle.



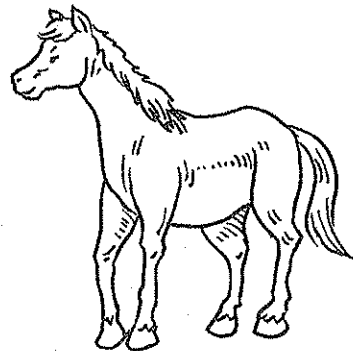
tiger



fox



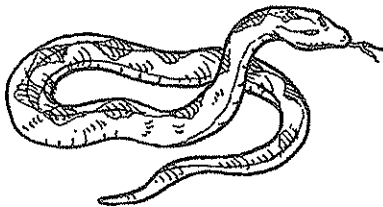
cow



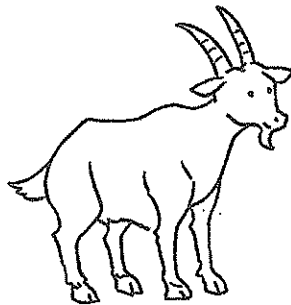
horse



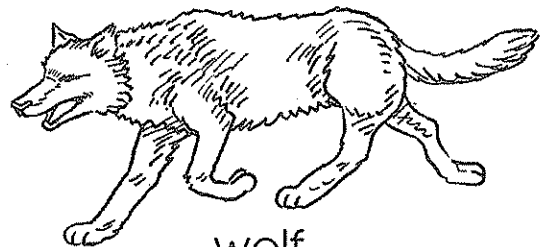
pig



snake



goat

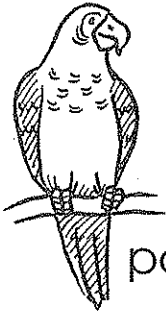


wolf

Pets



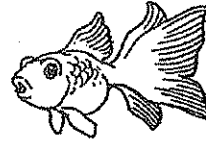
Put a cross ☒ in the boxes for animals that are kept as pets.



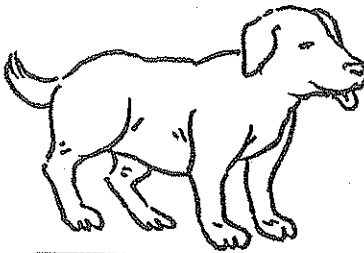
parrot

☐

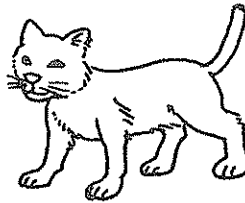
guppy

☐

goldfish

☐

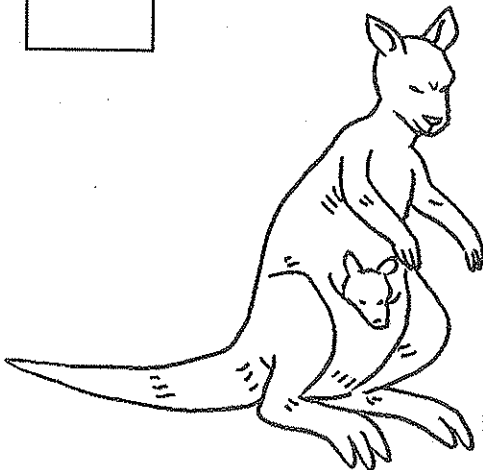
dog

☐

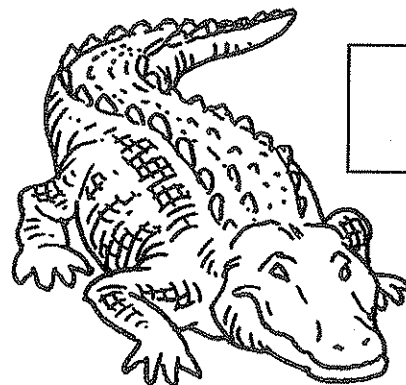
cat

☐

rabbit

☐

kangaroo

☐

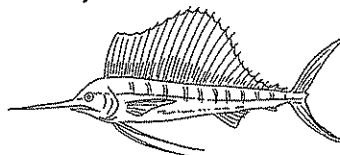
crocodile

☐

Animal movements



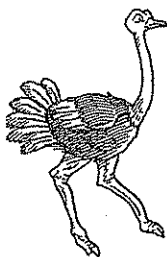
Animals move to find food, water and shelter. They also move to get away from their enemies. Different animals move differently.



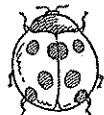
The fastest animal on land is the cheetah. The fastest animal in the sea is the sailfish.



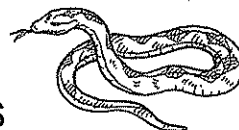
A frog can swim and hop.



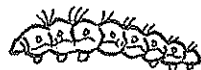
An ostrich can run very fast.



A ladybird can fly.



A snake glides on the ground.



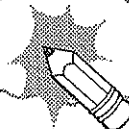
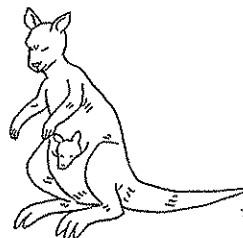
A caterpillar crawls.



A fish swims.

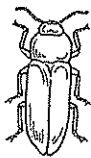


A rabbit and a kangaroo hop.

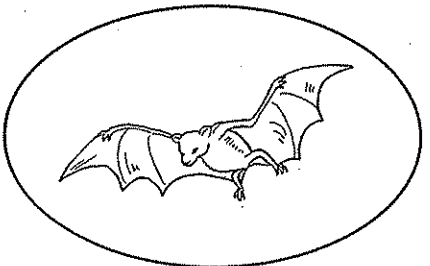
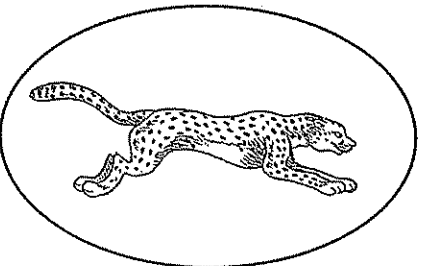
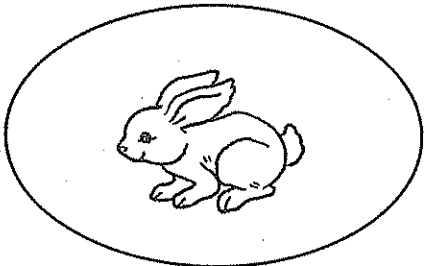
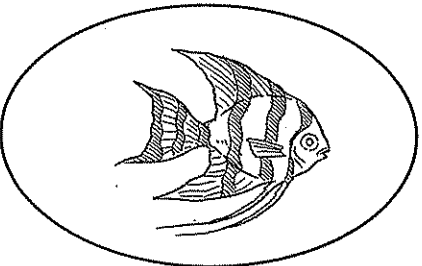
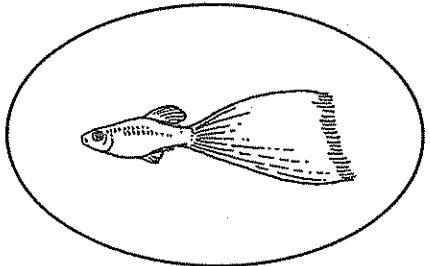
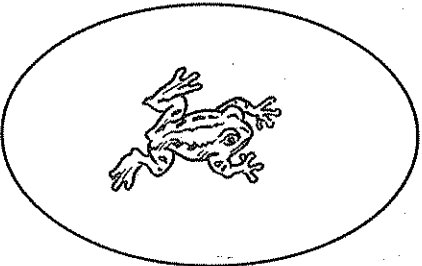
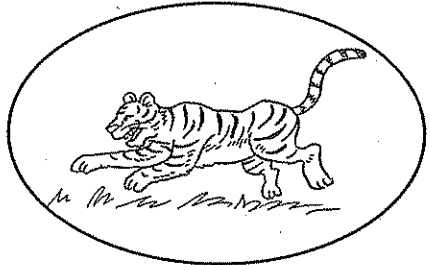
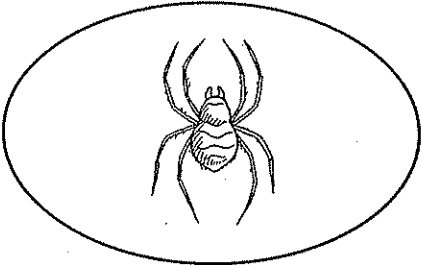
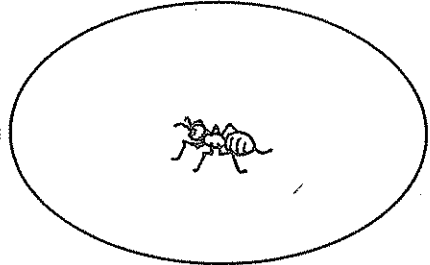
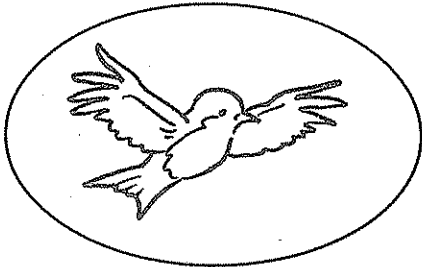


How they move

Put a tick (✓) in the correct boxes.

	Hop	Swim	Fly	Crawl
				
				
				
				

Match the animals that move in the same way.



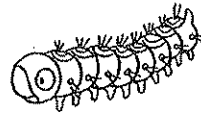
More animal movements



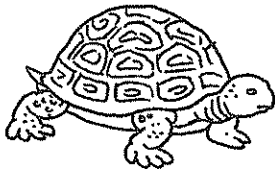
Circle the animals that move fast.
Colour the animals that move slowly.



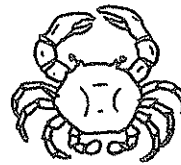
snail



caterpillar



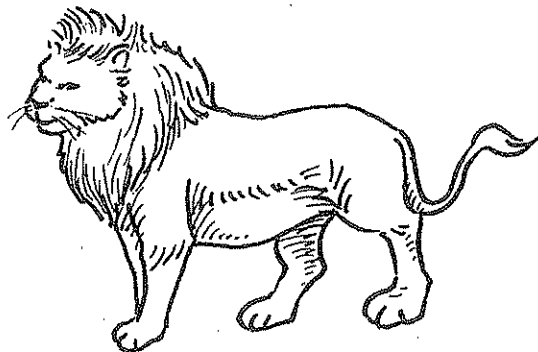
turtle



crab



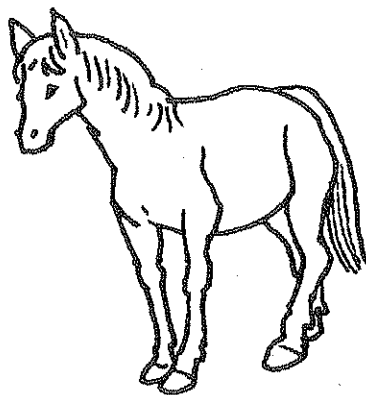
cockroach



lion



rat

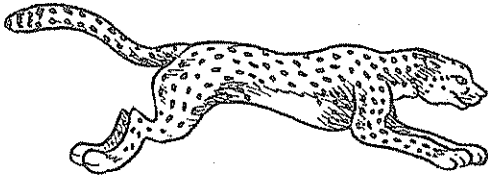


horse

Let's compete!



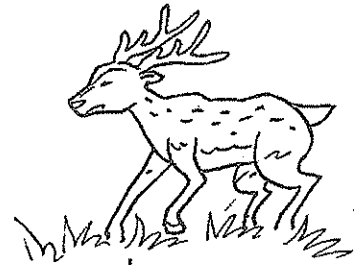
Which is the fastest land animal?
Circle it.



cheetah

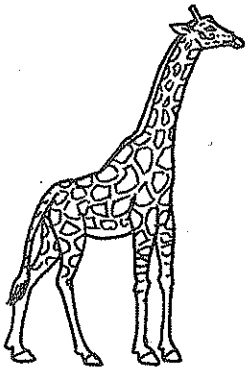


ostrich

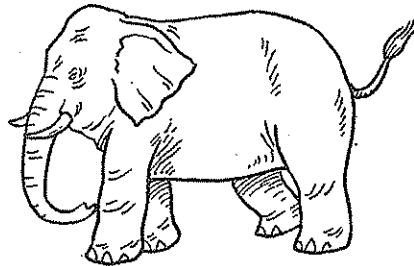


deer

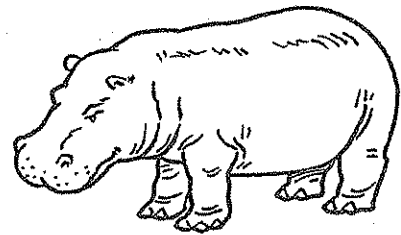
Which is the biggest land animal?
Circle it.



giraffe

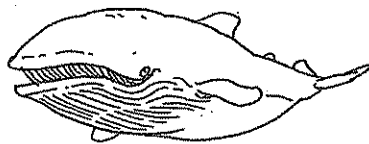


elephant

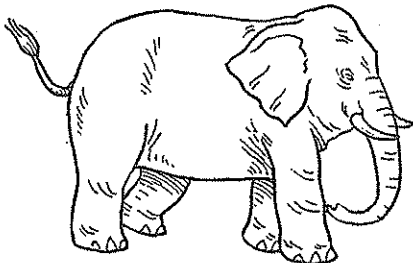


hippopotamus

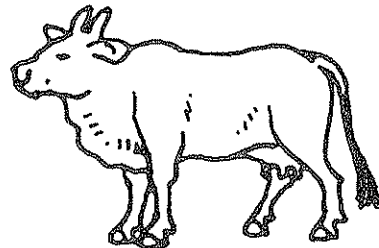
Which is the biggest mammal?
Circle it.



whale



elephant



cow

Food animals eat

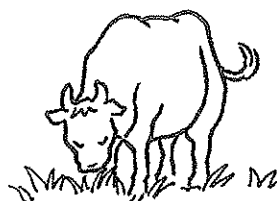


Some animals eat only plants. Some animals eat only other animals. Some animals eat both plants and animals.

Herbivore (Plant eater)

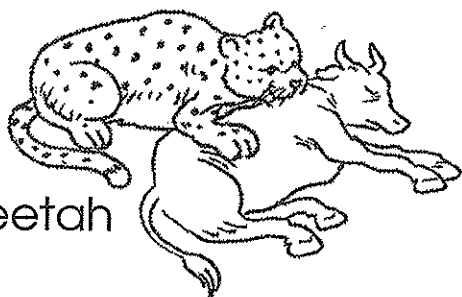


giraffe

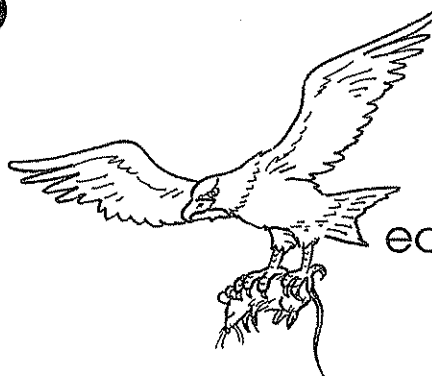


cow

Carnivore (Animal eater)

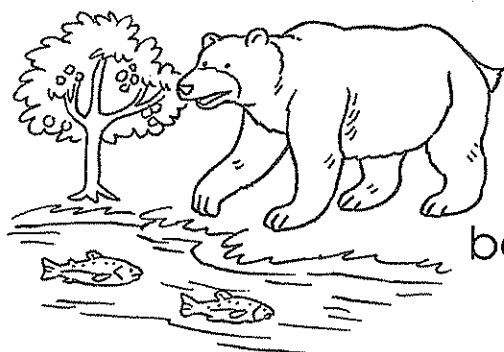


cheetah



eagle

Omnivore (Plant and animal eater)



bear

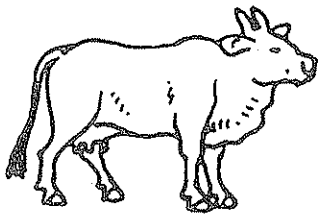


chicken

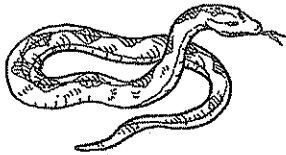
Animals and their eating habits



Match each animal with its eating habits.



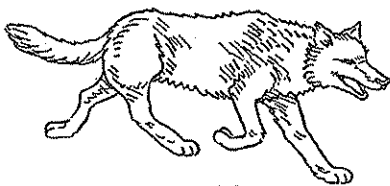
COW



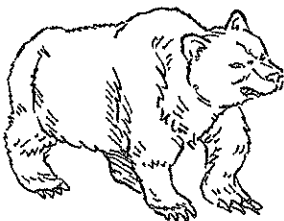
snake



caterpillar



wolf



bear

omnivore

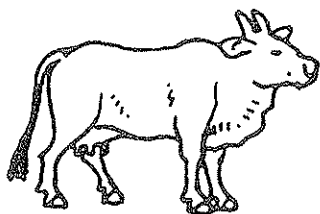
herbivore

carnivore

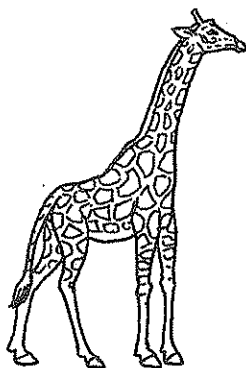
What do they eat?



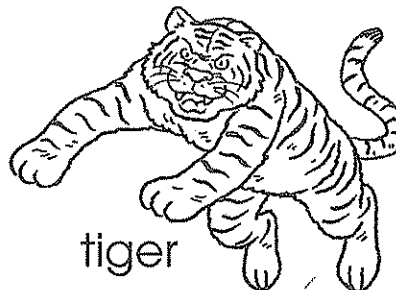
Group each animal correctly.



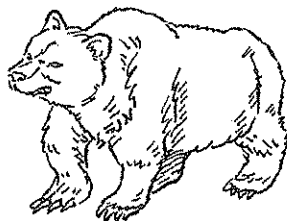
cow



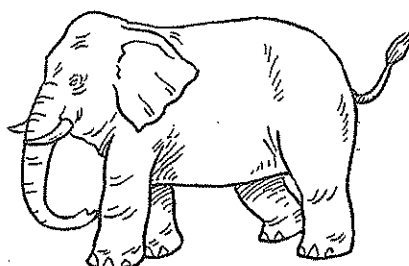
giraffe



tiger



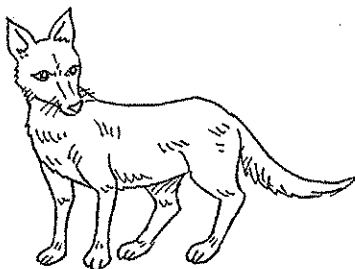
bear



elephant



frog



fox



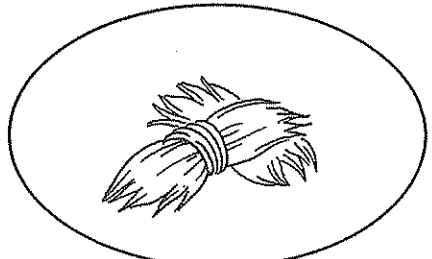
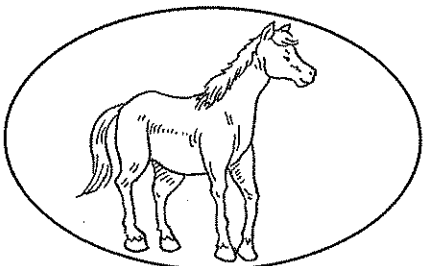
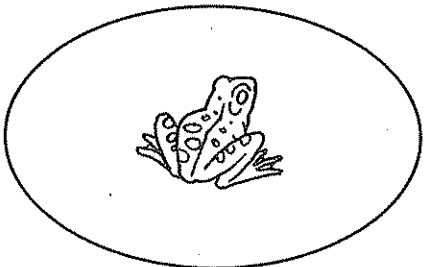
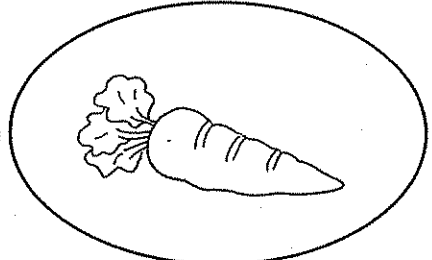
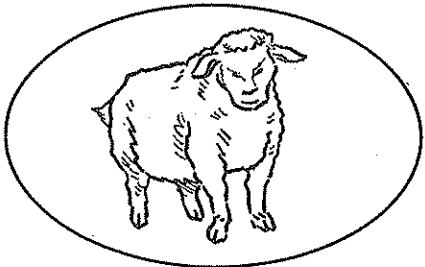
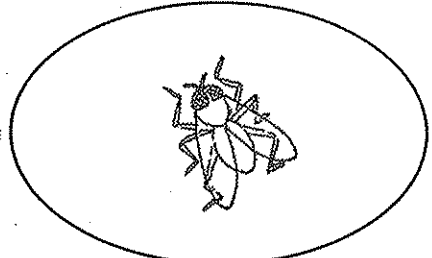
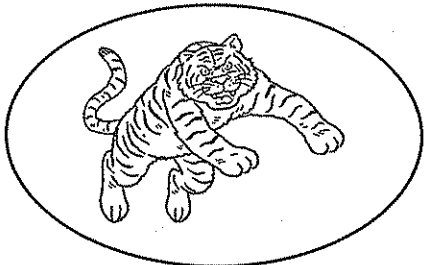
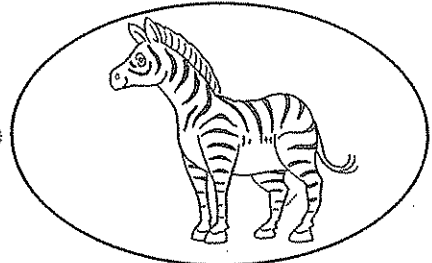
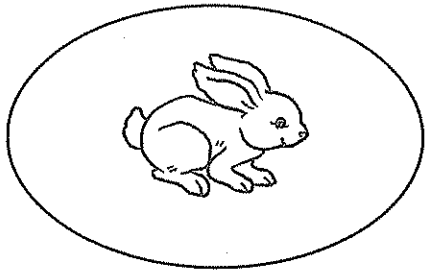
hen

Herbivore	Carnivore	Omnivore

Animals and their food

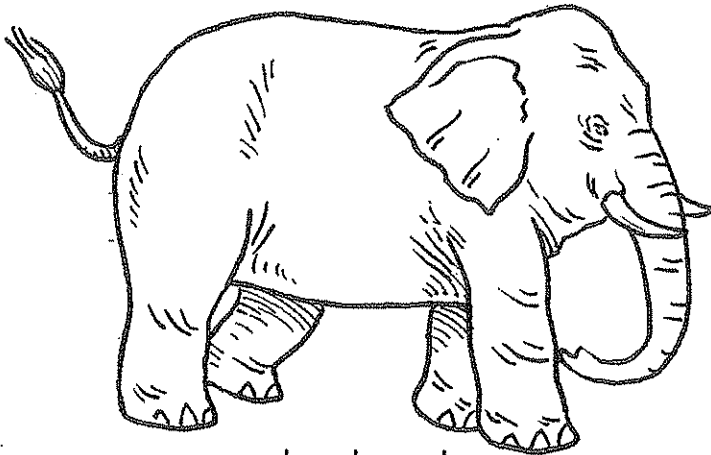


Match each animal with its food.

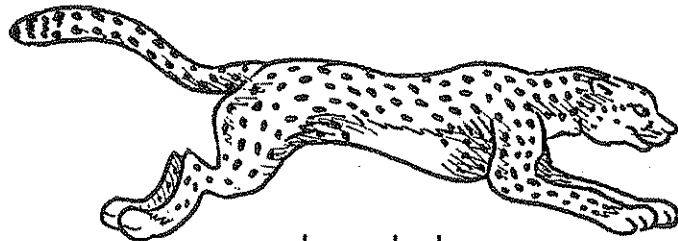


Guess the animal

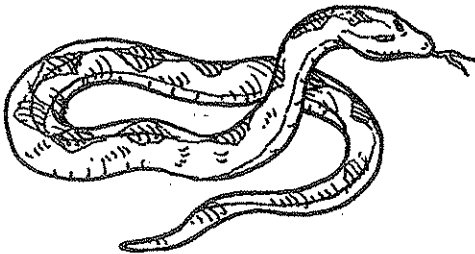
Look at each animal.
Then answer the questions.



elephant



cheetah



snake



frog



raccoon



Colour the heaviest animal grey.
What is it called?

e _ e _ h _ n _

Colour the animal that glides brown.
What is it called?

_ n _ k _

Colour the animal that croaks green.
What is it called?

_ r _ g

Colour the animal that can run the fastest yellow.
What is it called?

c _ e _ t _ h

Colour the animal that eats both plants and animals black.
What is it called?

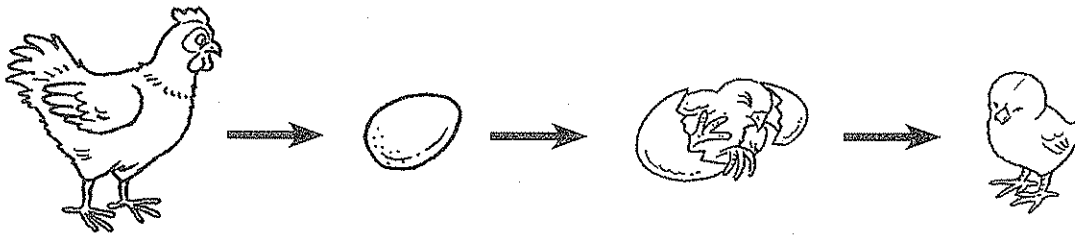
r _ c c _ _ n



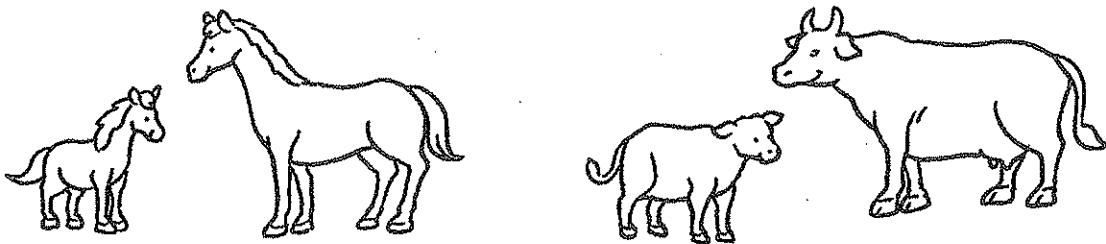
Life cycle of animals



Some animals lay eggs and their young hatch from the egg.



Some animals grow inside their mothers' bodies. These animals are born alive. All these young will grow into adults and give birth to their young.



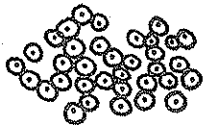
This pattern will repeat itself. It is called a life cycle.



Animals and their eggs



Match the eggs with the correct parent.



Fill in each blank to complete the word.

1. Frog lays its eggs in the

W _ _ _ _ _.

2. Hen lays its eggs in a

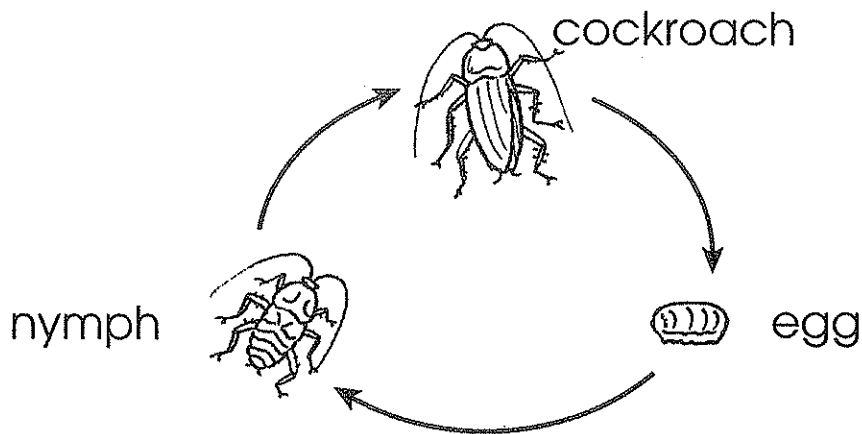
n _ _ _ _ _.

3. Butterfly lays its eggs on a

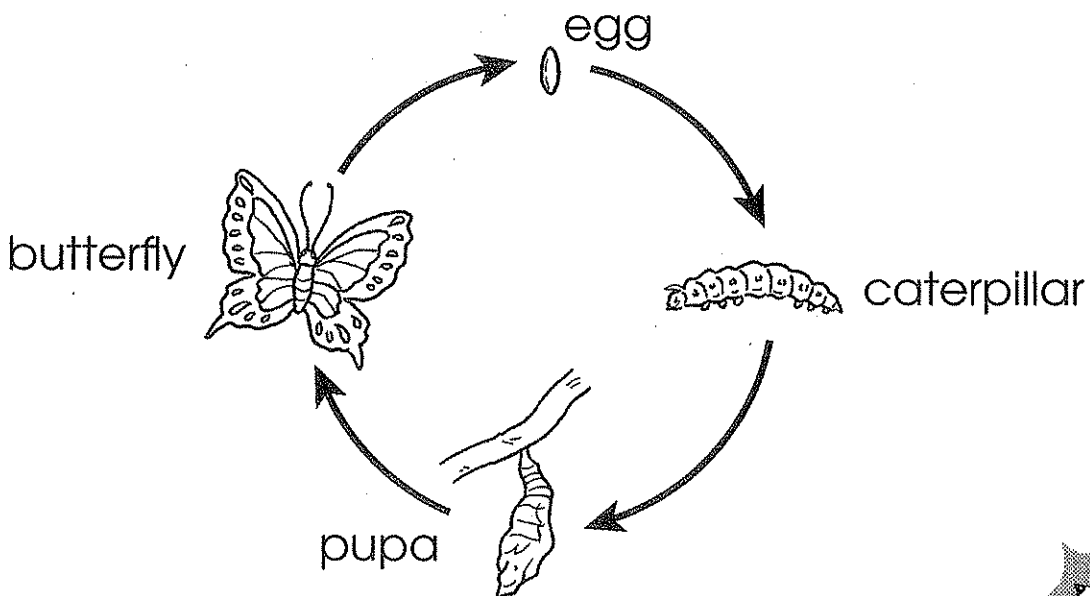
l _ _ _ _ _.

Life cycle of insects

All insects have 3 or 4 stages in their life cycles. Cockroaches and grasshoppers have 3 stages.



Beetles, mosquitoes, houseflies and butterflies have 4 stages in their life cycles.

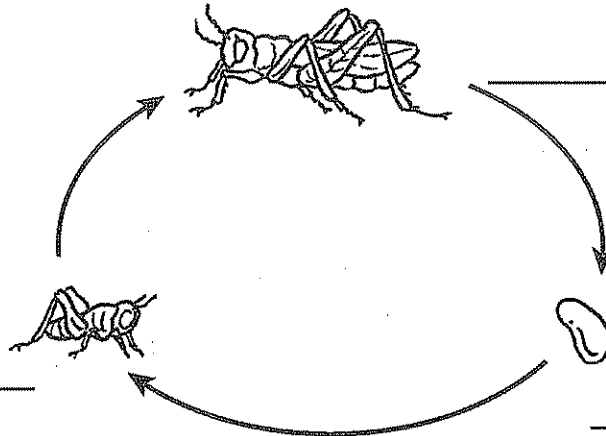


Fill in each blank with the correct word.

grasshopper

egg

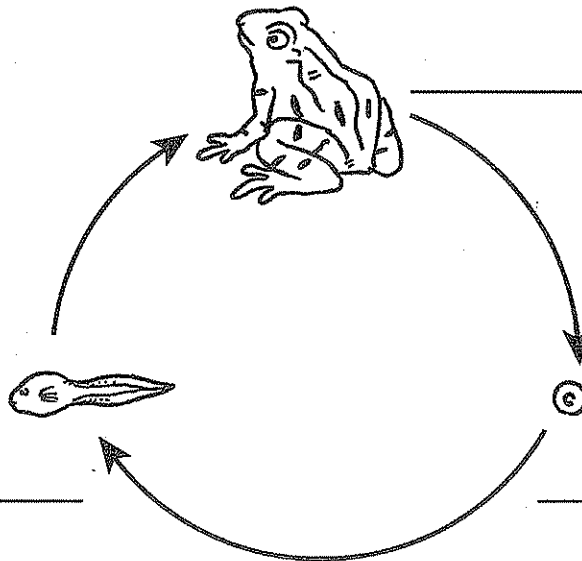
nymph



egg

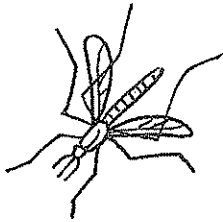
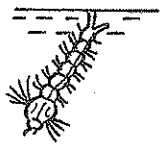
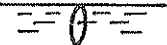
frog

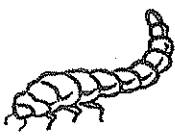
tadpole



More life cycles

Arrange the pictures in order.
 Write 2, 3 and 4 in the correct boxes.
 The first one has been done for you.

			
Stage 1	Stage	Stage	Stage

			
Stage 1	Stage	Stage	Stage



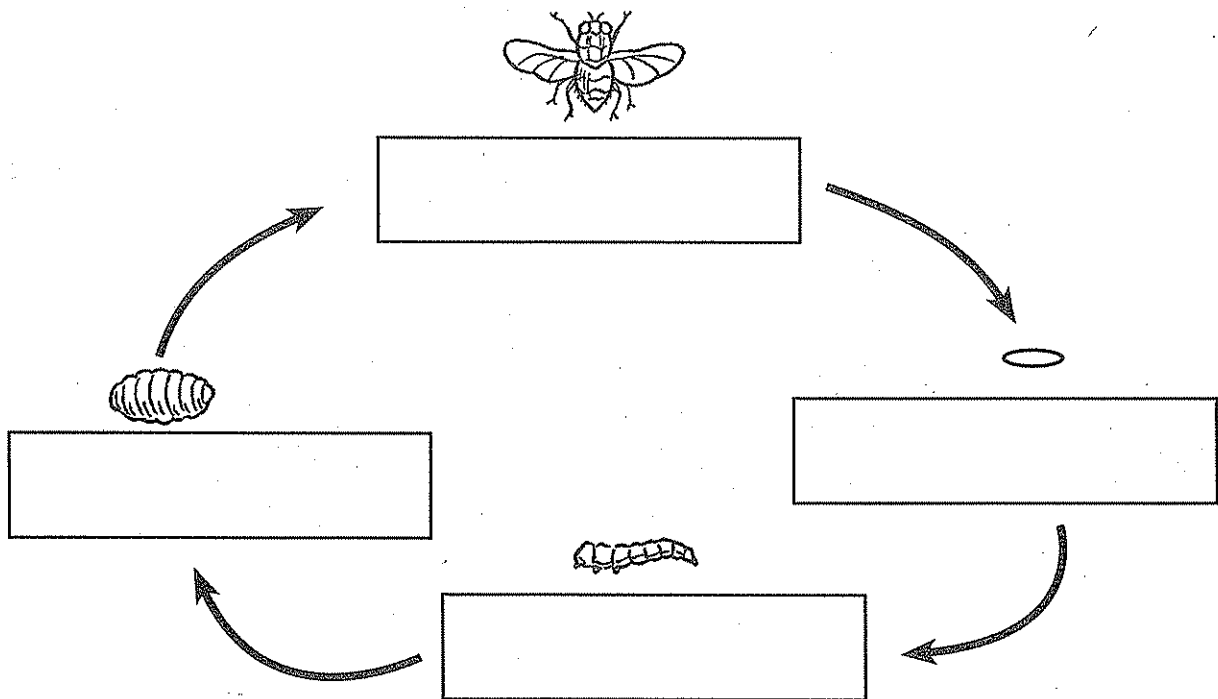
Fill in each blank with the correct word from the box.

maggot

housefly

pupa

egg



Match each adult insect with its young.

butterfly

housefly

mosquito

maggot

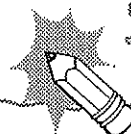
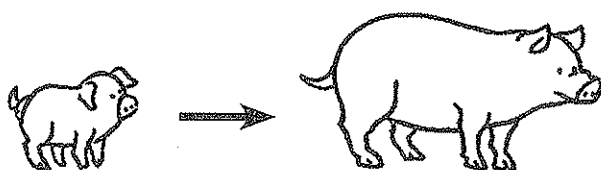
wiggler

caterpillar

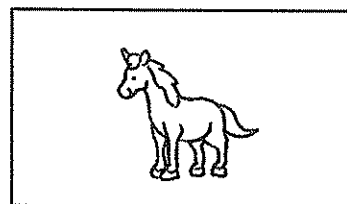
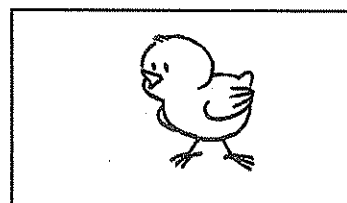
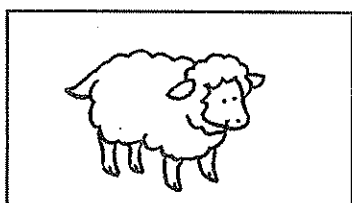
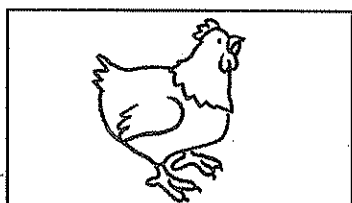
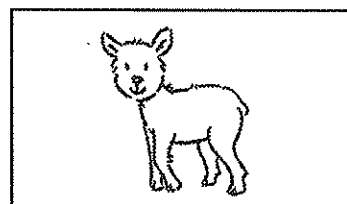
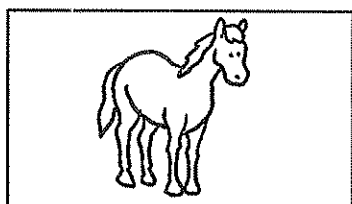
Life cycle of mammals



The life cycle of a mammal has 2 stages. The young is born alive and it grows into an adult.



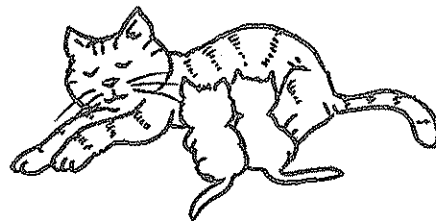
Match each adult mammal with its young.



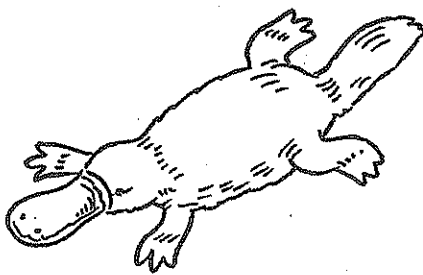
Mammals and their young



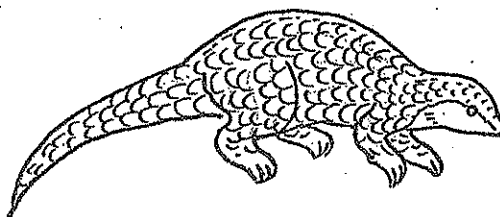
The young of mammals feed on their mothers' milk.
The parents usually take care of their young.



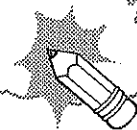
Most mammals give birth to their young alive,
except for the platypus and the spiny anteater.



platypus

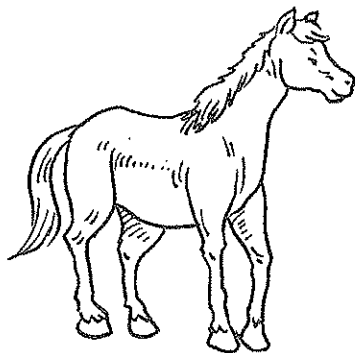


spiny anteater



Taking care of their young

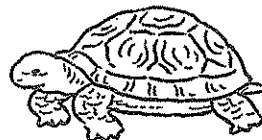
Write down the names of each animal in the correct column.



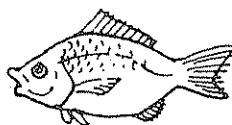
horse



bee



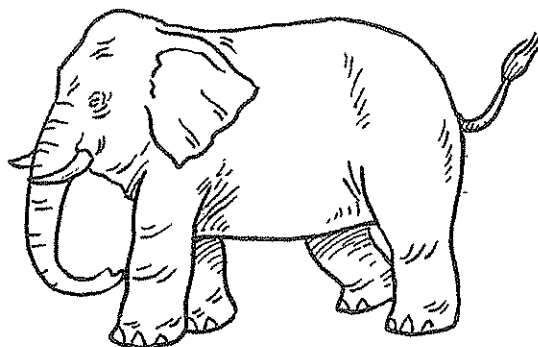
tortoise



fish



giraffe



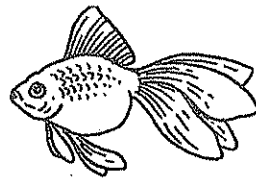
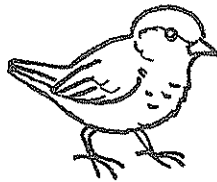
elephant

Take care of their young	Do not take care of their young

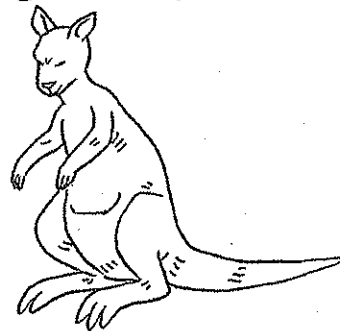
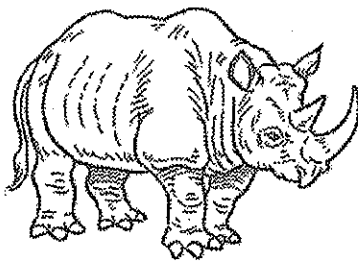


Animals take care of their young in different ways.
Circle the correct answer.

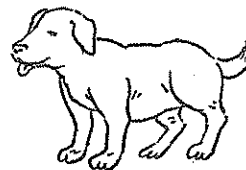
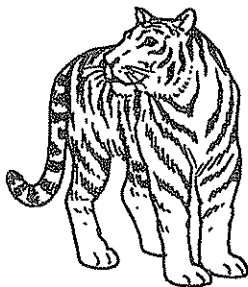
1. This animal chews food into small pieces and spits them out into the mouth of its young.



2. This animal keeps its young in a pouch.

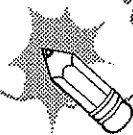
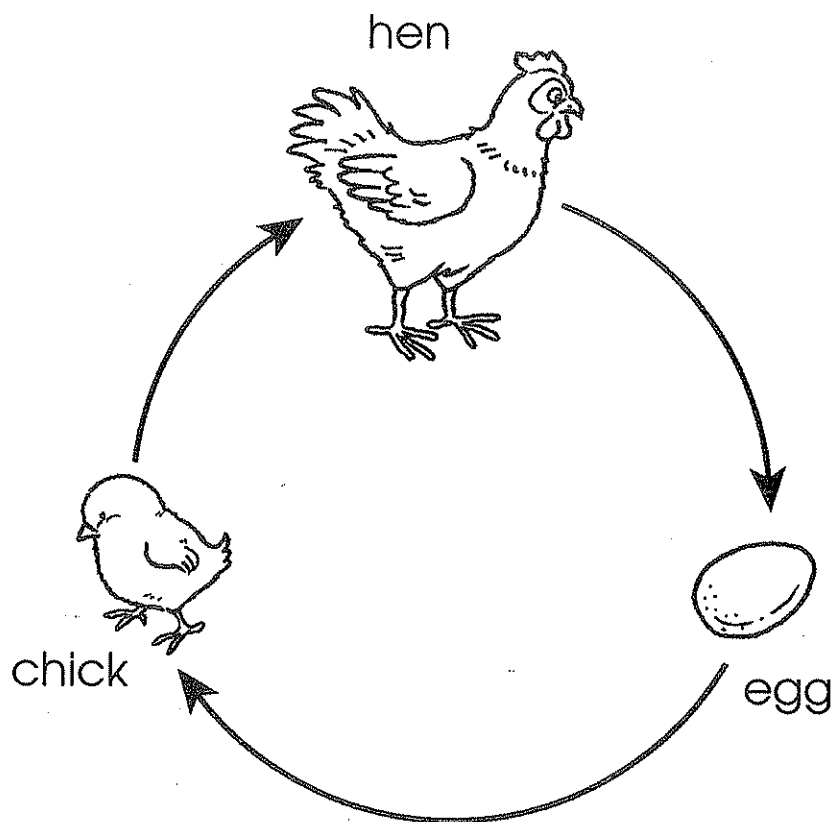


3. This animal teaches its young to hunt for food.



Life cycle of birds

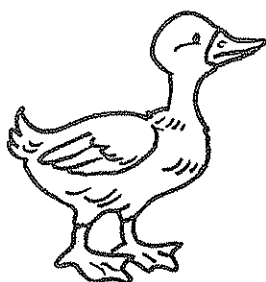
A bird has 3 stages in its life cycle. It lays eggs. The egg hatches into a young. The young then grows into an adult.





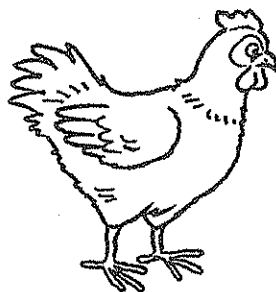
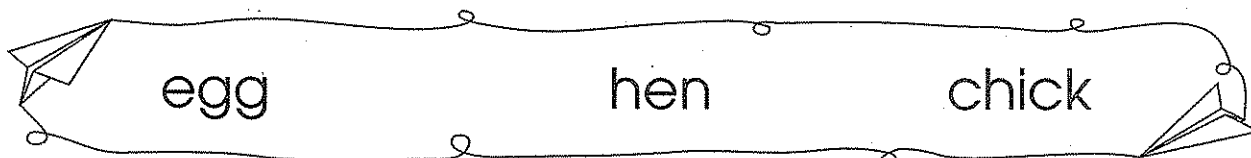
Write down each stage of the life cycle.

Fill in each blank with the correct word from the box.



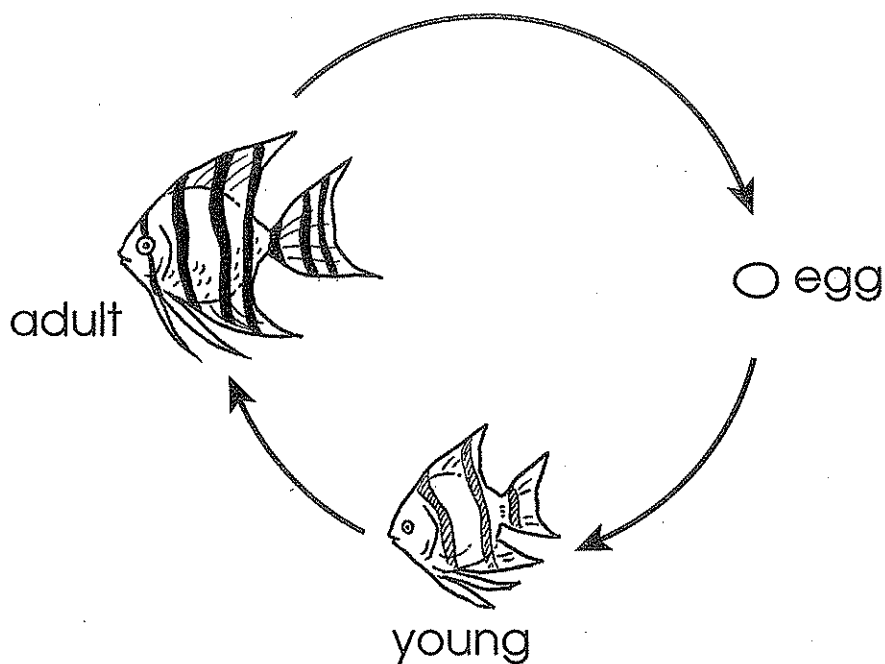
Write down each stage of the life cycle.

Use the words in the box to help you.

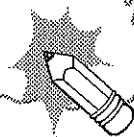
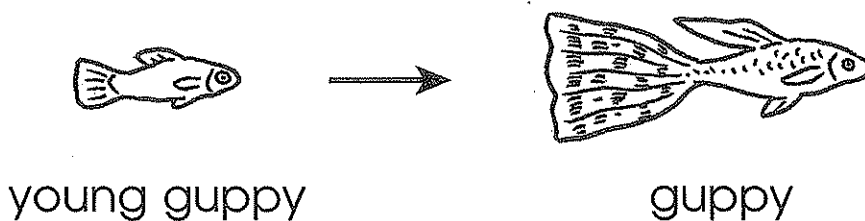


Life cycle of fish

Some fishes have 3 stages in their life cycles. A young fish will hatch from an egg and grow into an adult fish. The goldfish, fighting fish and angelfish lay eggs.

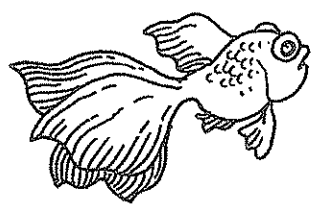


Some fishes do not lay eggs and have only 2 stages in their life cycles. The guppy, swordtail and molly do not lay eggs.

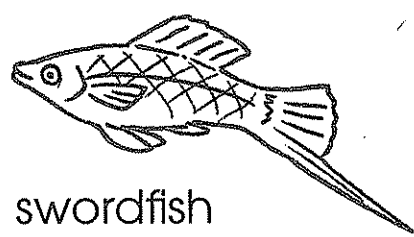




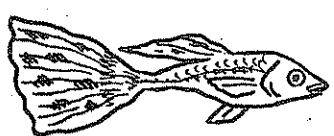
Circle the fish that lay eggs.
Cross out the fish that give birth.



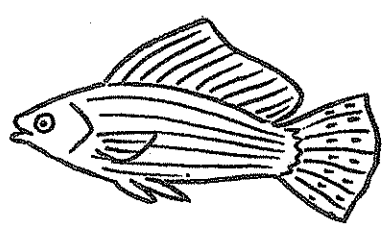
goldfish



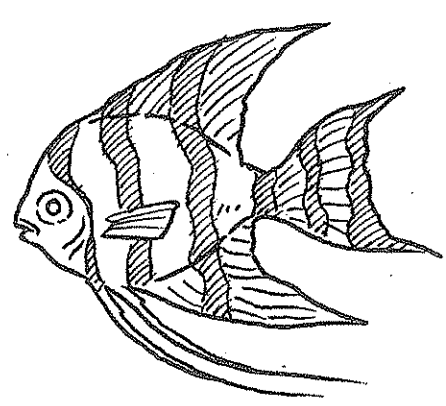
swordfish



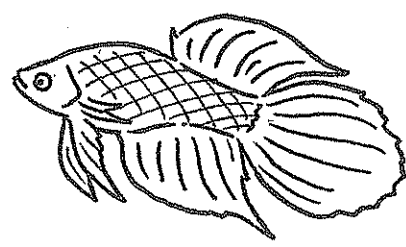
guppy



molly



angelfish



fighting fish

Life cycle of frogs



The pictures below show different stages in the life cycle of a frog. Match the stages of the life cycle.

Stage 1	Eggs are laid in the water
------------	-------------------------------



Stage 2	Egg hatches into a tadpole
------------	-------------------------------



Stage 3	Tadpole with 2 legs
------------	------------------------



Stage 4	Tadpole with 4 legs
------------	------------------------



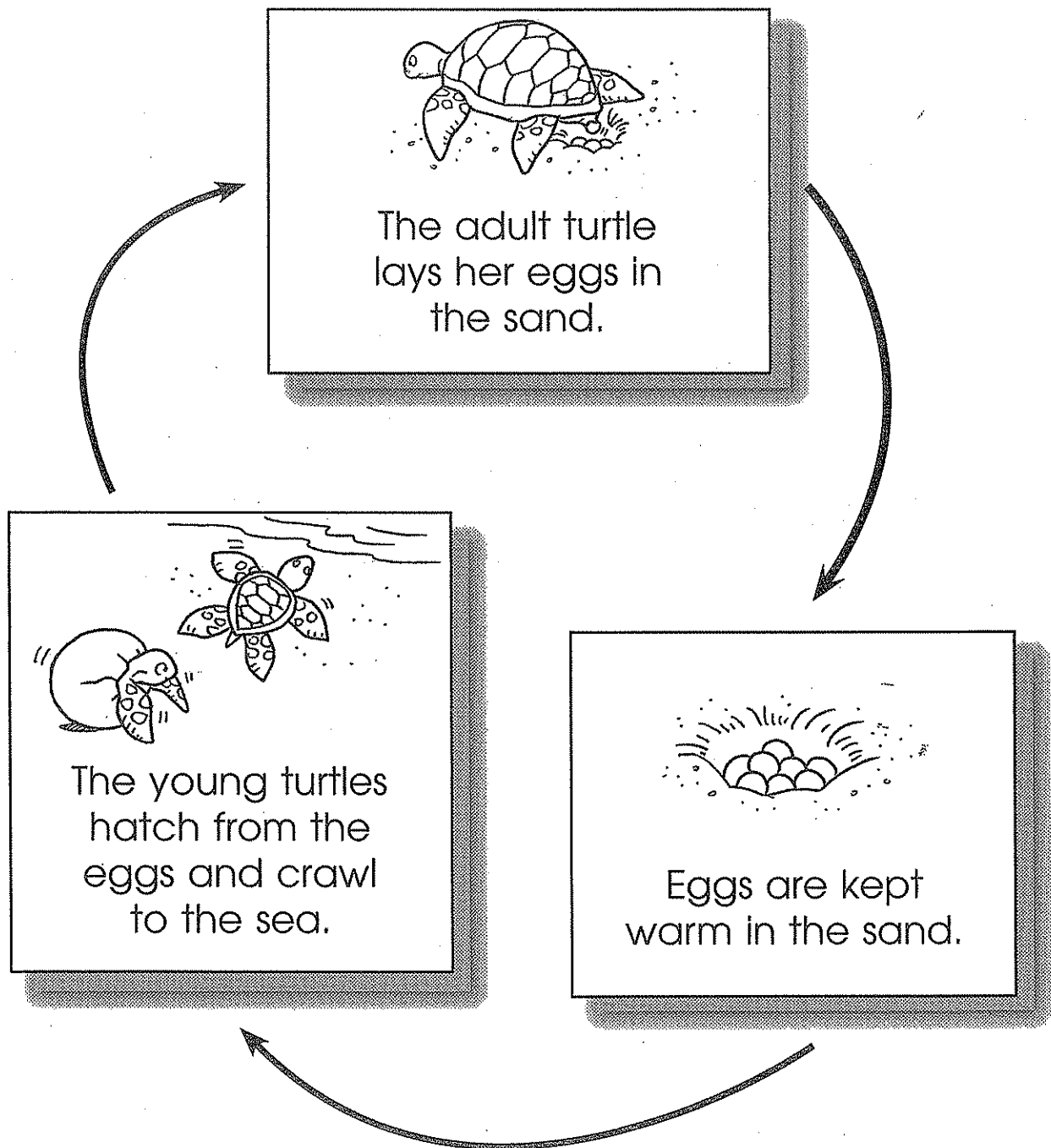
Stage 5	Froglet (baby frog)
------------	------------------------



Life cycle of reptiles



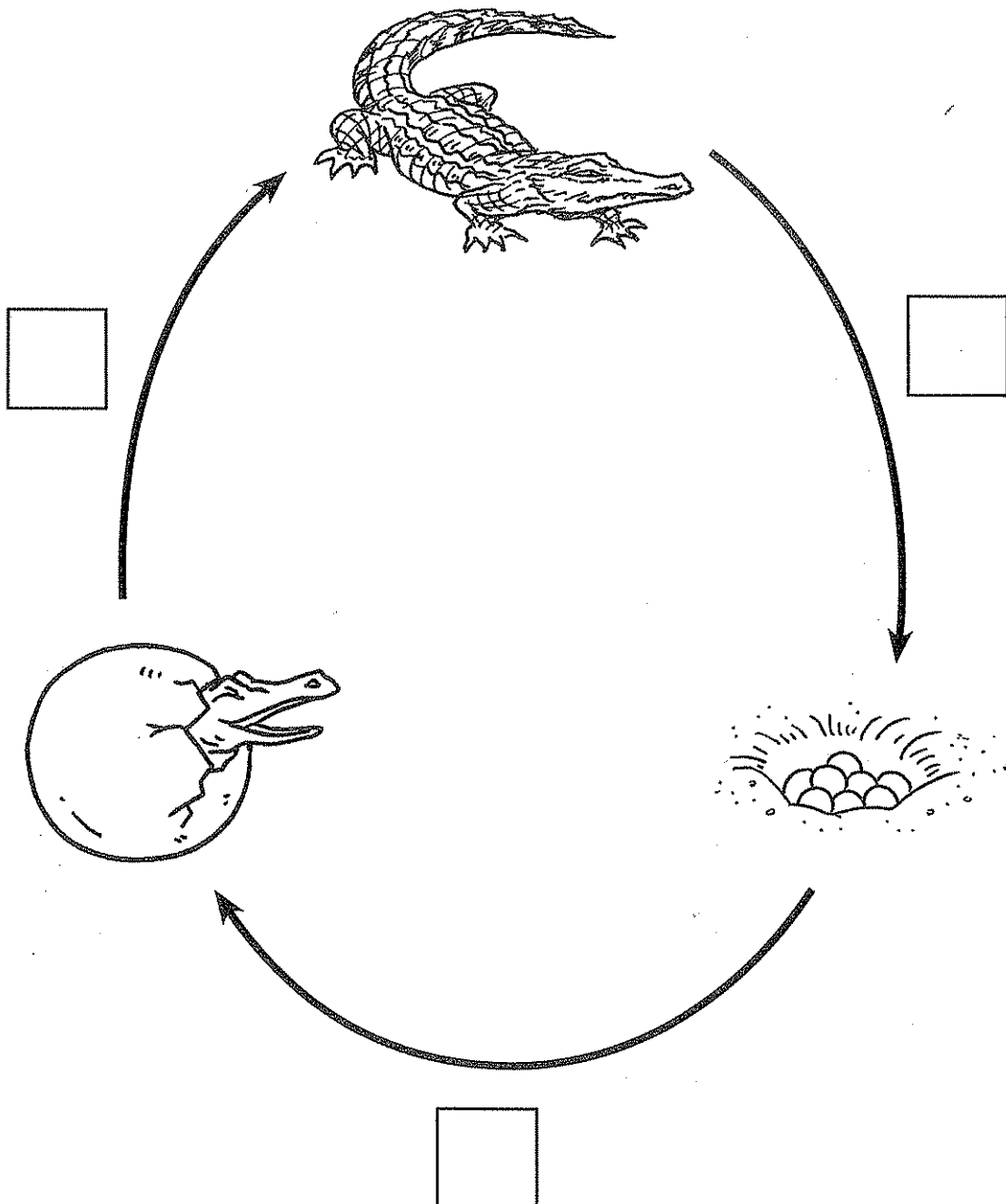
Most reptiles lay eggs. The eggs are laid on land.



More life cycles of reptiles



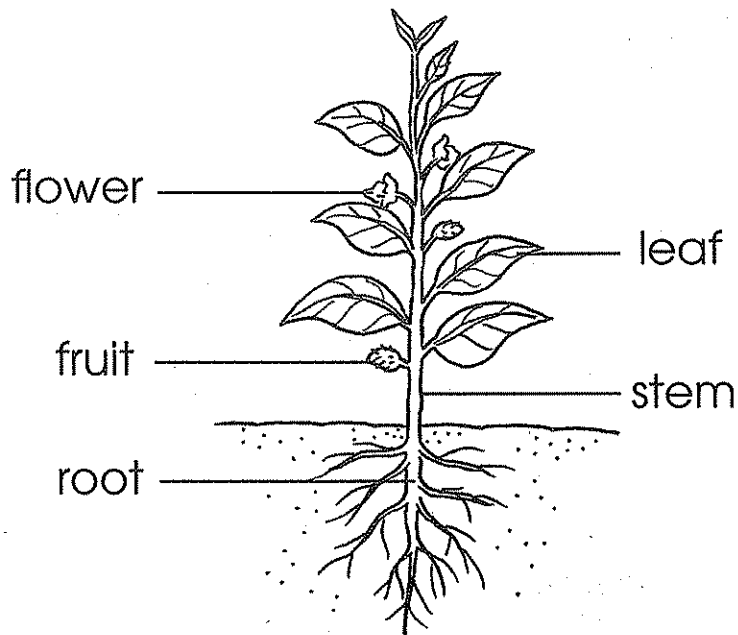
Arrange the pictures in order. Write 1, 2 and 3 in the boxes below.



Plants



A plant is made up of leaves, stem, roots, flowers and fruits.



Leaves use sunlight to make food for the plant.

The stem supports the branches and leaves. It joins the roots to other parts of the plant.

Roots grow in the soil. They hold the plant firmly to the ground. They take in water for the plant.

Flowers are the most beautiful part of a plant. They grow into fruits.

Seeds are found in the fruits. They can grow into new plants.



Plant parts

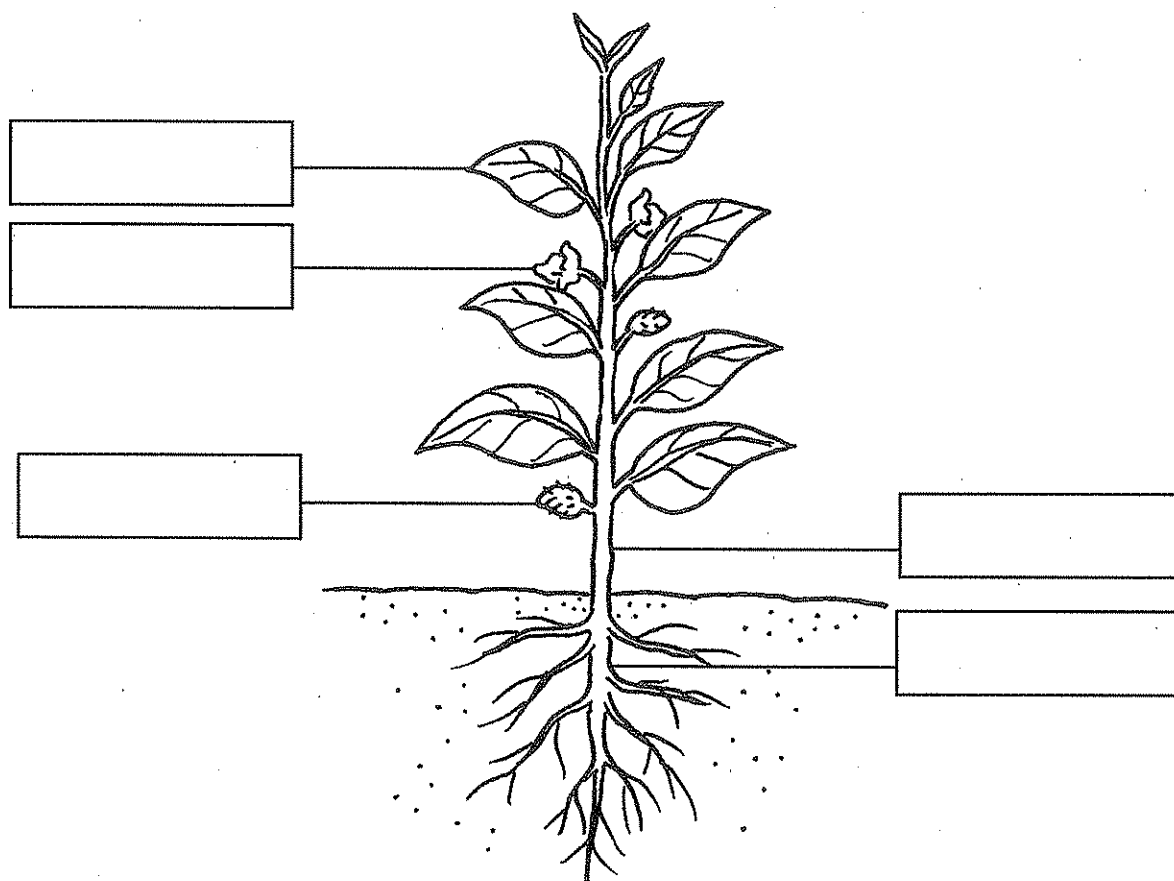


Label each part of the plant. Fill in each blank with the correct word from the box.

leaf
stem

fruit
root

flower



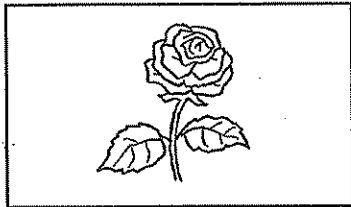
Types of flowers



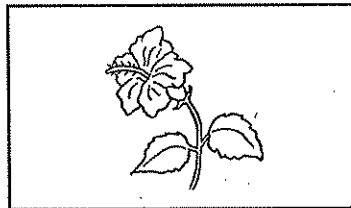
Flowers can grow into fruits. Fruits have seeds. These seeds can grow into new plants.



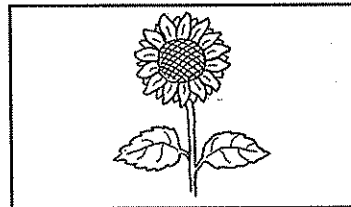
Match each flower with its name.



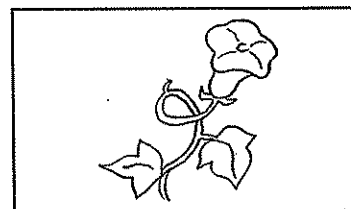
● sunflower



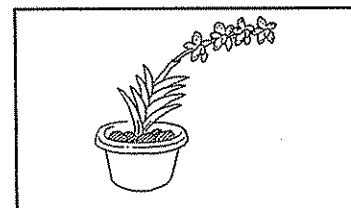
● morning glory



● rose



● orchid

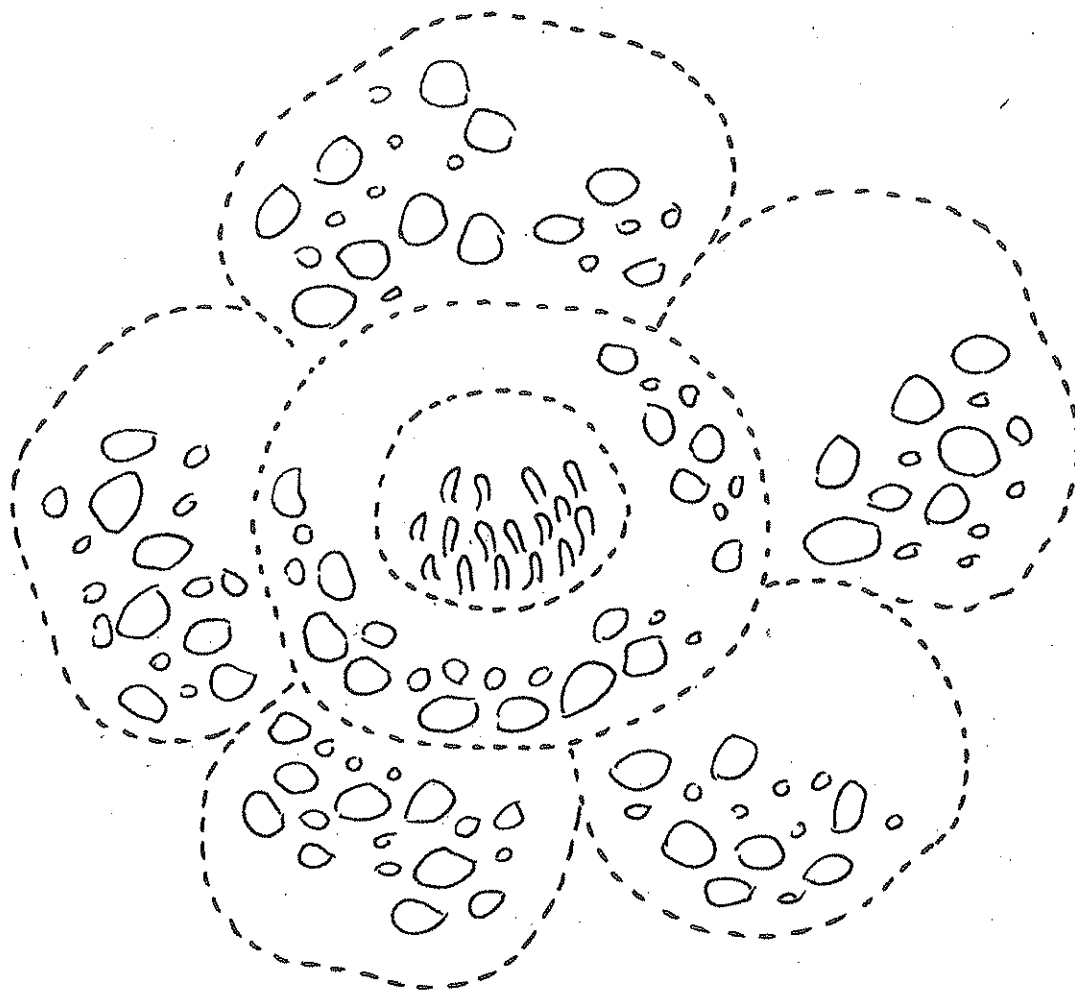


● hibiscus

The biggest flower



Trace to find out the biggest flower in the world.

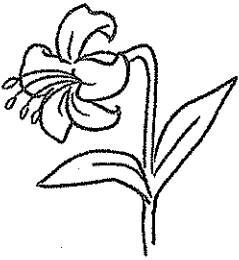
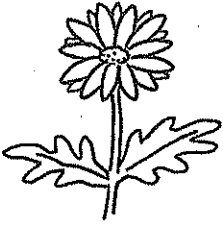
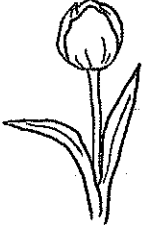
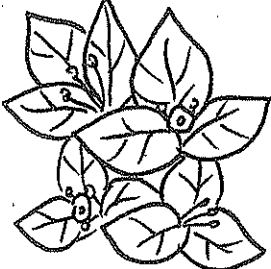


This is the Rafflesia.

More flowers



Circle the word that names the flower.

	orchid hibiscus lily
	sunflower daisy orchid
	tulip ixora carnation
	rose bougainvillea hibiscus

Fruits



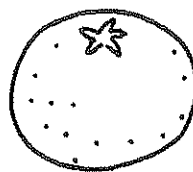
A flower grows into a fruit. It protects the seeds inside.

Some fruits are can be eaten (edible) while others cannot be eaten (inedible).

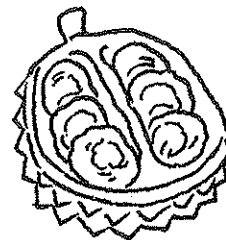
Fruits that can be eaten



apple

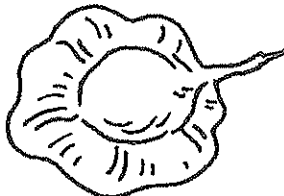


orange



durian

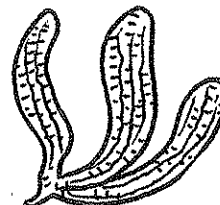
Fruits that cannot be eaten



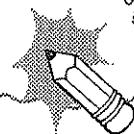
angkana



rubber



shorea

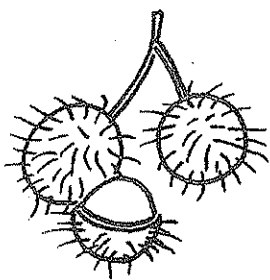


Edible and inedible fruits

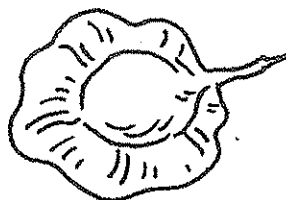


Colour the fruits that can be eaten.

Cross ☒ out the fruits that cannot be eaten.



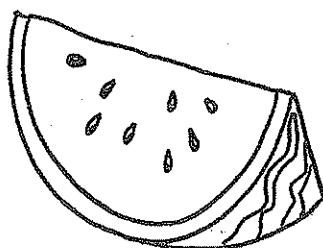
rambutans



angsana



cherry



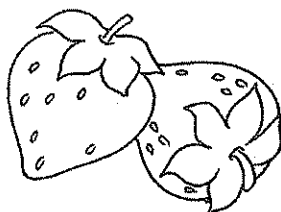
watermelon



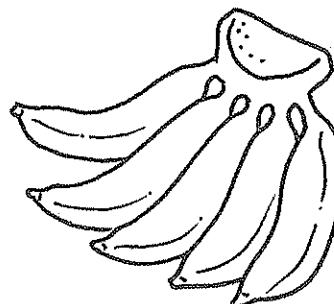
rubber



pod



strawberries

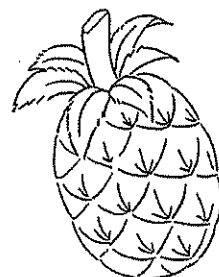
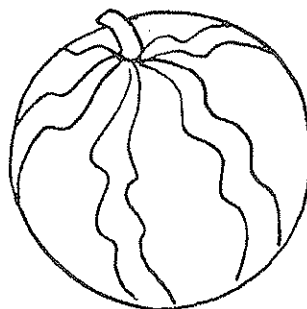
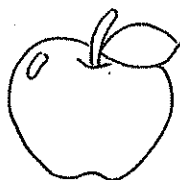
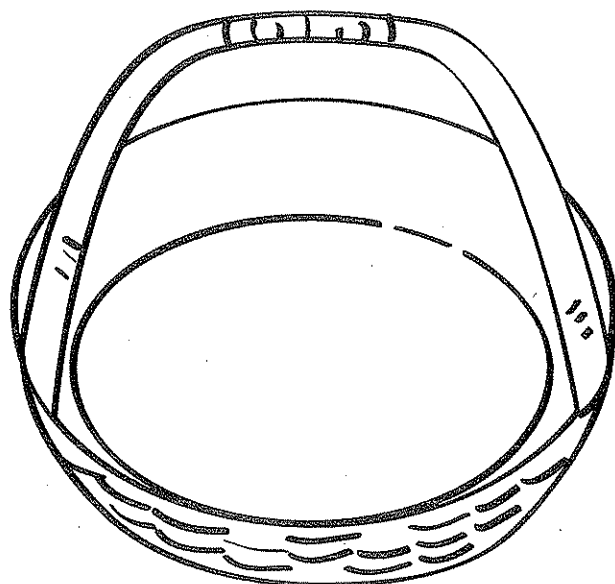
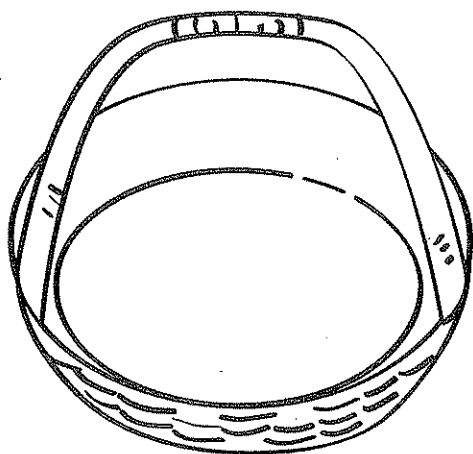
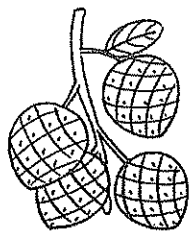
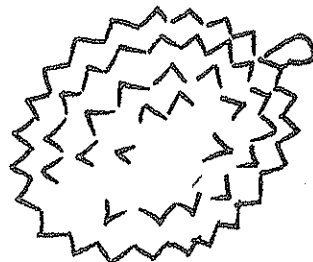
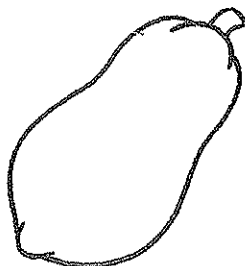
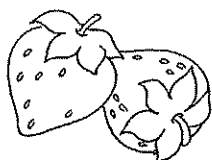


bananas

Big and small fruits



Which basket does each fruit belong to?
Match the bigger fruits to the bigger basket.

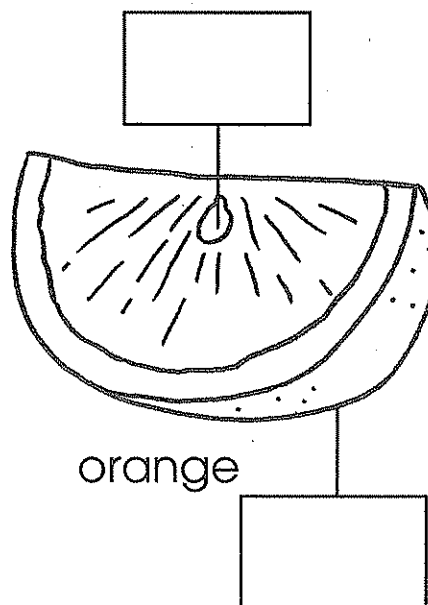
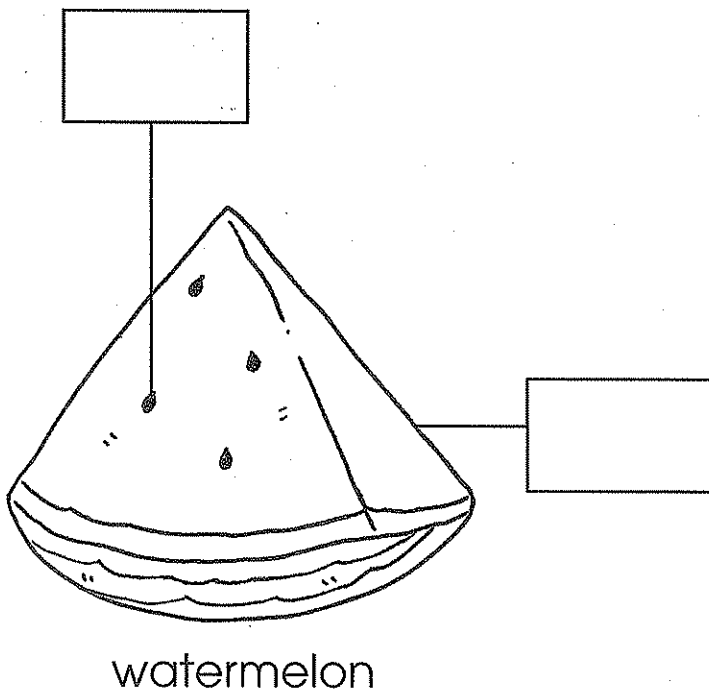
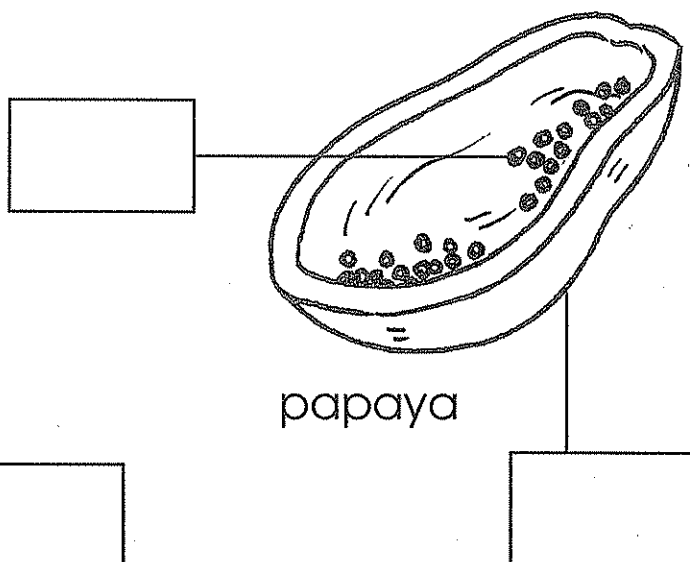
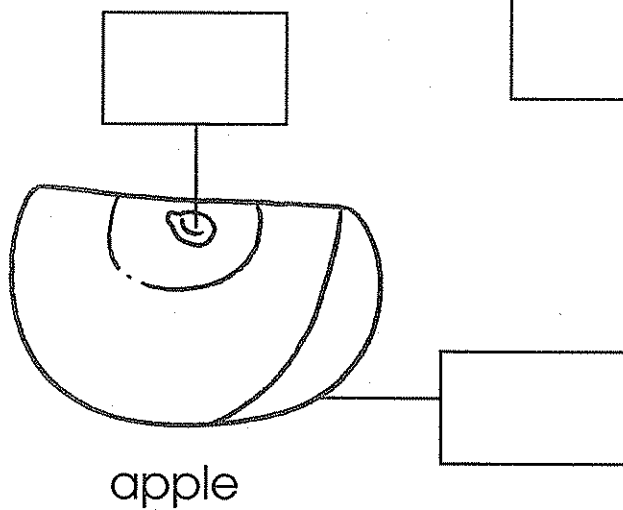


Fruits and seeds



Look at the labelled parts.

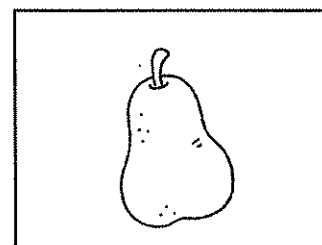
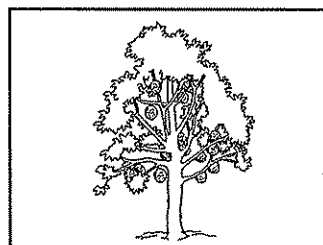
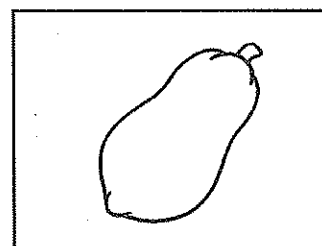
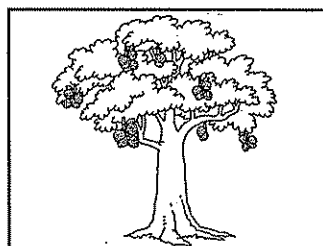
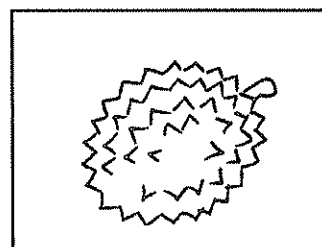
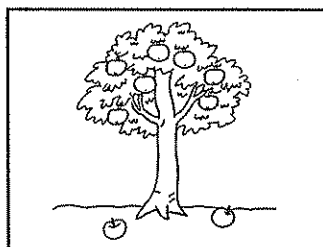
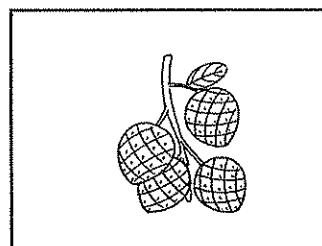
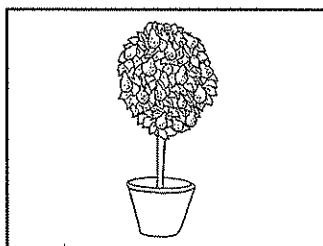
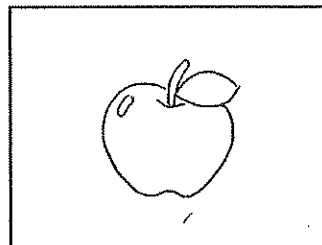
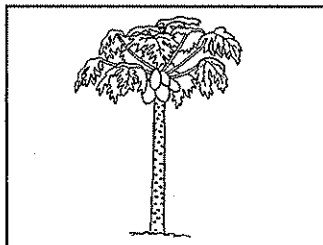
Put 'f' for 'fruit' and 's' for 'seed' in the boxes.



Fruit trees



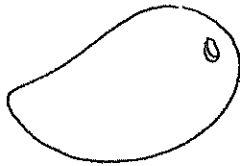
Match each fruit with its tree.



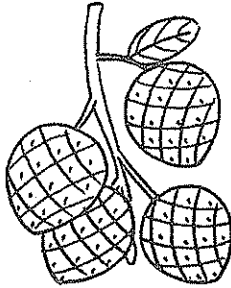
How many seeds?



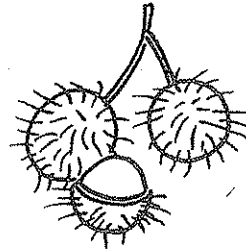
Write down the name of each fruit in the correct column.



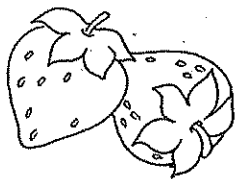
mango



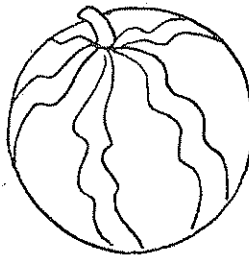
lychees



rambutans



strawberries



watermelon



papaya

Fruit with one seed	Fruit with many seeds

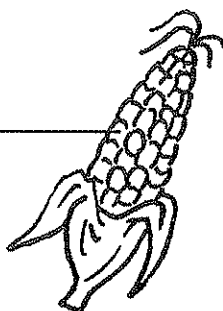
Edible seeds



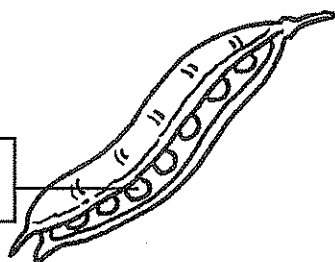
Some fruits have edible seeds. These include the seeds of beans and nuts.



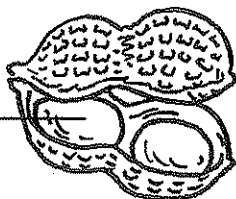
Trace the name of each fruit.
Then label the seeds.



corn

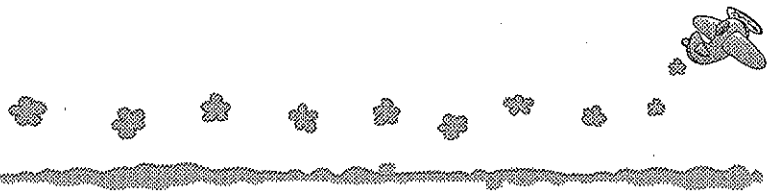


snow pea



groundnut

Seeds



Cut an apple.

Draw its seed in the box below.

What is the shape of the seed?

The apple seed is oval.

Open a pea.

Draw its seed in the box below.

What is the shape of the seed?

The pea seed is round.

More seeds



Find 4 different types of seeds from 4 different fruits.
Paste them in the boxes below.
Then write down the name of the fruit.



Leaves



Leaves have stalks, leaf blades and veins. They come in different colours, shapes and sizes.



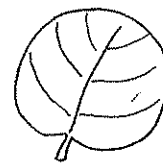
tooth-
edge



lobed
edge



entire-
edge



round-
shaped

Leaves can have two different types of patterns — network vein pattern and parallel vein pattern.



network vein pattern



parallel vein pattern

There are two types of leaves — simple leaf and compound leaf. In a simple leaf, one leaf grows from the stalk. In a compound leaf, two or more leaves grow from a stalk.



simple leaf



compound leaf



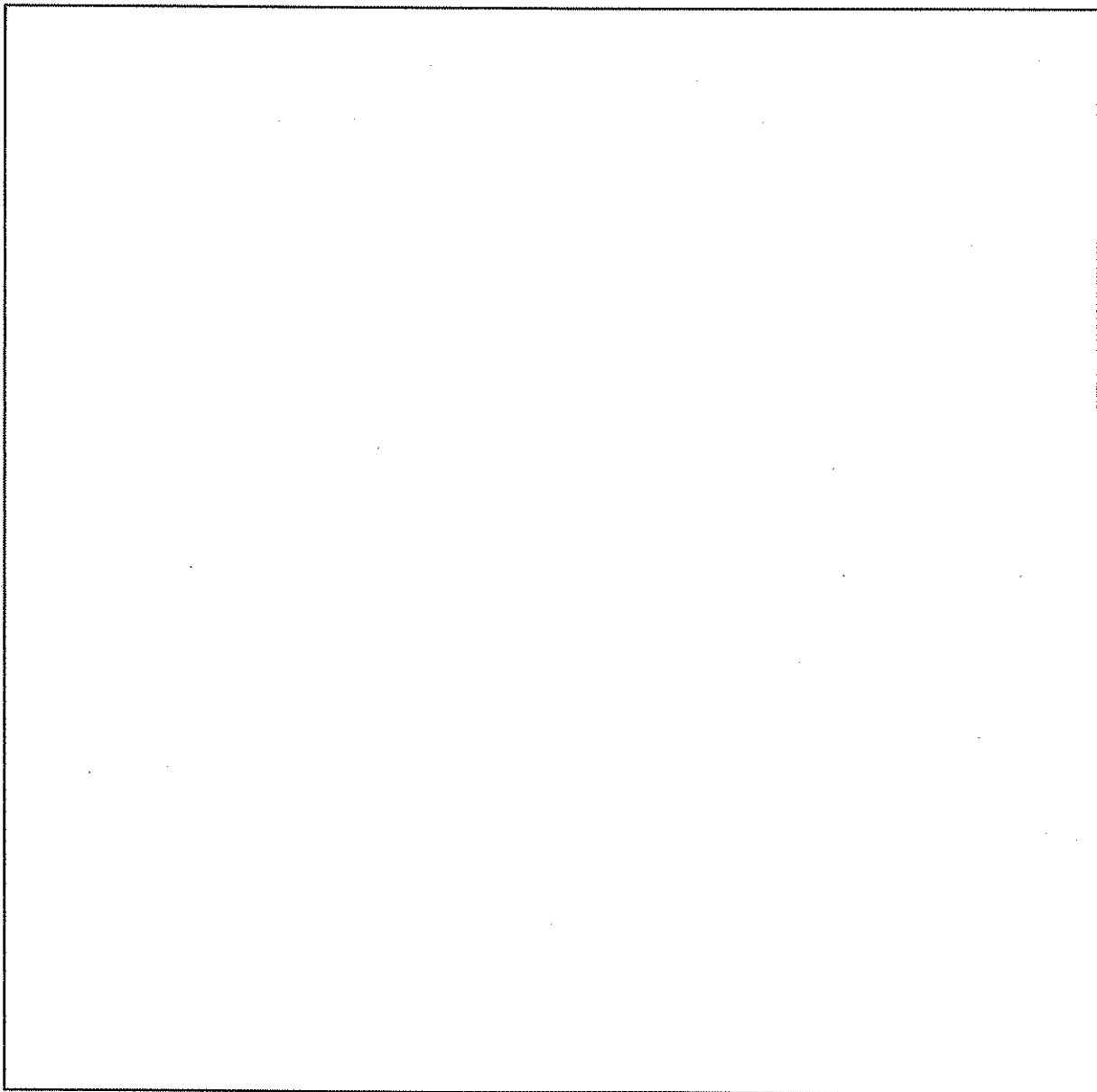
Parts of a leaf



Collect a leaf and trace its outline in the box.
Label the parts using the numbers shown.

1 — leaf stalk
2 — leaf blade

3 — main vein
4 — branch vein



Vein patterns of leaves



Collect two leaves and trace their outlines in the boxes.
Draw the vein patterns for each leaf.

parallel vein pattern

network vein pattern



Leaf printing



1. Pluck two leaves, one with a parallel vein pattern and one with a network vein pattern.
2. Paint the top of the leaves. Then print them in the boxes.
3. You should be able to see the vein patterns clearly.

network vein pattern

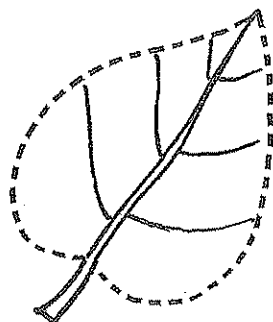
parallel vein pattern



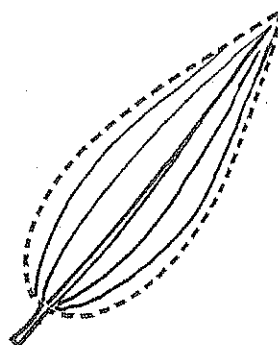
Leaf shapes



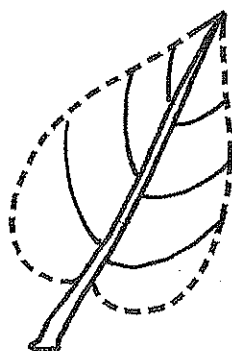
Trace the dotted lines to find the shape of each leaf.



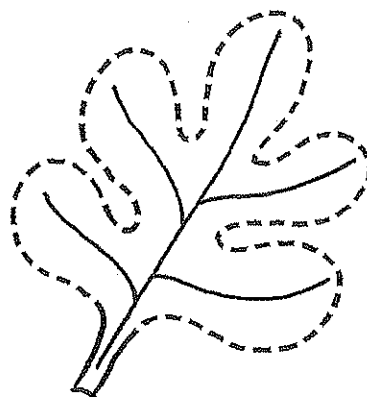
heart-shaped



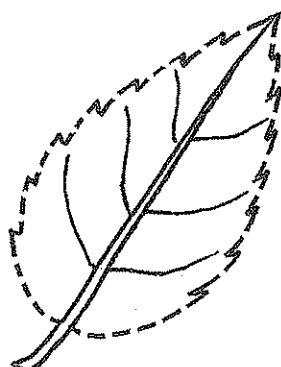
lance-shaped



entire-edge



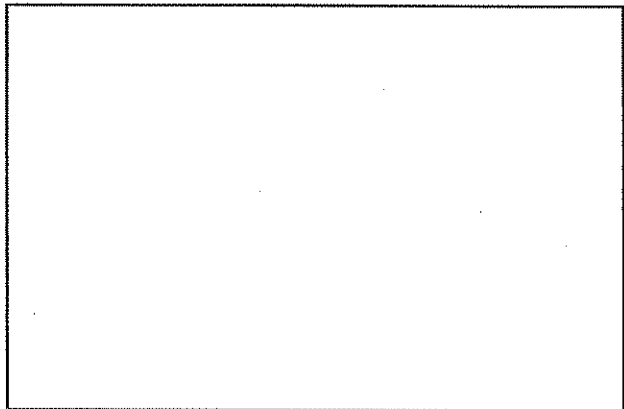
lobe-edge

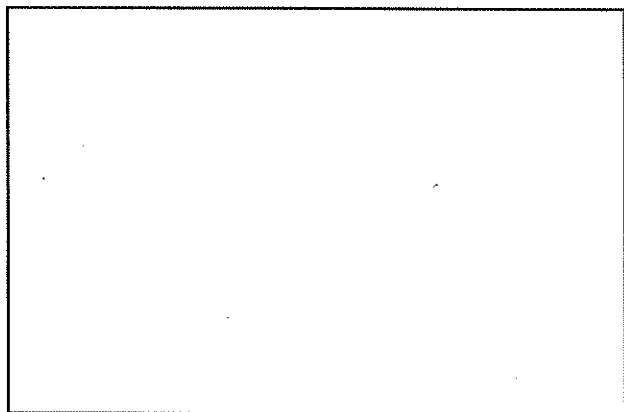


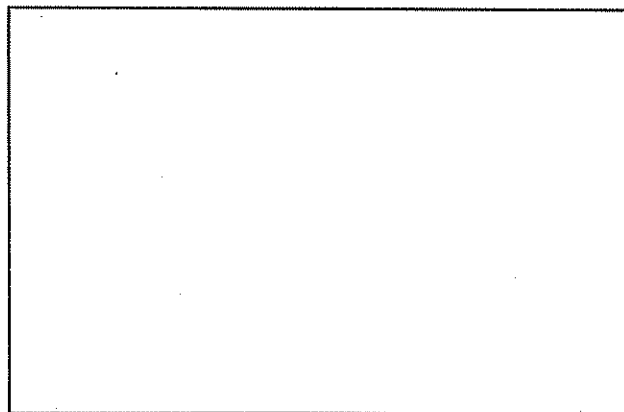
tooth-edge

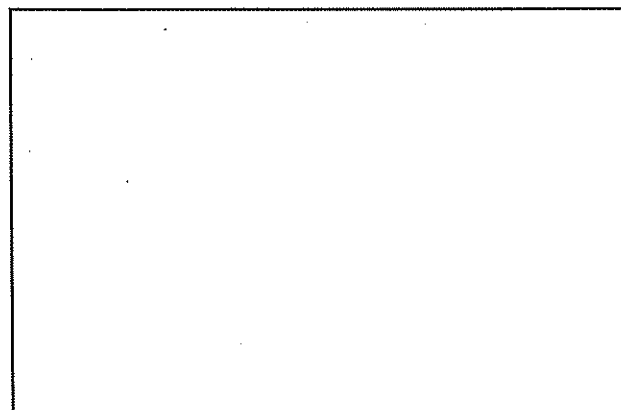
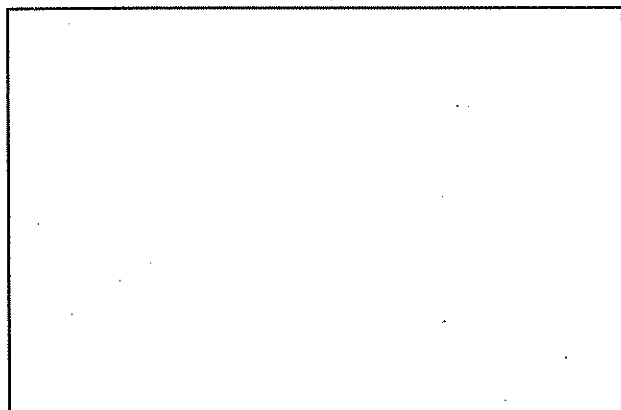
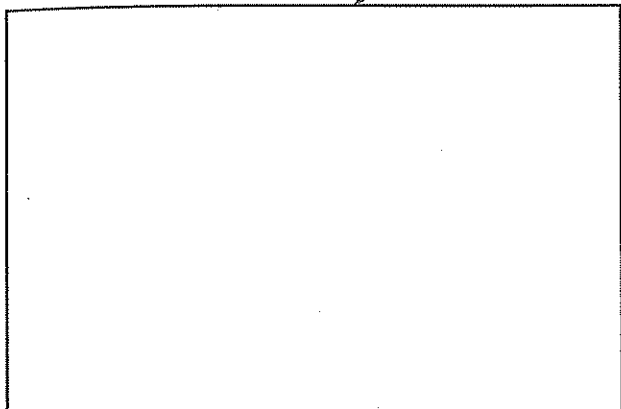
More leaf shapes

Collect leaves of different shapes.
Paste them in the boxes. Then label the shape of each leaf.





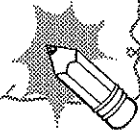




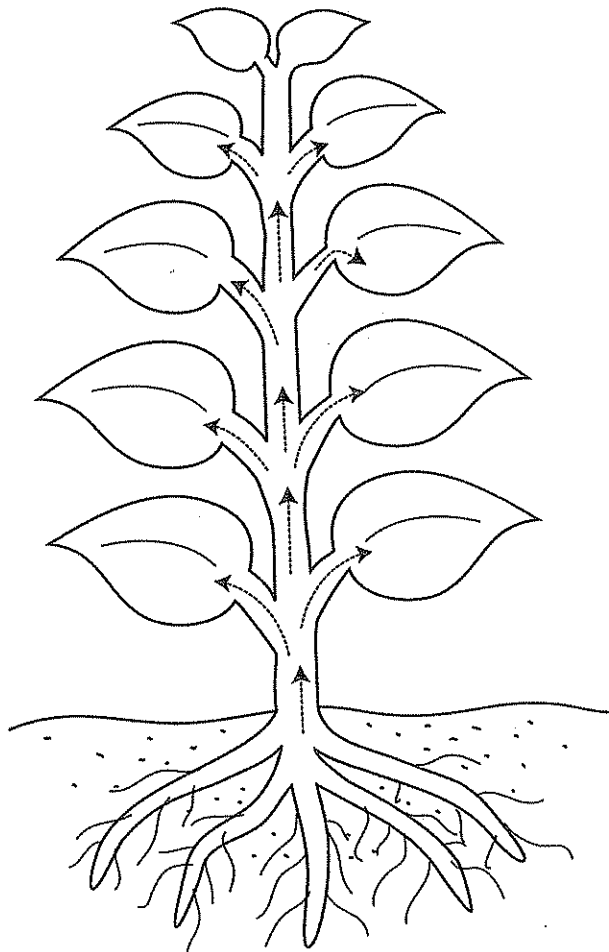
Stem



The stem holds a plant upright. It carries water upwards from the roots to other parts of the plant.



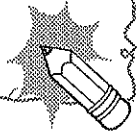
Trace the dotted lines to see how water is carried from the roots to the other parts of the plant through the stem.



Edible underground stems



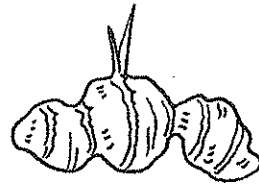
Some plants have special stems that store food and water. Potato and ginger are plant parts that grow below the ground. They are called underground stems.



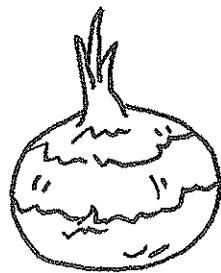
Colour the underground stem.
Then trace the word.



potato



ginger

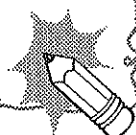


water chestnut

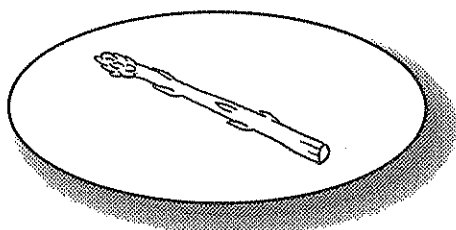
Edible stems



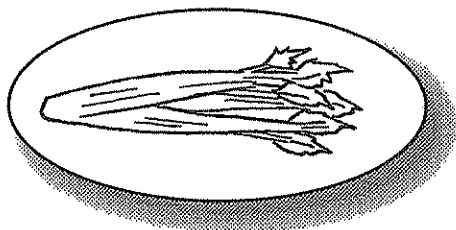
Some of the vegetables we eat are stems. Asparagus, potato, celery and broccoli are stems.



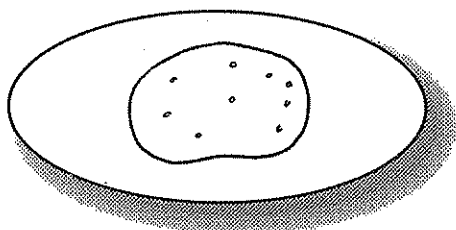
Match each picture to its name.



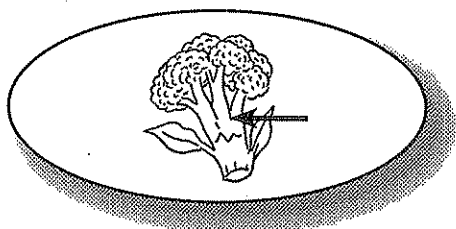
● broccoli



● asparagus



● potato



● celery



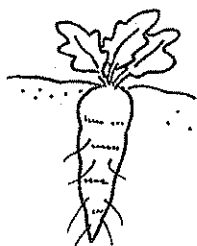
Roots



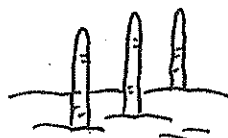
Roots help to hold the plant firmly to the ground. They stop the plant from being blown away by the wind or be pulled out by animals.

The roots also take in water and minerals from the soil.

Some plants have special roots — storage roots, breathing roots, clasping roots and prop roots. They help the plant to grow.



storage root



breathing roots



clasping roots



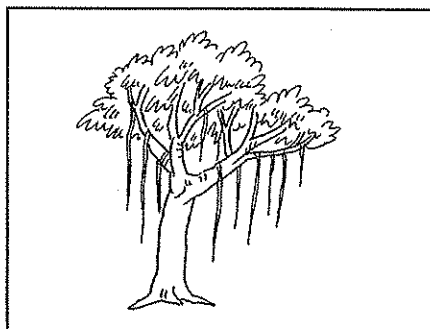
prop roots



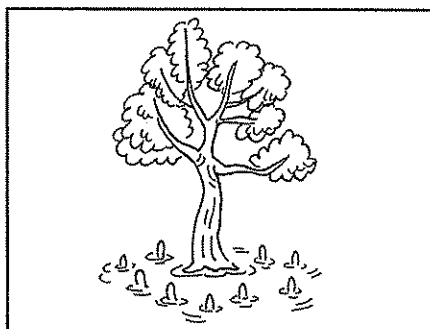
Types of roots



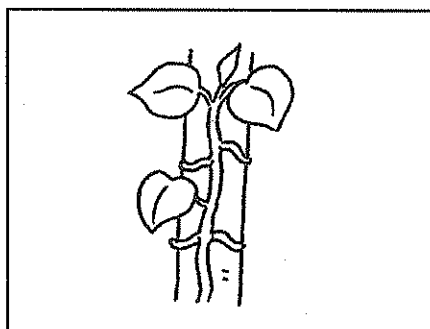
Match each picture with their roots.



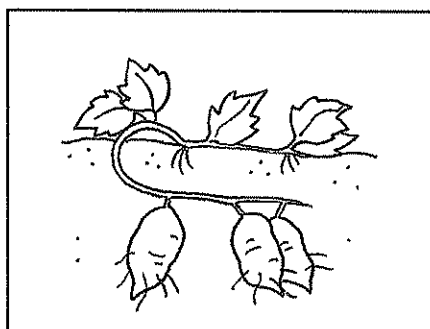
● prop roots



● storage roots



● breathing roots

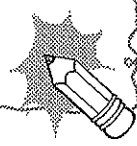


● clasping roots

Edible roots



Some roots can be eaten. We call them root vegetables. Carrot, tapioca, sweet potato and radish are edible roots.



Colour the root vegetables.



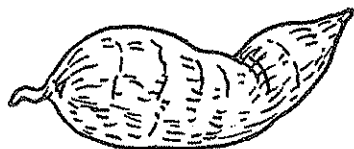
carrot



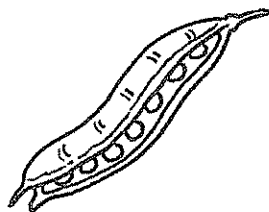
corn



potato



tapioca



pea



groundnut



sweet potato



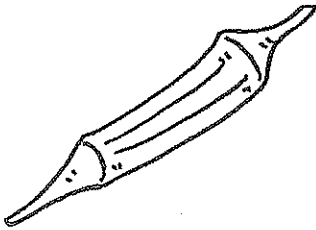
radish



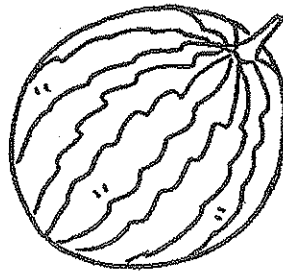
Fruits and vegetables



Circle the fruits.
Colour the vegetables.



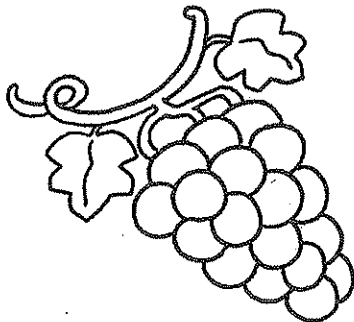
lady's finger



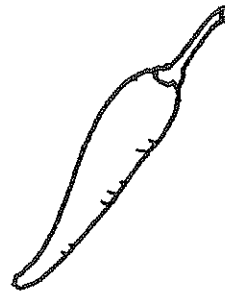
watermelon



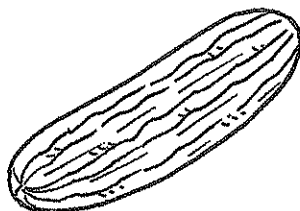
tomato



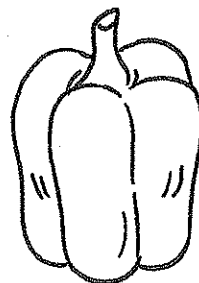
grapes



chilli



cucumber



capsicum

Plant parts



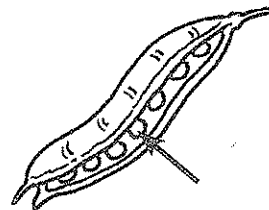
Which part of the plant does each vegetable belong to?
Write the correct number in the box.



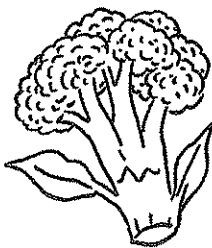
sweet potato



tomato



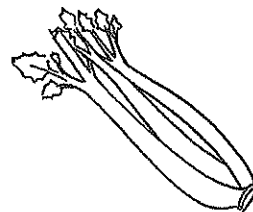
snow pea



broccoli



spinach



celery

1 - flower

4 - fruit

2 - leaf

5 - stem

3 - root

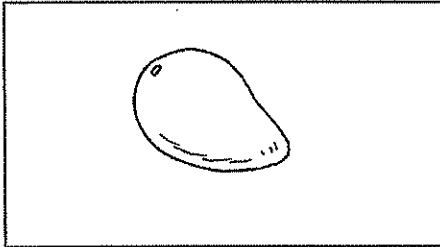
6 - seed



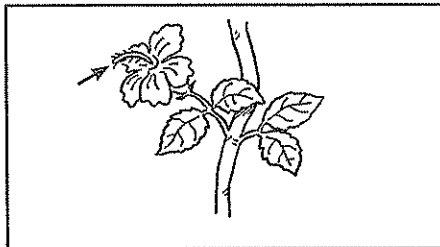
More plant parts



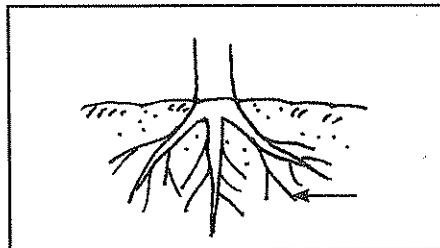
Match each picture with the correct plant part.



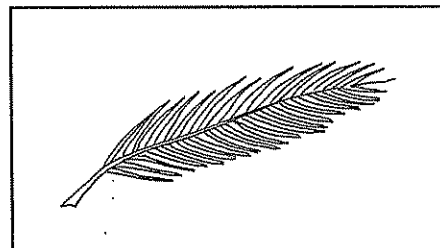
● flower



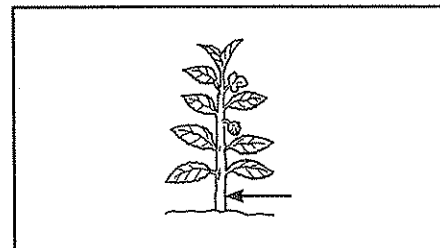
● stem



● root



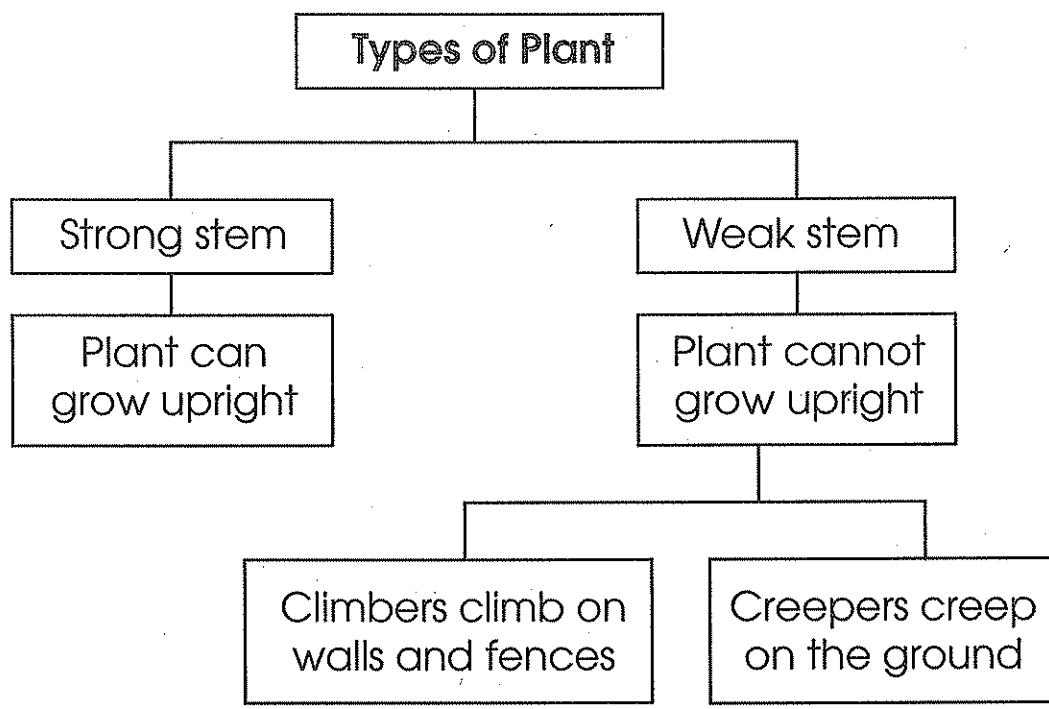
● fruit



● leaf



Land plants



Climbers climb onto supports. They climb upwards to get more sunlight.

- The money plant has roots that cling onto sticks for support.
- The passion plant has tendrils that cling onto other plants for support.
- The morning glory wraps around fences for support.

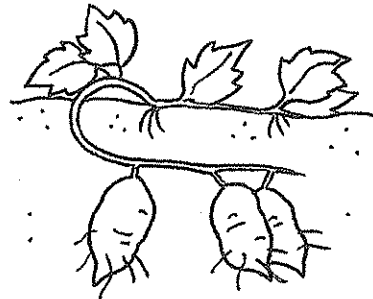
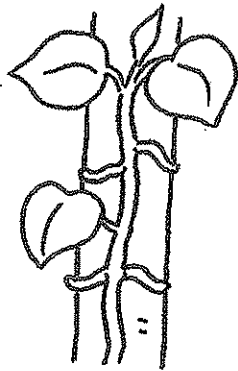
Creepers such as the strawberry plant and sweet potato plant creep on the ground to get more sunlight.



Climbers and creepers



Name each plant. Fill in each blank with the correct word from the box. Then colour the plants.



money plant

passion fruit plant

morning glory plant

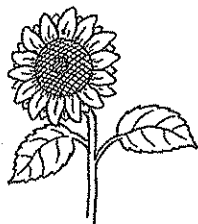
sweet potato plant



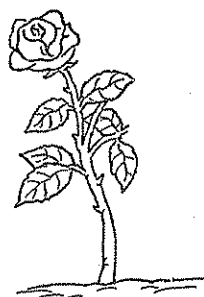
Strong and weak stems



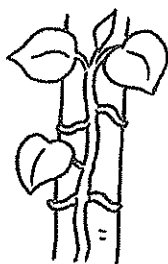
Put a tick (✓) for plants that have strong stems.
Put a cross (X) for plants that have weak stems.



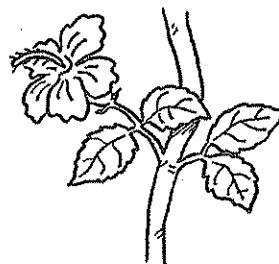
sunflower plant

☐

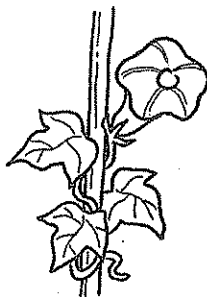
rose plant

☐

money plant

☐

hibiscus plant

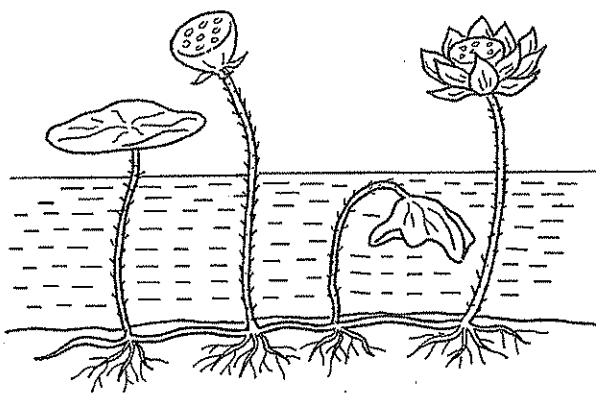
☐

morning glory plant

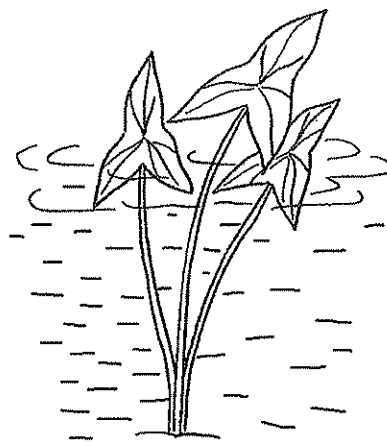
☐

Water plants

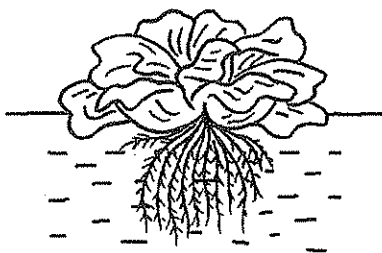
Some water plants float on water. Some plants stay completely underwater. Some plants have their roots in the soil but their leaves and flowers are above the water.



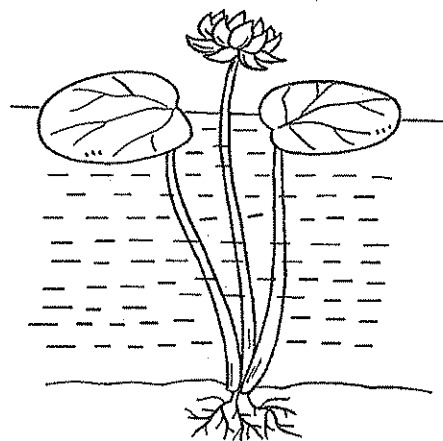
lotus plant



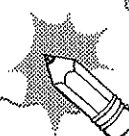
arrowhead



water lettuce

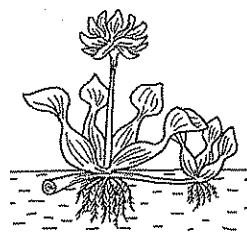


water lily

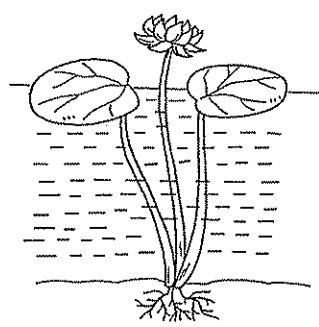




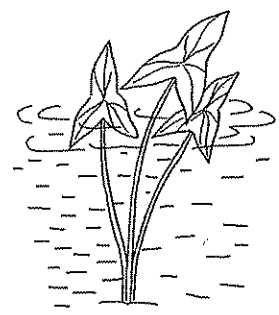
Write the name of each plant in the correct column.



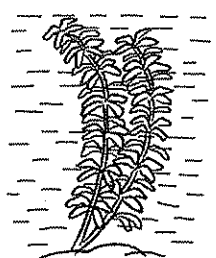
water hyacinth



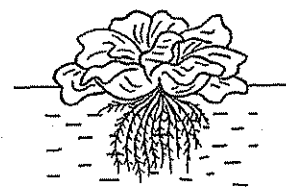
water lily



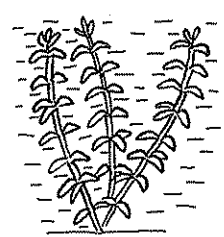
arrowhead



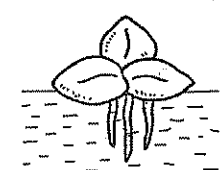
hydrilla



water lettuce



elodea



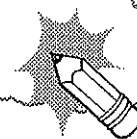
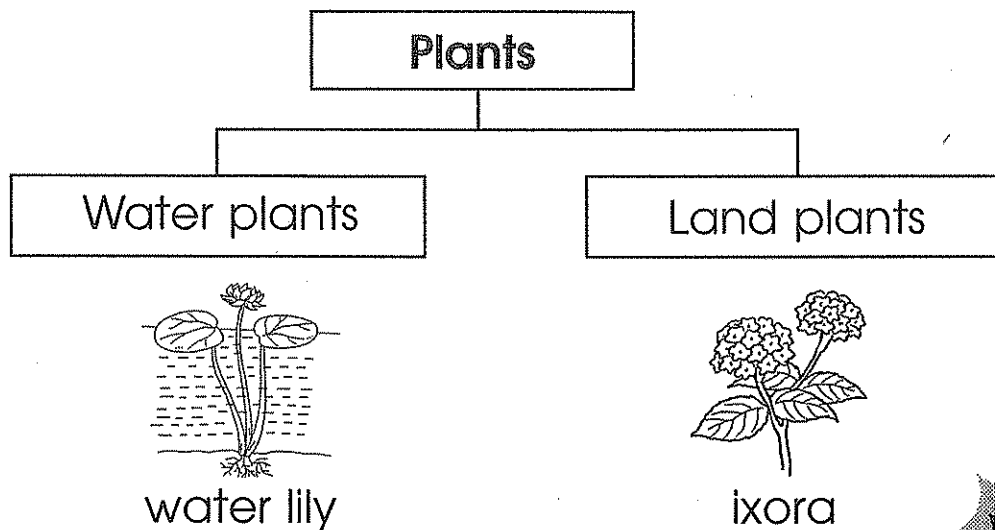
duckweed

Float on water	Partly underwater	Completely underwater

Land and water plants



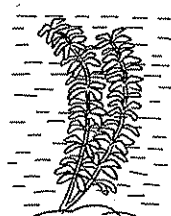
Some plants grow in water. Some plants grow on land.



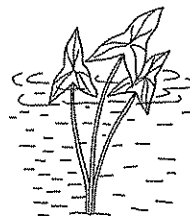
Write the name of each plant in the correct column.



bird's nest fern



hydrilla



arrowhead



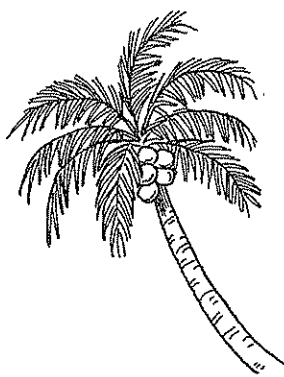
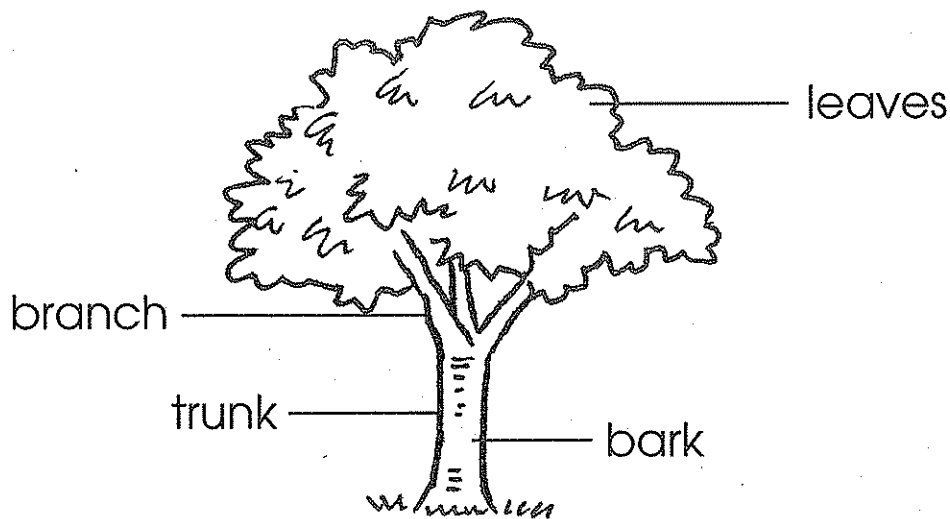
rose plant

Water plants	Land plants

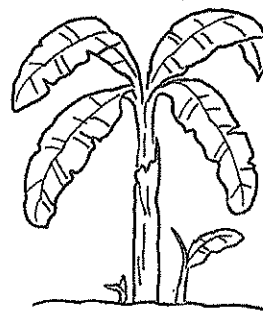
Trees



A tree is a very big plant. It has a hard woody stem called the trunk. The bark is the outer covering that protects the trunk. Some barks are smooth. Some barks are rough. The trunk joins the roots to the branches and leaves.



rough bark



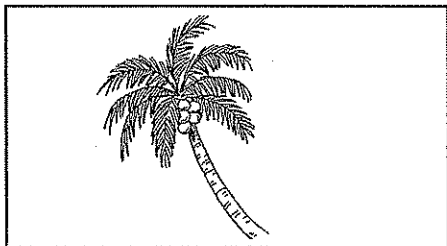
smooth bark



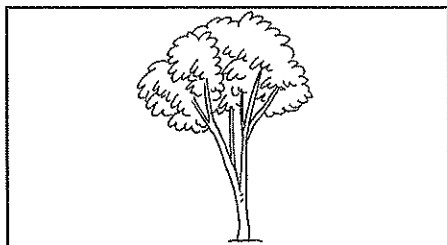
More on trees



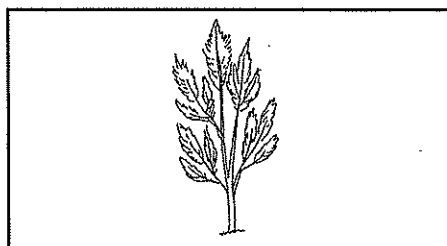
Match each picture with its name.



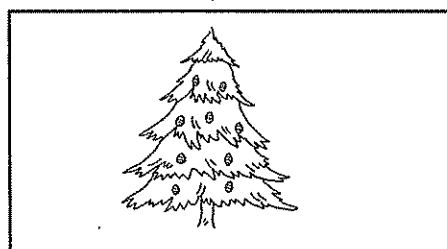
rain tree



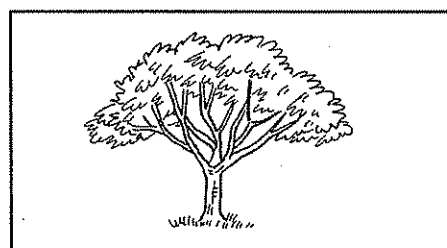
casuarina tree



coconut tree



pine tree



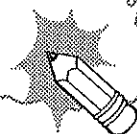
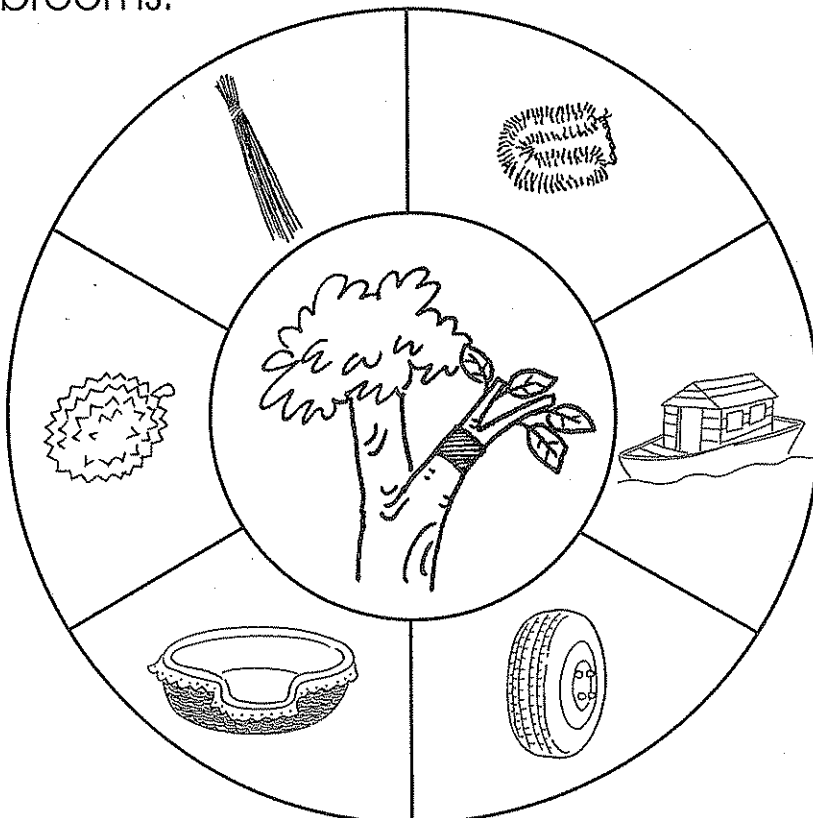
angsana tree

Uses of trees



Trees are very useful to man. They provide shade. They also add beauty to the surroundings. Trees give us fresh air, slow down the movement of wind and remove dust and dirt with their leaves. They also stop soil from being washed away during heavy rain.

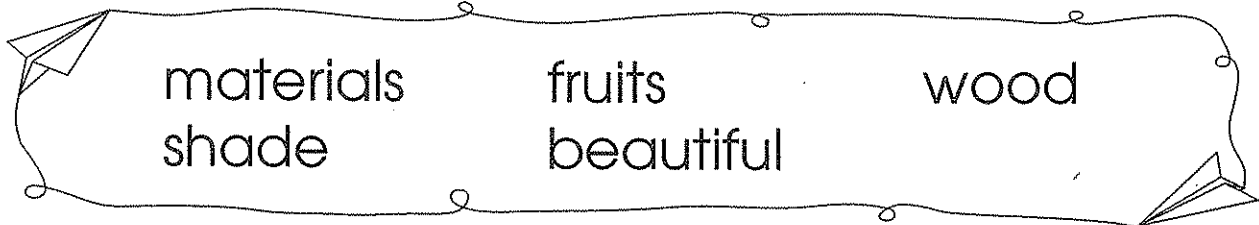
Trees give us materials such as paper and wood. They also give us fruits and oil. Some trees have parts that can be made into useful things like brushes and brooms.



Useful trees



Fill in each blank with the correct word.



1. Trees can make a place _____.
2. On a hot day, trees give us _____.
3. We use the _____ from trees to build houses.
4. Wood and rubber are _____ that come from trees.
5. We can eat the _____ that come from some trees.



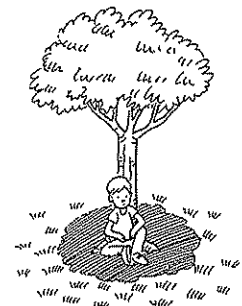
More on trees



Fill in each blank with the correct answer.
Then find and circle the word in the puzzle.

q	q	w	e	r	t	w	y
w	q	r	w	d	a	i	r
s	a	f	u	e	f	n	g
x	s	c	s	h	a	d	e
c	x	d	e	w	e	r	t
v	c	s	f	d	f	g	h
b	e	a	u	t	y	h	j
a	s	d	l	f	g	h	j

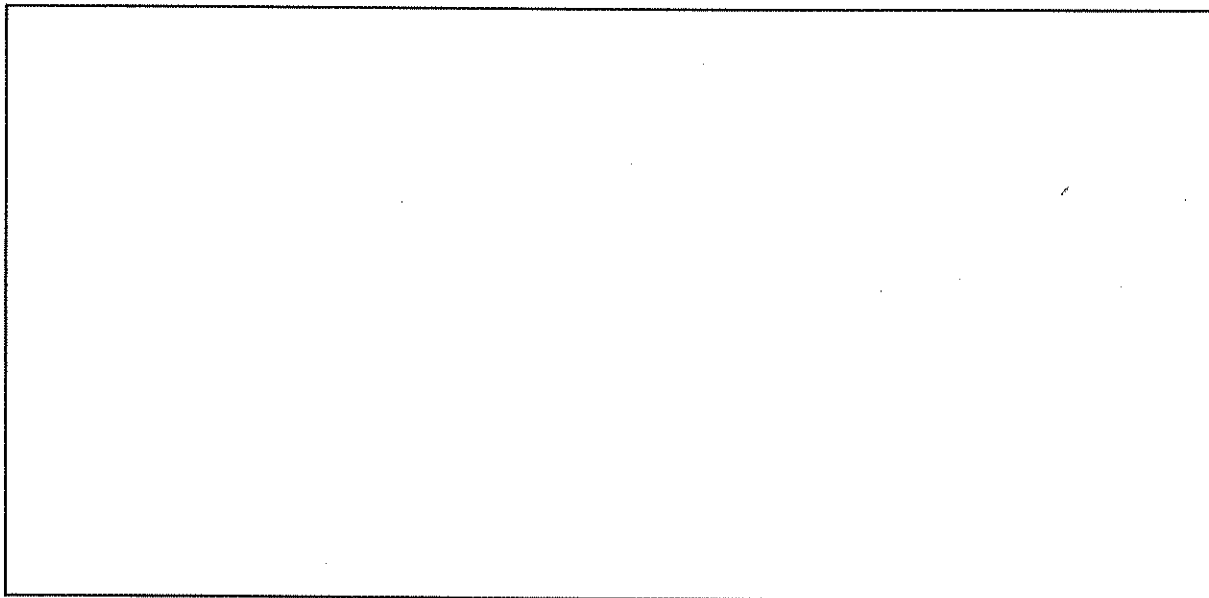
1. Trees add _____ to the surroundings.
2. Trees give us _____ so that the place is not so hot.
3. Trees slow down _____.
4. Trees give us fresh _____.
5. Trees are very _____ to man.



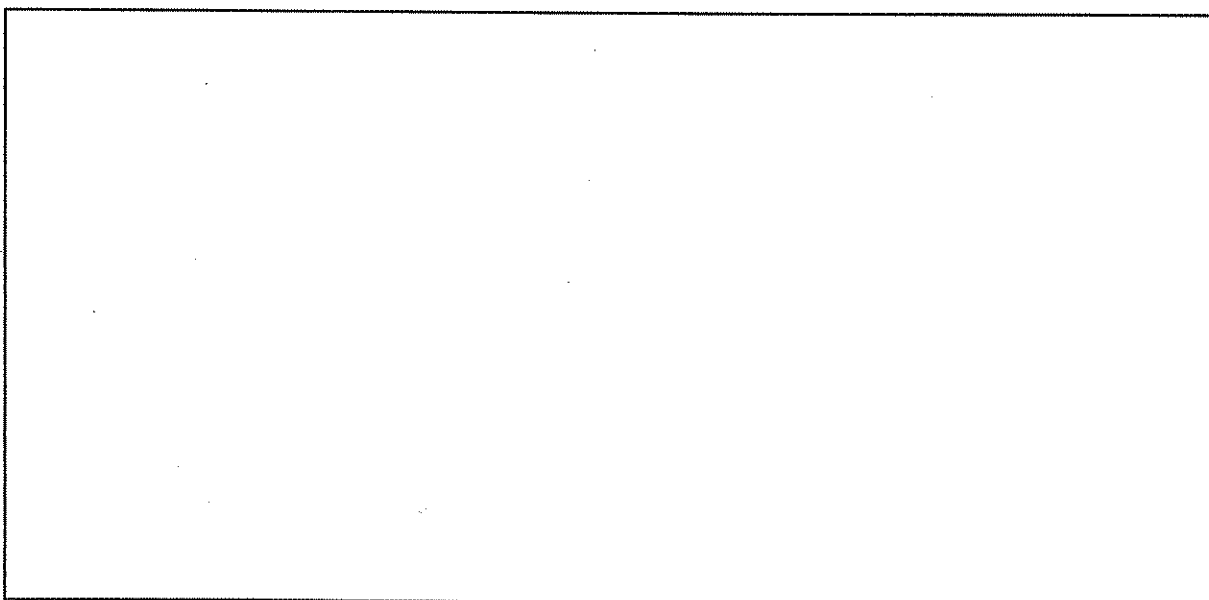
Things from trees



Draw an object that comes from trees.



Draw a fruit that comes from trees.



Barks



Place a piece of paper against the bark of different trees.
Then shade over the piece of paper using a black crayon.
Cut out the pattern of the bark and paste it in the boxes
below.

Tree 1

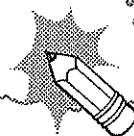
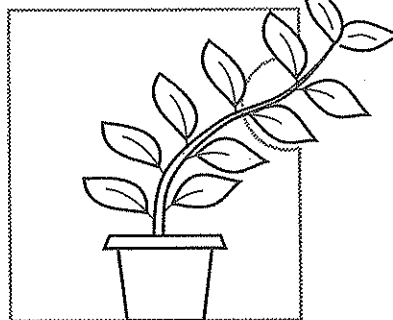
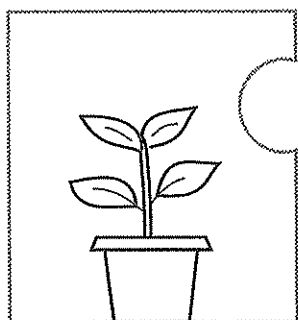
Tree 2



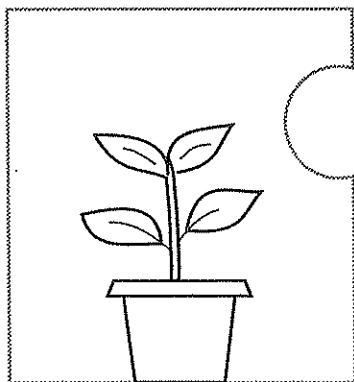
What do plants need to grow?



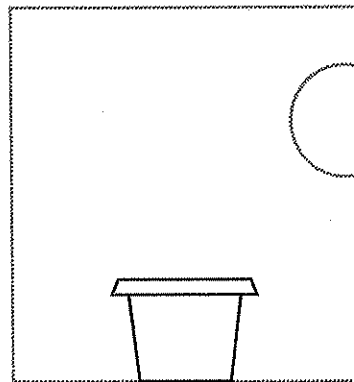
Plants need air, food, water and sunlight to grow.
They will grow and bend towards sunlight.



Draw in Box B what the plant will look like in 3 weeks.



Box A



Box B

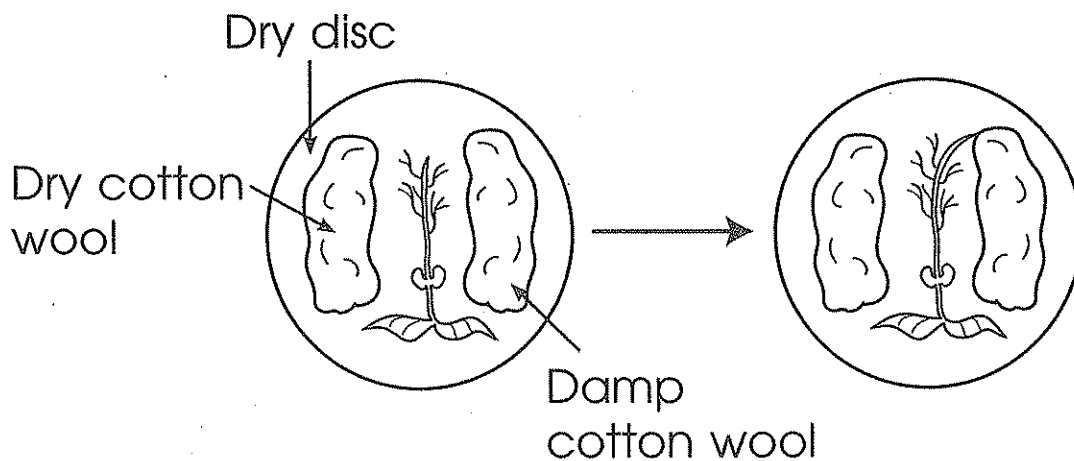
Plants need water



Plants need water. Without water, plants will die.

Try this.

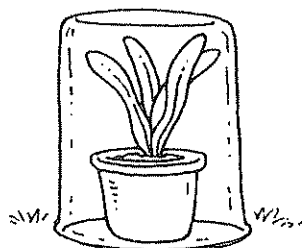
1. Put a seedling on a dry and flat disc.
2. Place a piece of dry cotton wool on the left side of the seedling.
3. Place another piece of damp cotton wool on the right side of the seedling. Make sure both pieces of cotton wool are placed at an equal distance from the seedling.
4. After a day, we can see the roots of the seedling growing towards the piece of damp cotton wool.



Healthy plants

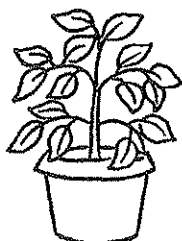
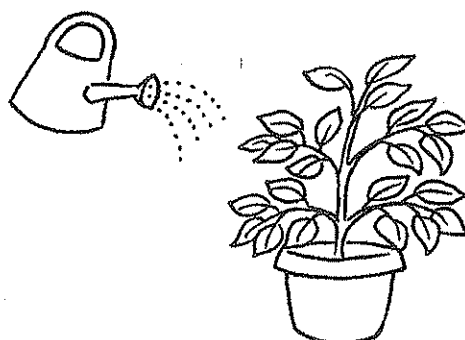


Which plants will grow healthily?
Put a tick ☒ in the correct boxes.


☐

☐

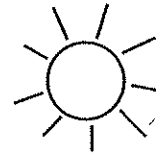
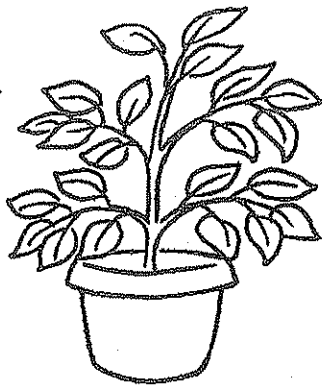
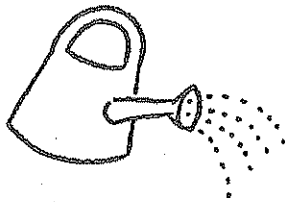
☐

☐

☐

☐

More on healthy plants

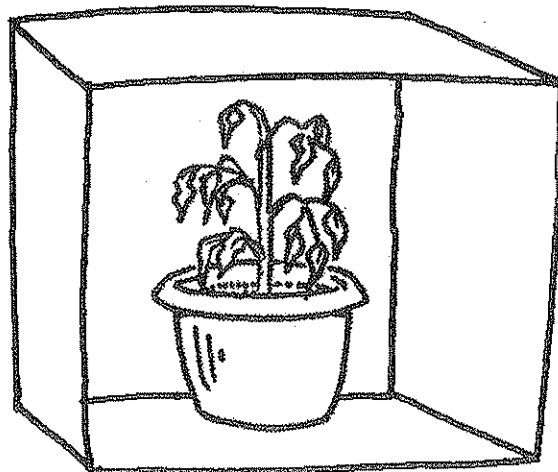


If plants have enough sunlight, water and food, they will grow taller every day.



Healthy plant

Unhealthy plant



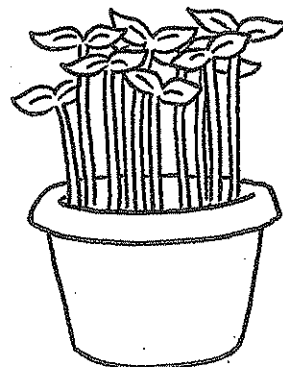
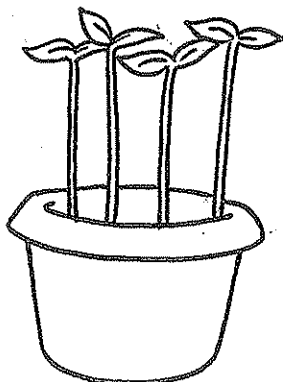
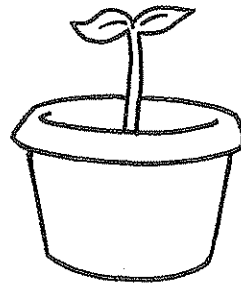
Unhealthy plants



To get enough sunlight, water and food from the soil, young plants should grow far away from their parent plants. If they grow too near together, overcrowding of plants will happen. The plants will not be healthy.



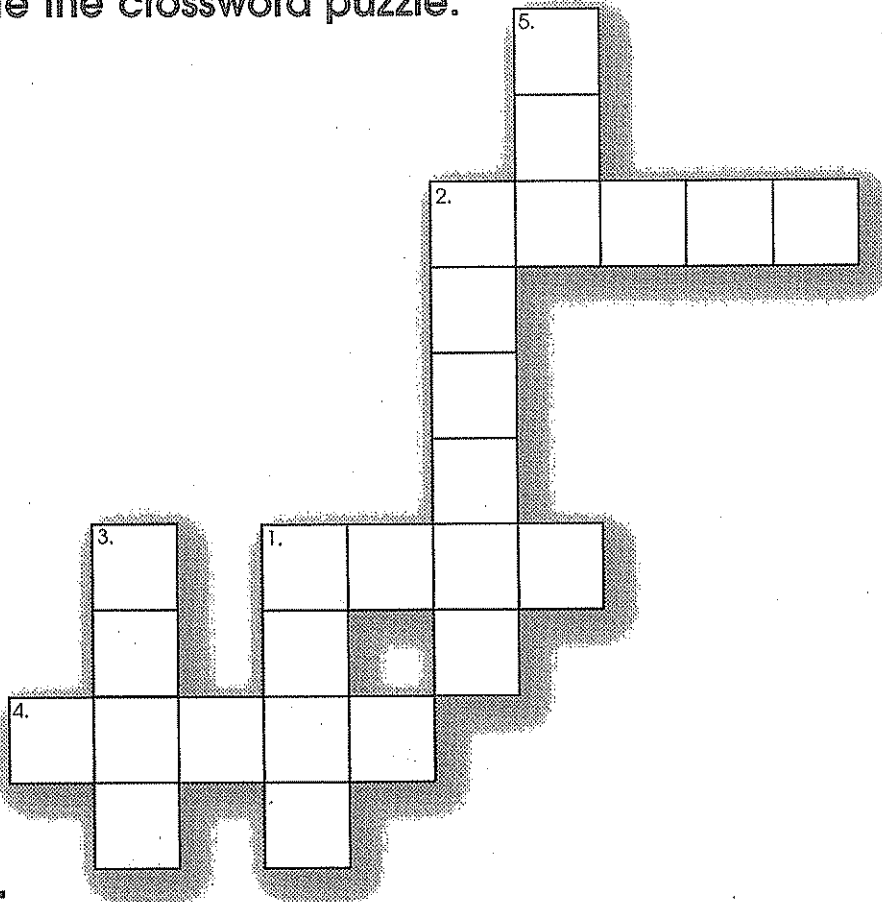
Cross ☐ out the plants that will grow unhealthily.



Uses of plants



Complete the crossword puzzle.

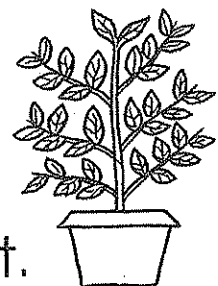


Down:

1. A ____ will grow into a new plant.
2. The ____ grows into fruits and seeds.
3. The ____ is green and can make food.
5. A plant needs ____, water and sunlight to grow well.

Across:

1. The ____ holds the plant upright.
2. The ____ protects the seeds.
4. The roots take in ____ for the plant.



Photosynthesis

Plants need sunlight. They use carbon dioxide (a gas) from the air and water from the soil to make food. This is called **photosynthesis**.

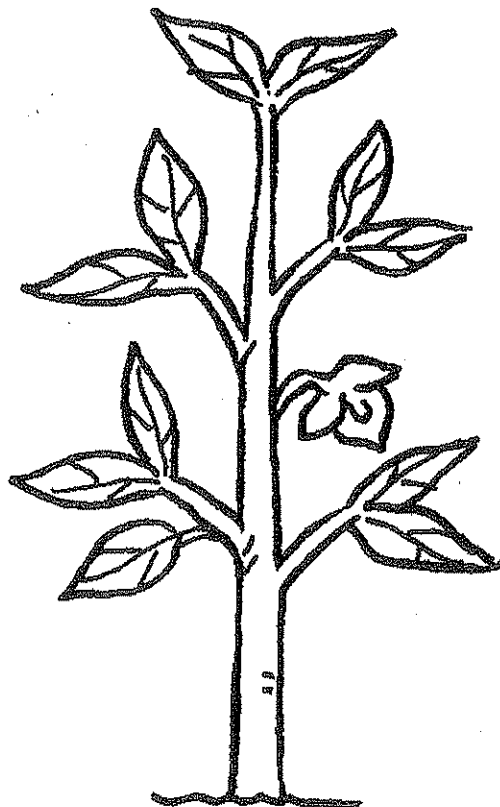
'Photo' means 'light' and 'synthesis' means 'make'.

'Photosynthesis' means 'to make food with light'.

Only green leaves can make food. The food made is sugar. Oxygen (a gas) is also made during photosynthesis.



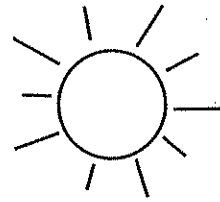
Colour the leaves green.



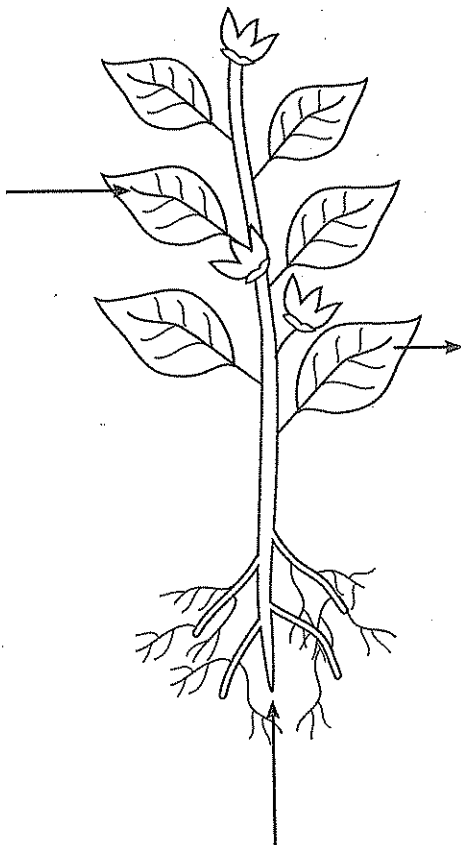
Fill in each blank with the correct word from the box.

carbon dioxide sunlight oxygen water

takes in



takes in



gives out

takes in

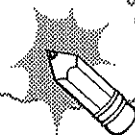
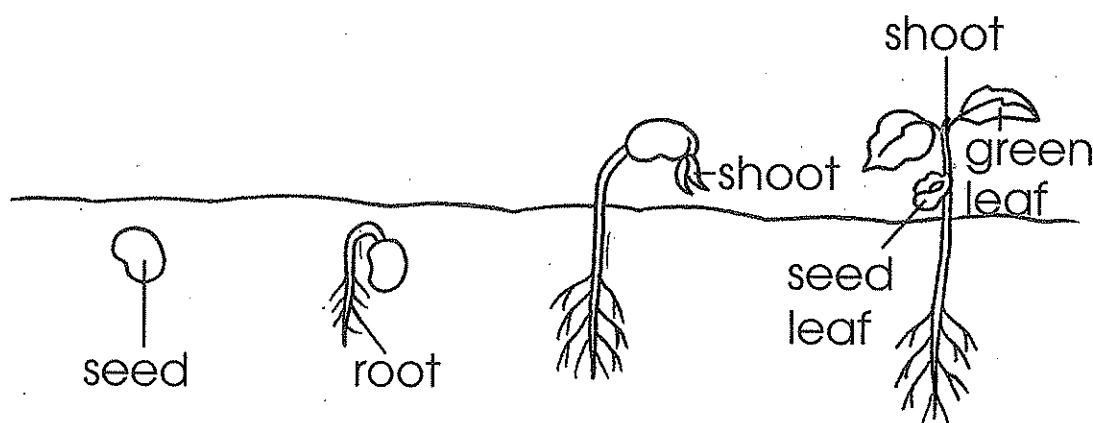
Life cycle of plants



A seed can grow into a new plant. It needs water, air and warmth to grow into a new plant.

A seed is protected by a seed coat. Within the seed coat are two seed leaves. Seed leaves store food. The young plant (seedling) uses the stored food to grow.

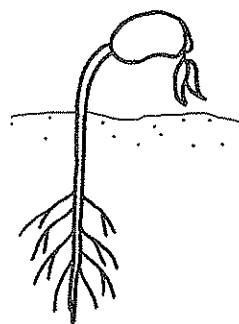
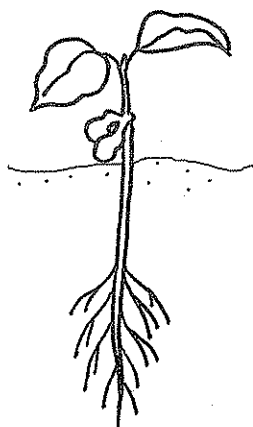
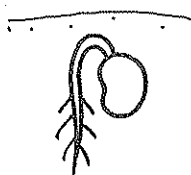
When the seed grows, roots appear first. Next, the shoot and small green leaves appear. When the plant develops green leaves, it can then make its own food.



How does a seed grow?



Place the pictures in the correct order. Write 1, 2, 3 and 4 in the correct boxes.



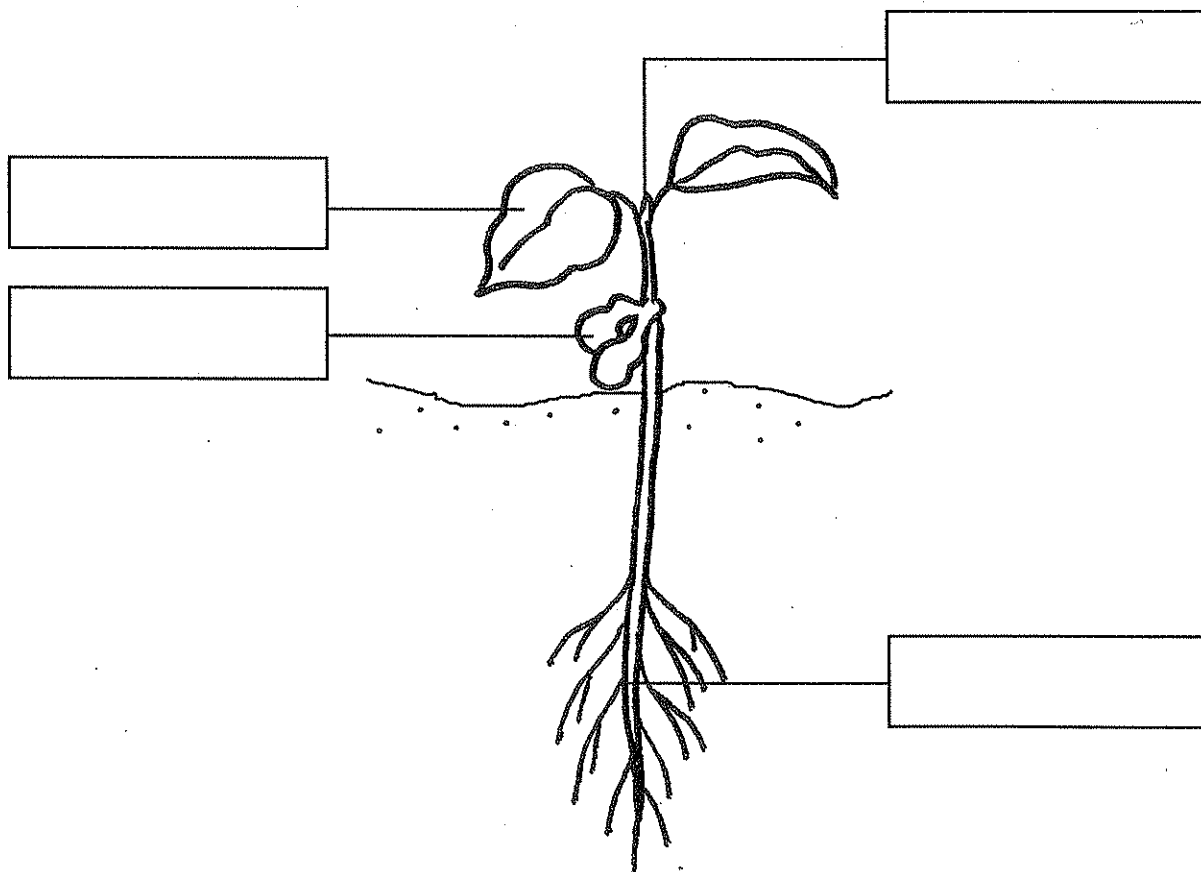
Parts of a seedling



Label the seedling.

Fill in each blank with the correct word from the box.

leaf seed leaf root shoot



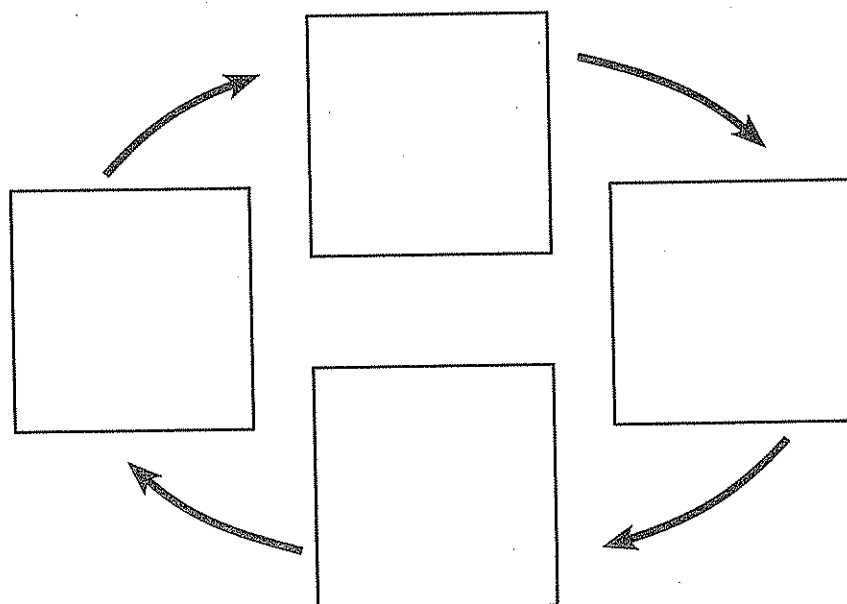
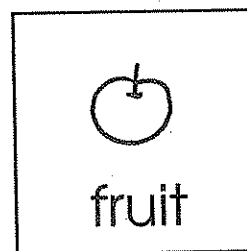
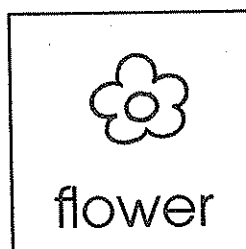
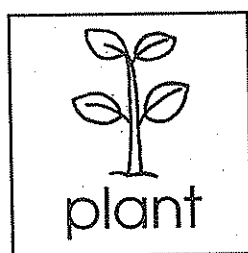
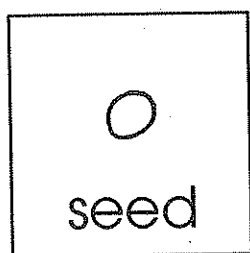
How plants grow



When a fruit falls off from the plant and drops to the ground, the seed will grow into a new plant. The young plant will grow into an adult plant that produces flowers. The flowers will become fruits again. This pattern repeats itself in the life cycle of a plant.



Draw each picture in the box below such that it shows the correct sequence.



Flowers

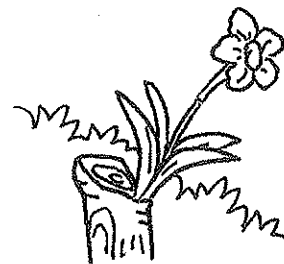
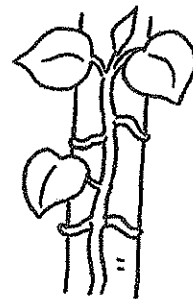
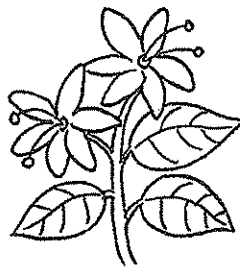


Some flowers attract insects as they are big, colourful and sweet-smelling. These flowers contain nectar. Nectar is a sweet juice. Insects like to drink nectar.

Some flowers are small and dull. They do not have any smell or nectar. These flowers do not attract insects.



Colour the plants that insects are attracted to.

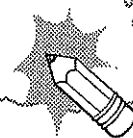
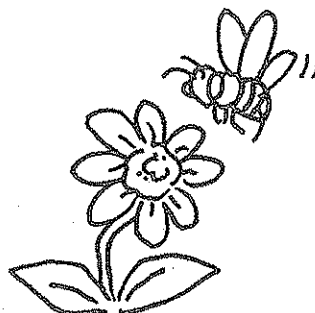


From flowers to fruits

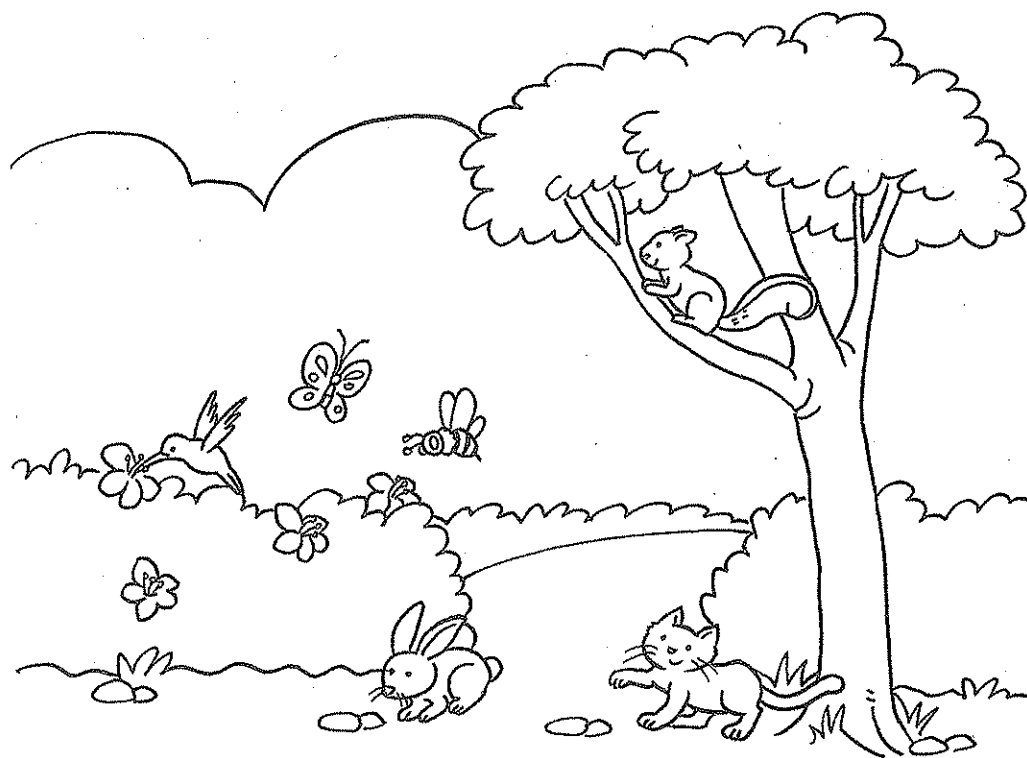


Flowers are important. They grow into fruits. Fruits contain seeds. Seeds can grow into new plants.

Before flowers can become fruits, insects or birds must visit the flower to move pollen. Pollen is a powder found in flowers. Pollen is moved from one part of the flower to another. Then a fruit can start to form.



Circle the animals that visit the flowers.



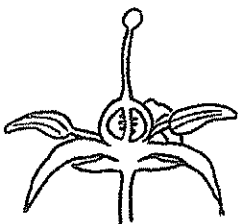
How a flower develops into a fruit



The bud



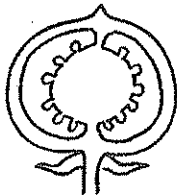
A mature flower



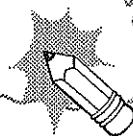
The flower wilts.



The petals drop off.

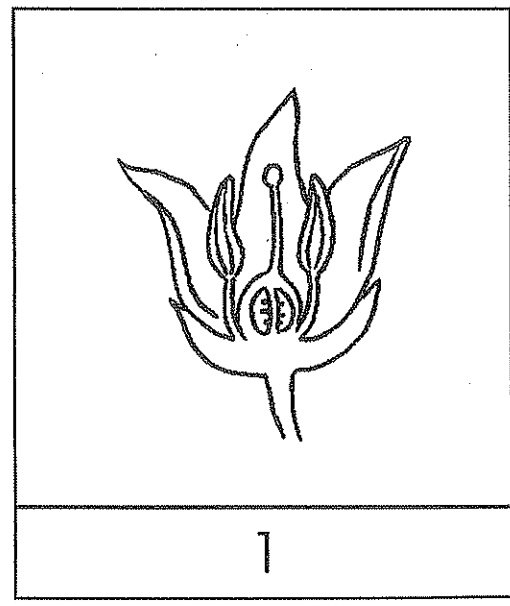
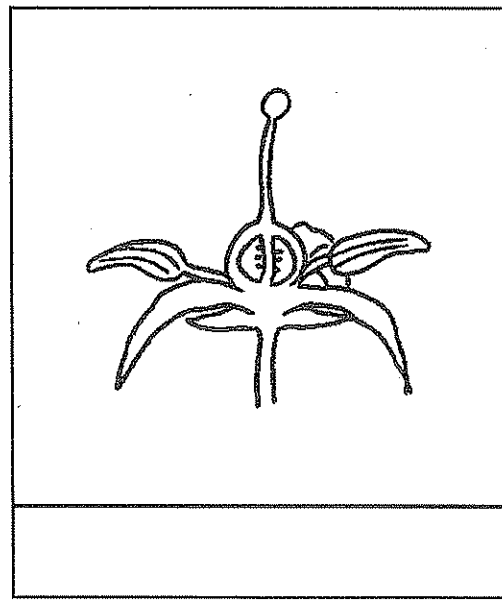
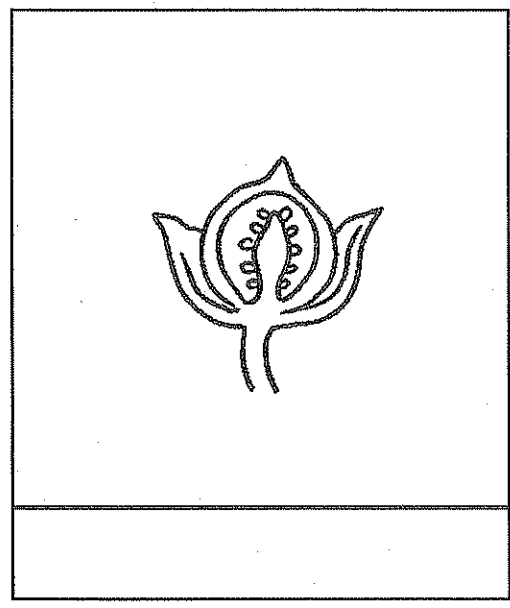
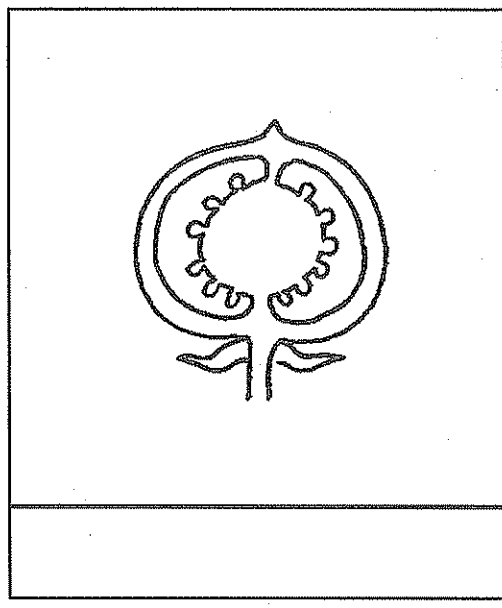


The fruit grows bigger.





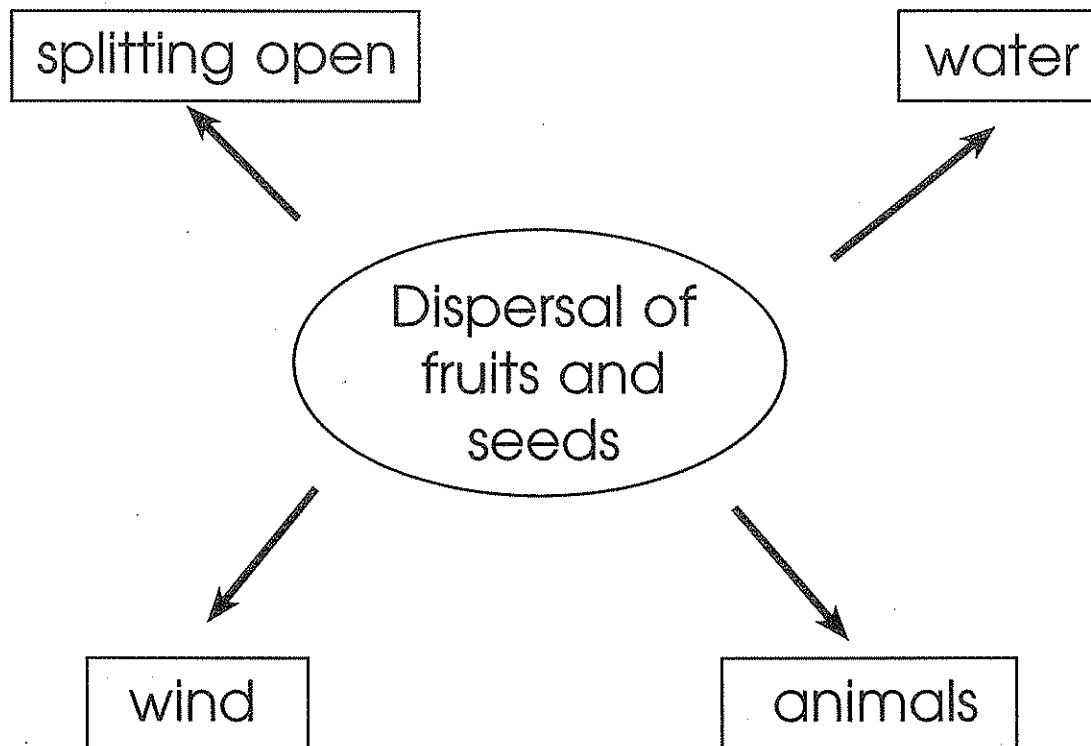
Place the pictures in the correct order. Write 2, 3 and 4 in the correct boxes. The first one has been done for you.



Dispersal of fruits and seeds



Plants make use of the wind, animals and water to scatter their fruits and seeds to different places. Some plants scatter their seeds by splitting. The ripened fruits of these plants split open and throw their seeds far away.

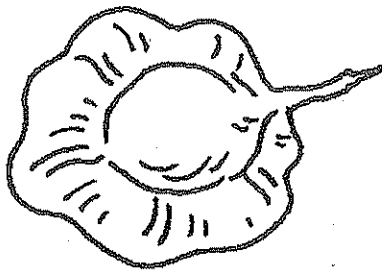


Dispersal by wind

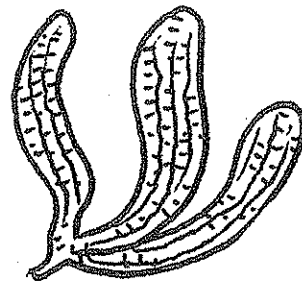


Fruits and seeds that are scattered by wind are usually light. They have wings or hairs that help them to move in the air.

The thin and flat wing-like structures of the angšana, lalang and shorea help them to be carried away by the wind more easily.



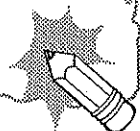
angšana



shorea



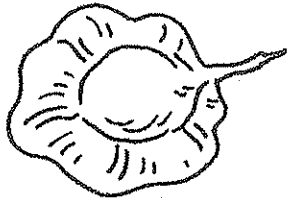
lalang



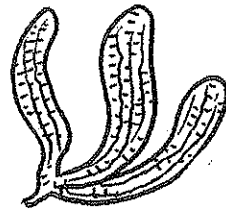
Seeds dispersed by wind



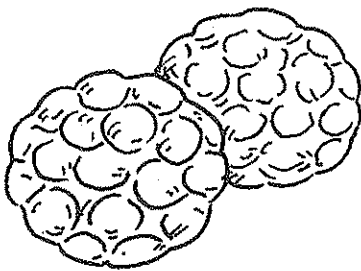
Circle the seeds that are dispersed by wind.



angsa



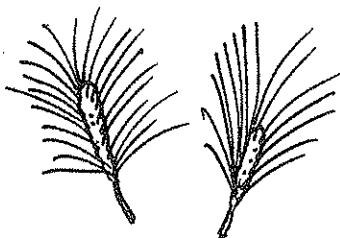
shorea



custard apple



lalang



dandelion

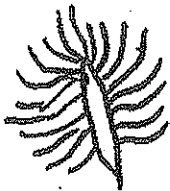


dragonfruit

Dispersal by animals



Some fruits have hooks that stick onto the fur of animals. When the animals move around in the grass, the fruits fall off from the animals' bodies and fall to the ground.

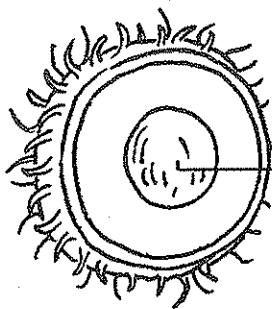


love grass

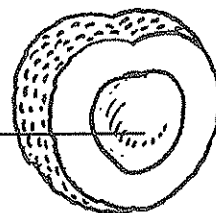


mimosa

Fleshy and juicy fruits are also dispersed by man and animals. These fruits have seeds that cannot be eaten. Man and animals throw these seeds away after eating the fruits. These seeds are then scattered around.

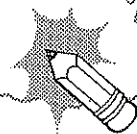


rambutan



lychee

seed



Dispersal of seeds by man and animals

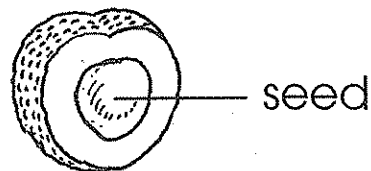
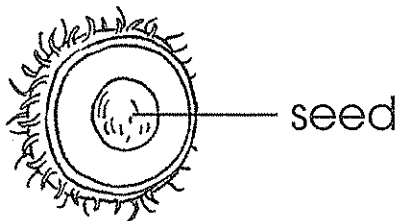
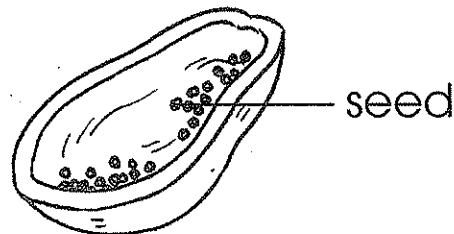
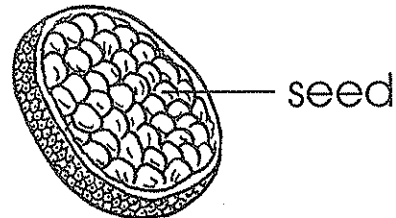
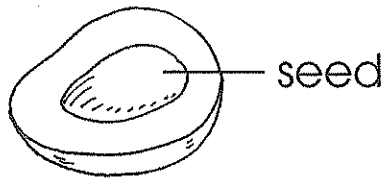


The seeds of these fruits are scattered by man and animals.
Fill in each blank with the correct word from the box.

papaya
rambutan

mango
lychee

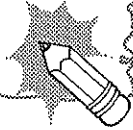
jackfruit



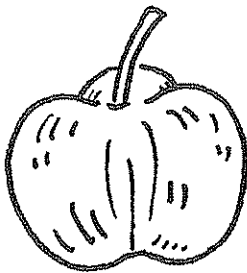
Fleshy and juicy fruits



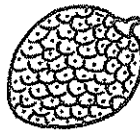
Fruits that are juicy and fleshy are usually eaten by animals. These fruits have a nice smell to attract the animals.



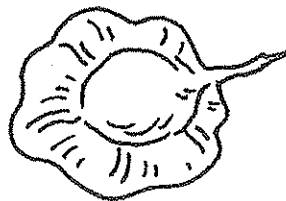
Colour the fruits that can be eaten by animals.



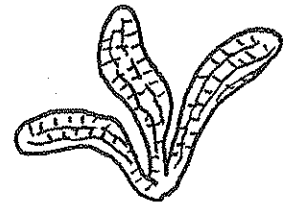
rubber fruit



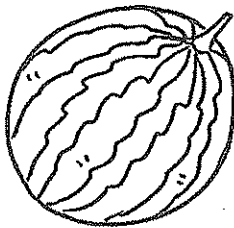
lychee



angkana



shorea



watermelon



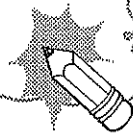
pear

Seeds

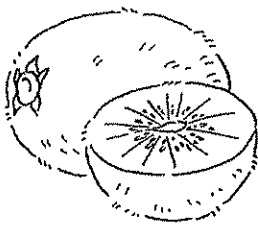


Some fruits have seeds that can be eaten by animals, especially if the seeds are small. The seeds are then passed out in the animal droppings.

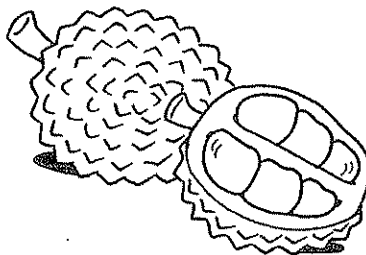
Some fruits have seeds that are big. These seeds are thrown away.



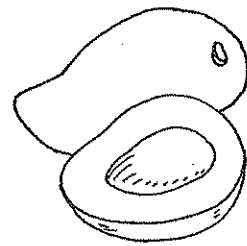
Circle those fruits with big seeds.



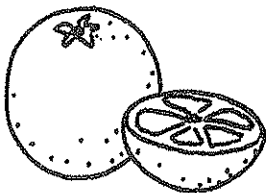
kiwi fruit



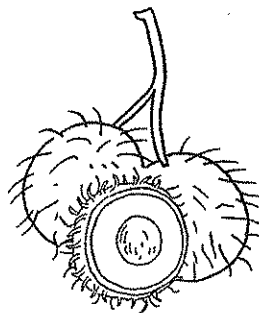
durian



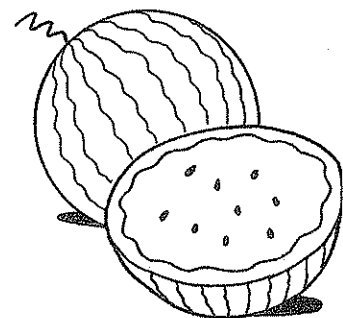
mango



orange



rambutan



watermelon

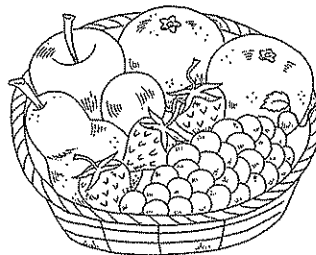
More on fruits and seeds



Find and circle the words in bold in the puzzle.

h	l	t	k	e	a	t	e	n
o	r	a	r	d	i	g	c	g
o	c	j	u	i	c	y	z	j
k	l	e	z	b	f	y	x	r
s	m	a	l	l	i	r	b	t
b	i	g	x	e	n	g	q	w

1. Edible fruits can be **eaten**.
2. Fruits that are **small** and light are dispersed by wind.
3. Fruits with **hooks** can stick onto the animal's fur.
4. Seeds that are too **big** have to be thrown away.
5. Seeds that are **edible** can be eaten.
6. Fruits that are **juicy** and fleshy are eaten by animals.

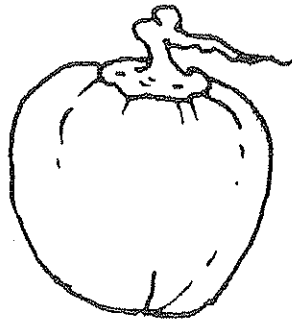


Dispersal by water

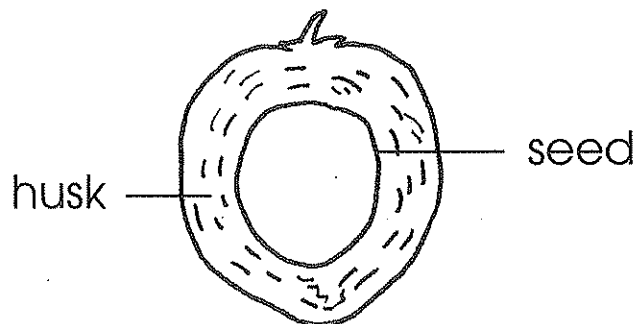


Fruits and seeds that are dispersed by water usually have an outer covering to help them float in water. The water helps to bring them away from the parent plant to places far away.

Coconut is dispersed by water. Coconut trees are often found at the seaside. The husk is the outer covering of the coconut seed. The husk is thick but light.



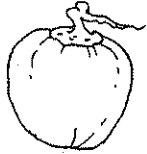
coconut



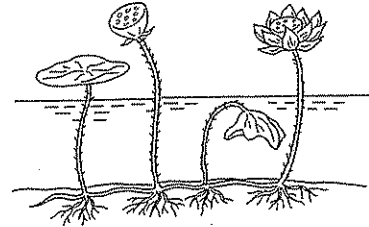
Plants that grow near water



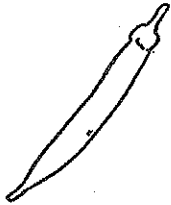
Match each fruit with its adult plant.



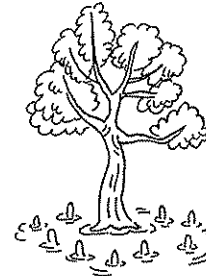
coconut



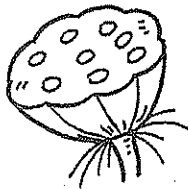
lotus plant



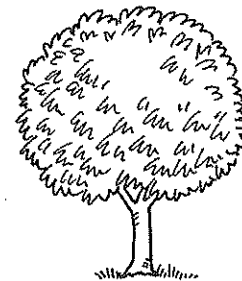
mangrove fruit



mangrove tree



lotus fruit



pong pong tree



pong pong fruit

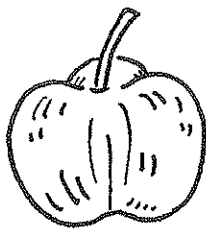


coconut tree

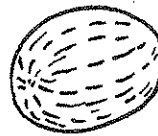


Dispersal by splitting of the fruit

The rubber fruit scatters its seeds by an explosive action. The fruit splits open and the seeds are thrown into the air in different directions away from the parent plant.



rubber fruit



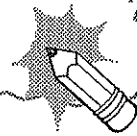
rubber seed



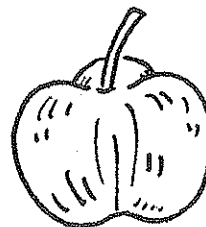
balsam fruit



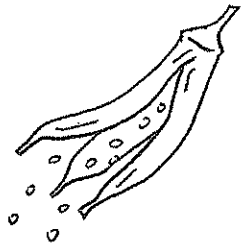
balsam seeds



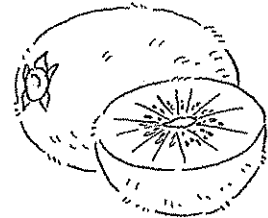
Name the fruits that disperse by splitting.



Colour the fruits that disperse by splitting.



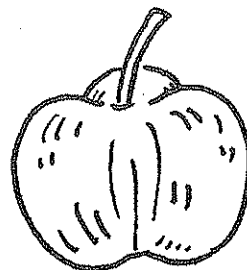
lady's finger



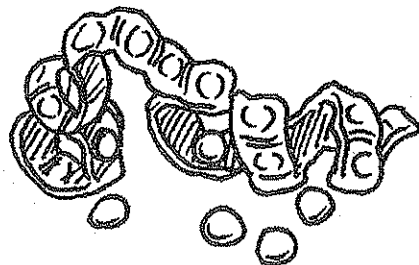
kiwi fruit



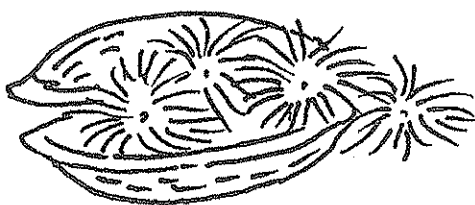
balsam



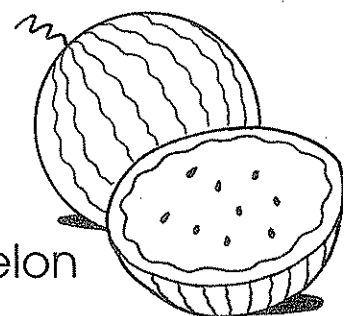
rubber fruit



saga



African tulip



watermelon

What am I?



Unscramble the letters to find the word.

1.



bburer

r _ _ _ _ _

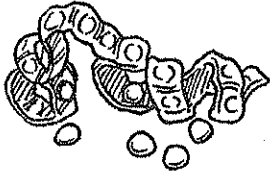
2.



albsam

b _ _ _ _ _

3.



gasa

s _ _ _ _

4.



canfriA liptu

A _ _ _ _ C _ _ _

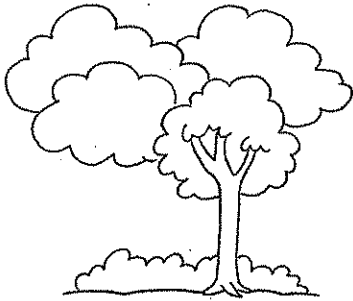
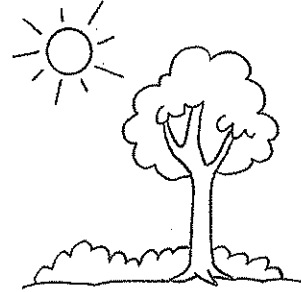
t _ _ l _ _ _



The weather

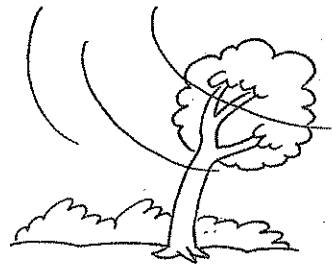


On a sunny day, the sky has some clouds. It is hot and bright. There is no rain.

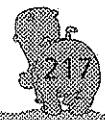
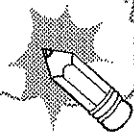


On a cloudy day, the weather is cool. The sky is covered with clouds.

On a windy day, there is a lot of wind. You can tell how windy it is by looking at the leaves on the trees. You can also feel the wind blowing on your face and body.



On a rainy day, droplets of water fall from the clouds.

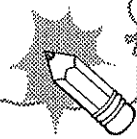


Sunny and rainy weather

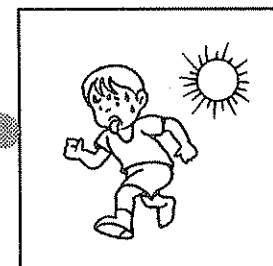
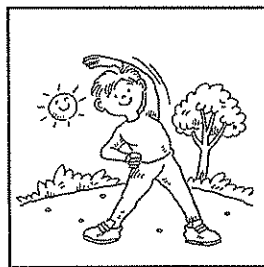
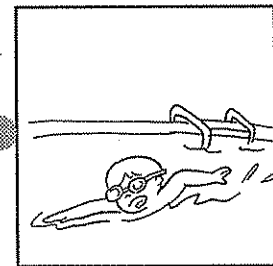
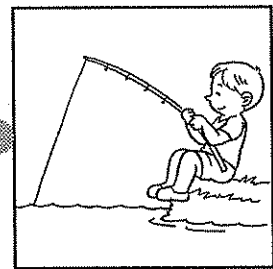
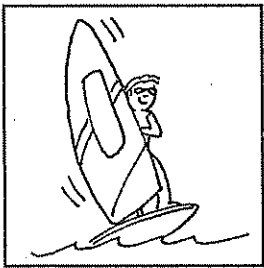


The weather tells us if the day is sunny, cloudy or rainy. It also tells us if it will be a hot or cool day.

Knowing the weather helps us to know what to wear, what to do, where to go and what to bring.



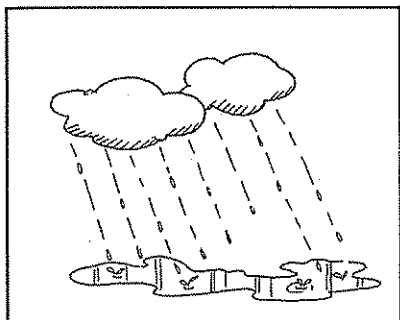
Match each picture with the correct weather.



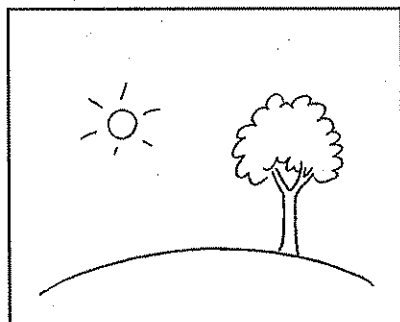
What is the weather like?



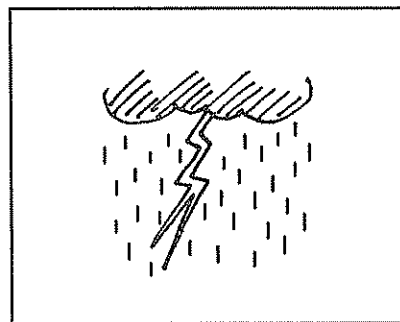
Match each picture with the correct word.



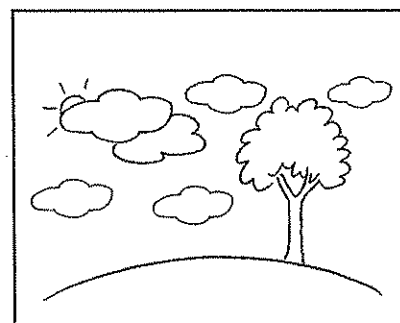
● thunderstorm



● rainy



● sunny

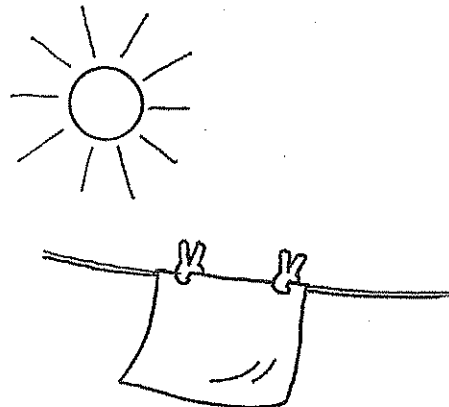
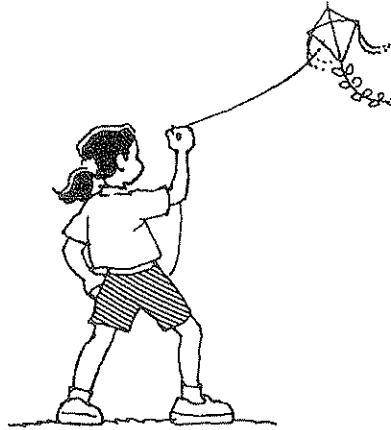


● cloudy

Activities in different weather.



Write 'sunny', 'windy' or 'rainy' in the correct boxes.



What do they need?



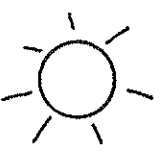
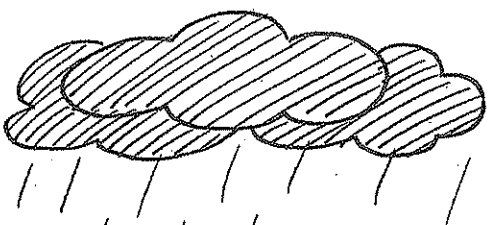
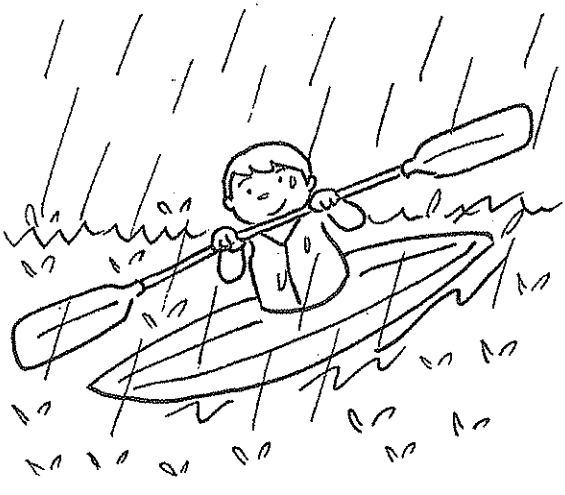
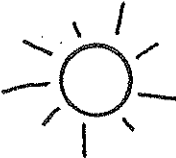
Match each person with the correct object.



Wrong weather for activities



Put a tick ☒ in the boxes for the activities that match the weather.

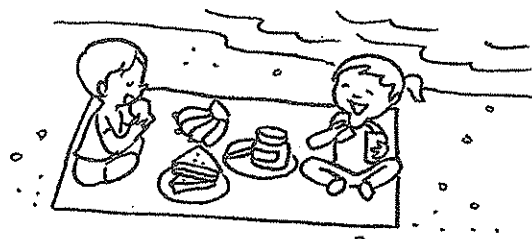
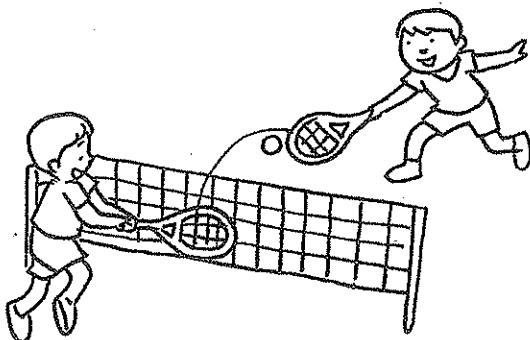
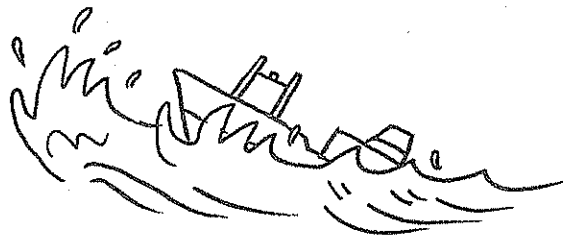
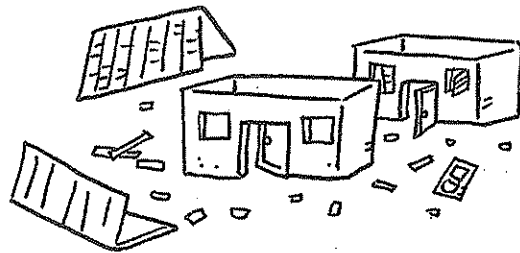
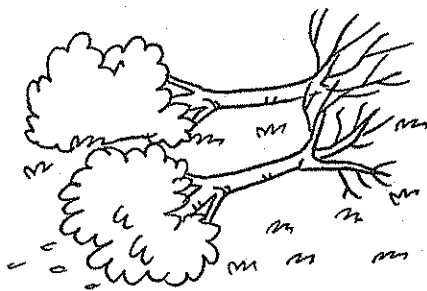
Hurricane



The word hurricane means 'big wind'. It starts from the sea and makes its way to the land. When it comes onto the land, the heavy rain, strong winds and heavy waves can damage buildings, trees and cars.



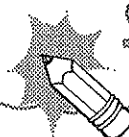
Circle the pictures that show what happens during a hurricane.



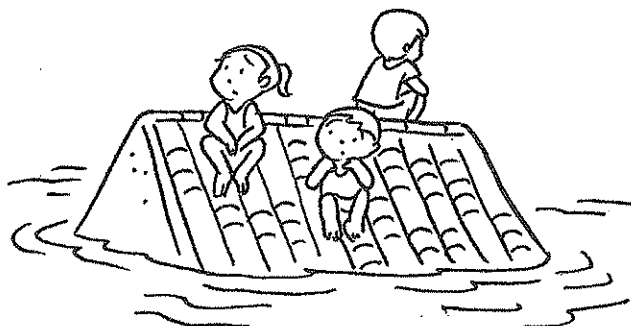
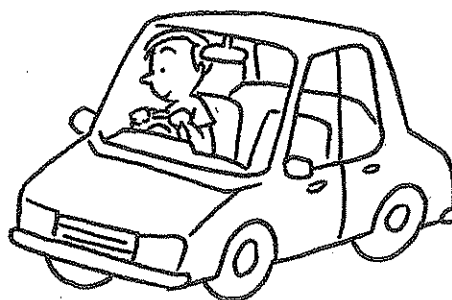
Flood



There are floods when thunderstorms bring about short bursts of heavy rain. Floods also happen when rain keeps falling over several days without stopping. During a flood, water from the drains and rivers overflow onto roads and into houses.



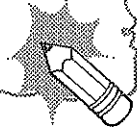
Which pictures show people trapped by floods? Circle them.



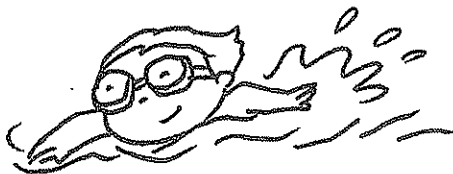
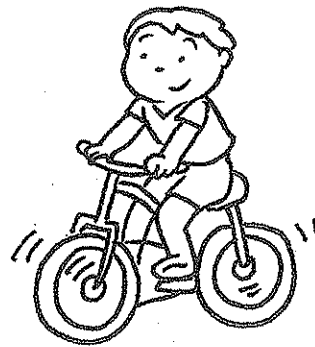
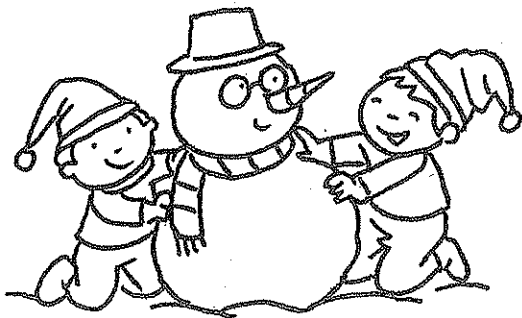
Snow



Some countries experience snow in winter. When the weather becomes very cold, tiny droplets of water in the clouds turn to snow. Snow falls from the clouds and covers the ground. It is white and feels cold. People have snowball fights and make snowman in winter.



Which pictures show activities that we can do in winter?
Circle them.



Seasons

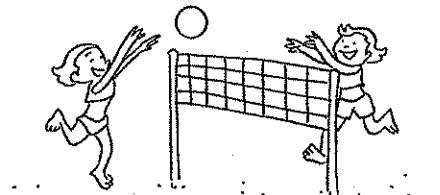
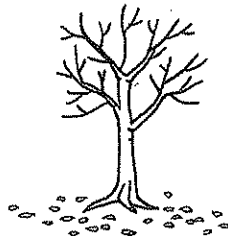


In some countries, there are four seasons — autumn, winter, spring and summer. This is caused by the earth moving around the sun.

Leaves fall from trees in autumn. During winter, the temperature drops and snow starts to fall. In spring, plants, trees and flowers bloom. In summer, the weather becomes warmer and many people head for the beach.



Match each picture to the correct season.



spring



winter



autumn



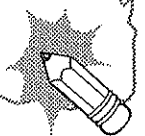
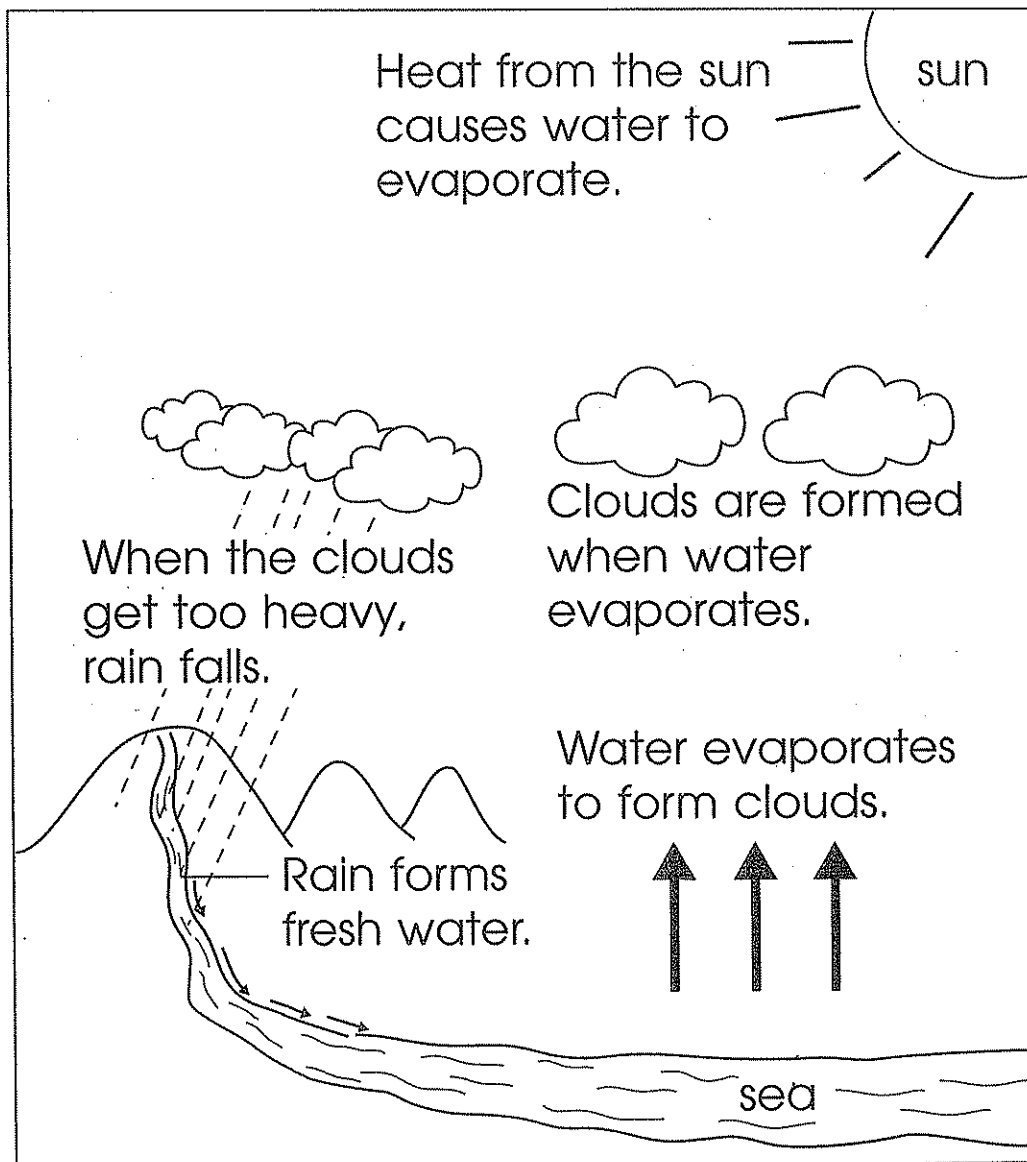
summer



Water cycle



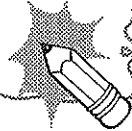
The earth has a limited amount of water. This water keeps going around and around in what we call the 'water cycle'.



Uses of water



What is water used for? Water can be used for drinking, cooking, bathing, washing clothes, cleaning things and making medicine.



Match each sentence with the correct picture.

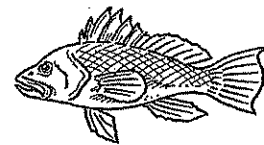
Water is used
for showering.



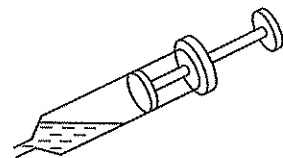
Water is used to
make medicine.



Water is used
for cooking rice.



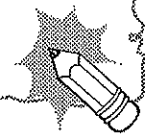
It lives in the
water.



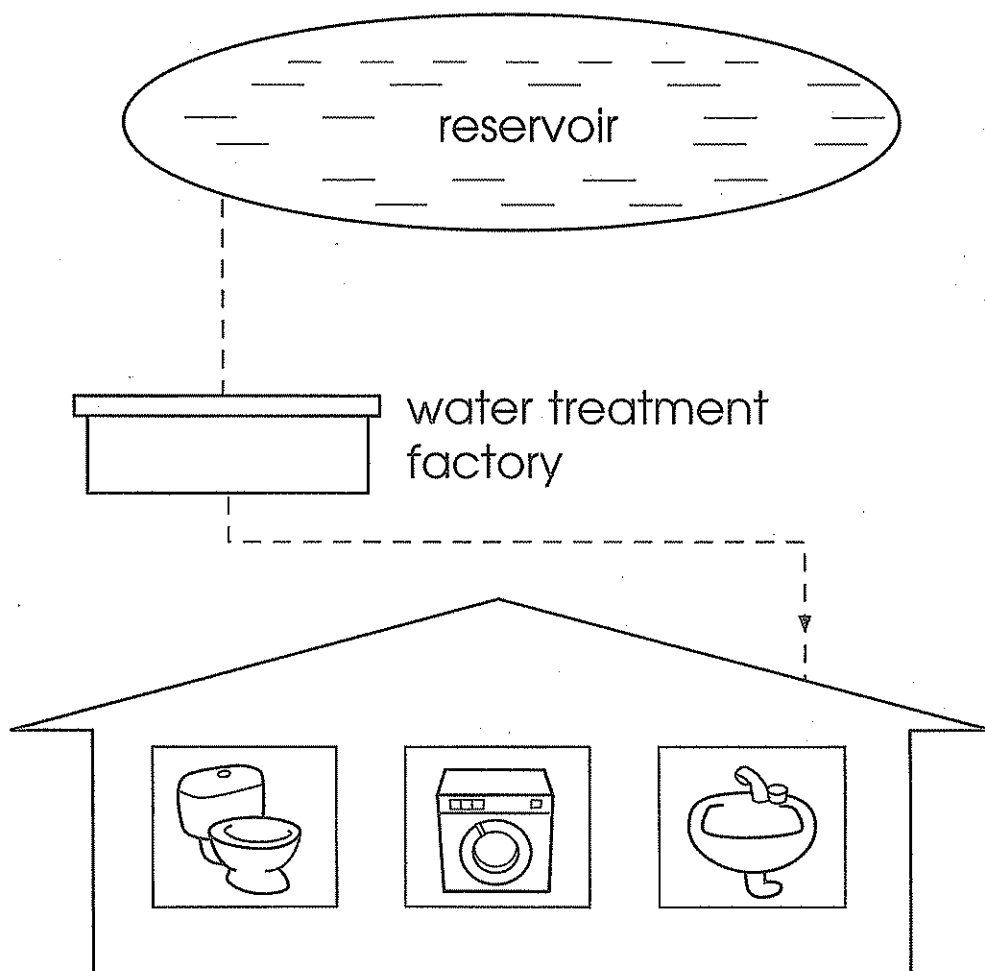
Water for drinking



Water that falls from the clouds is collected in reservoirs, rivers and lakes. Before water gets to your home, it has to be cleaned so that germs and dirt can be removed. The water then flows through big pipes under the ground to your homes.



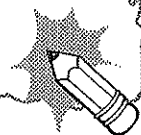
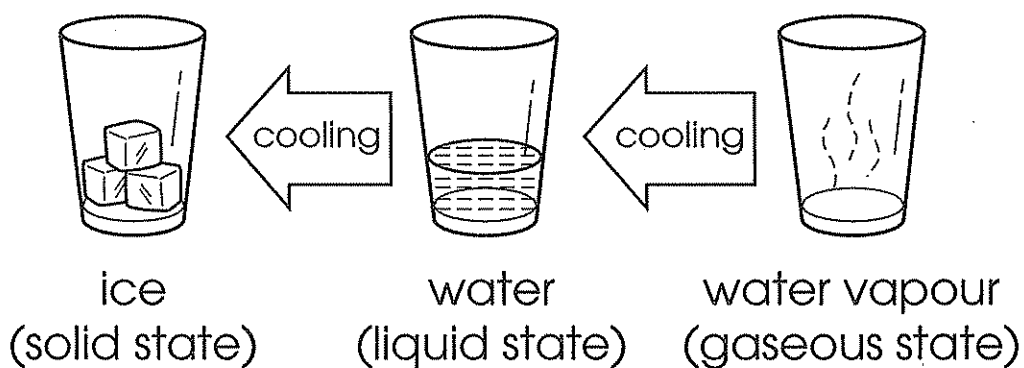
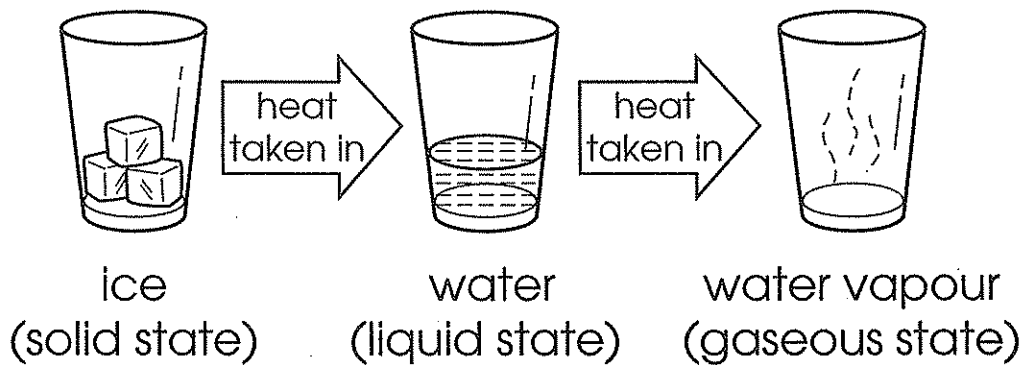
Trace the dotted lines to see how water gets to your home.



The three states of water



Water has three states — solid, liquid and gas. Ice and snow are water in the solid state. Sea water and dew water are water in the liquid state. Water vapour is water in the gaseous state.

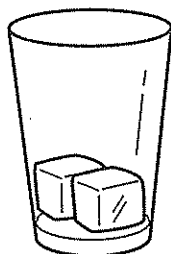


Ice becomes water



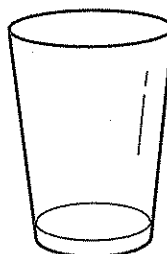
Try this.

1. Take 2 ice cubes and put them in a glass. What happens to the ice cubes after some time? Draw it in Glass B. Then write your answer on the lines provided.



Glass A

melt
→

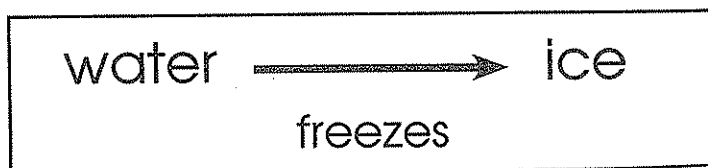


Glass B

The ice cubes m ____ to become water.

2. Put the glass of water back into the freezer. What happens after a day?

The water turns to i ____ again.
We say that the water has frozen.

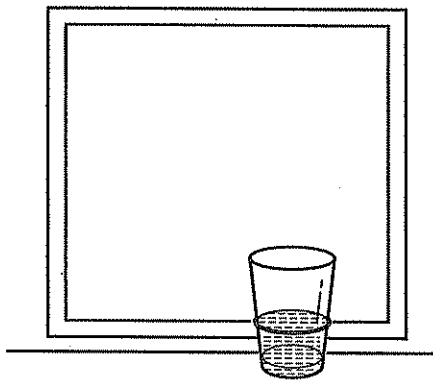


Evaporation

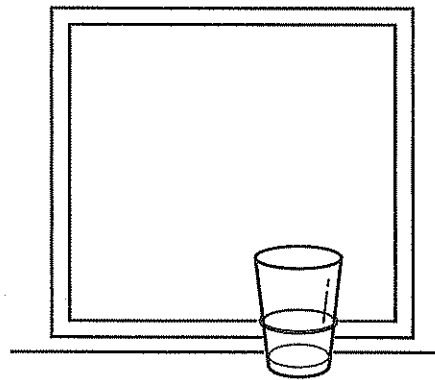


Try this.

Place a glass of water near a window. Use a rubber band to mark the water level. What happens to the water level after two days? Draw it in the glass provided.



Day 1



Day 3

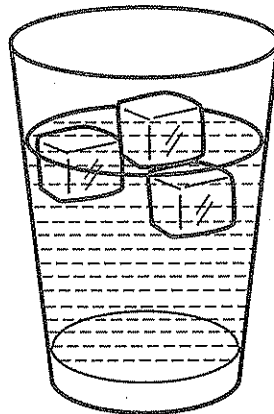
The water level has dropped. Where did the water go? The water has gone into the air to become water vapour. We cannot see water vapour.

water $\xrightarrow{\text{evaporates}}$ water vapour

More on evaporation



Pour some cold water into a glass. What can you see on the glass after a while? Draw it.



Droplets of water are seen on the outer glass surface. Where did this water come from?

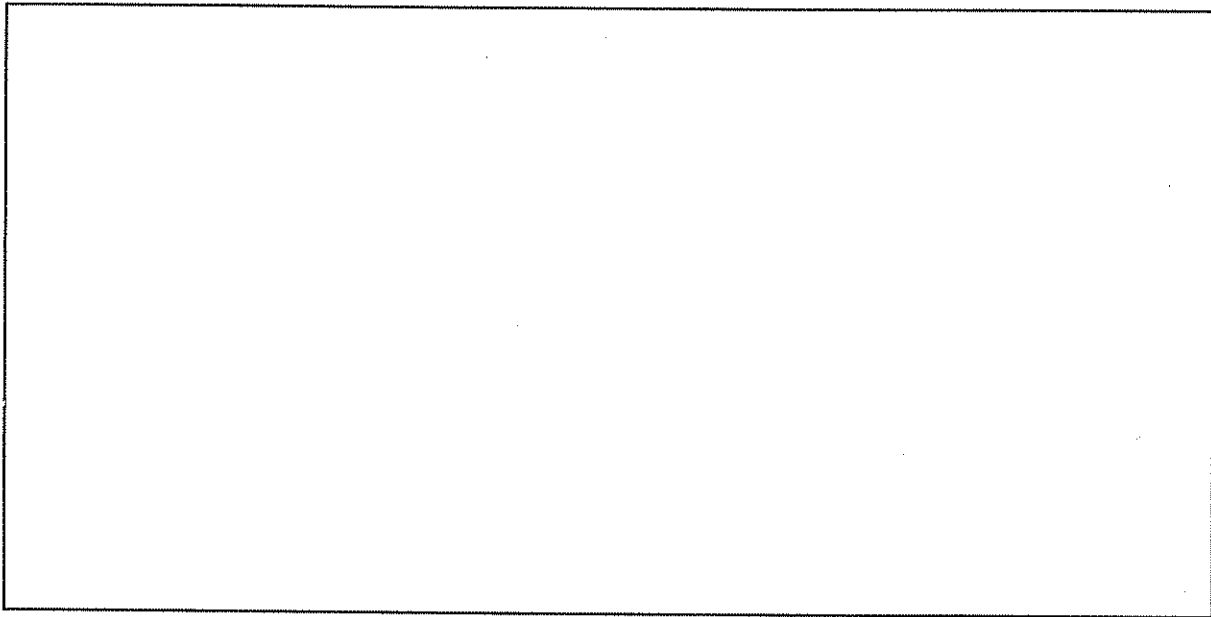
It comes from the water vapour in the air. Water vapour becomes water droplets when it touches the cold glass. We say that the water has condensed.

water vapour	condenses →	water droplets
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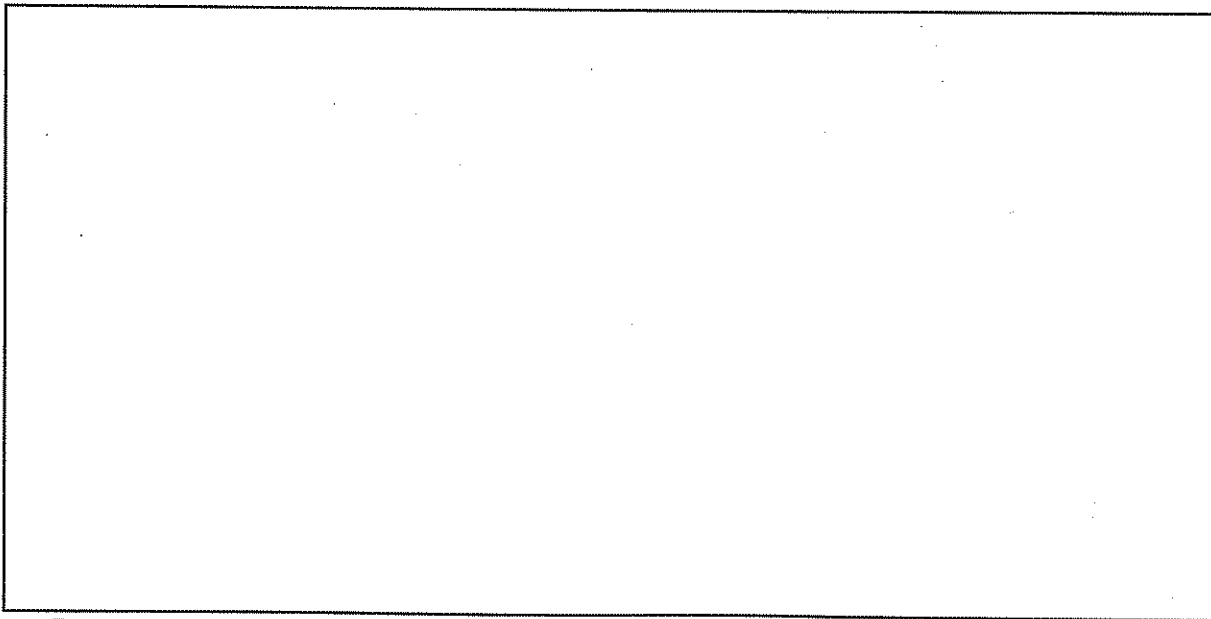
Try this



Leave a plum in the refrigerator for a few hours.
Then take it out and draw the plum.



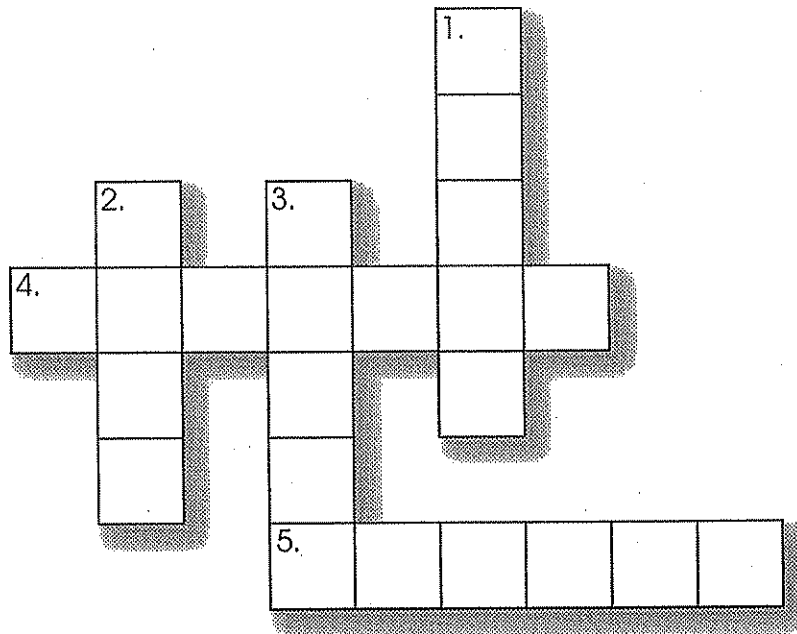
Leave the plum on the table for a few minutes.
What can you see on the plum?
Draw the plum.



Forms of water



Complete the crossword puzzle.



Down:

1. When water vapour touches cold glass, it becomes _____.
2. The water level will _____ if we leave a glass of water near the window.
3. When ice _____, it becomes water.

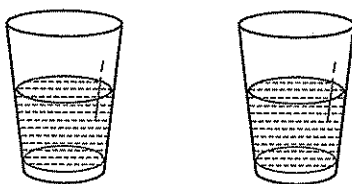
Across:

4. Water _____ to become ice.
5. The three forms of water are also called the three _____ of water.

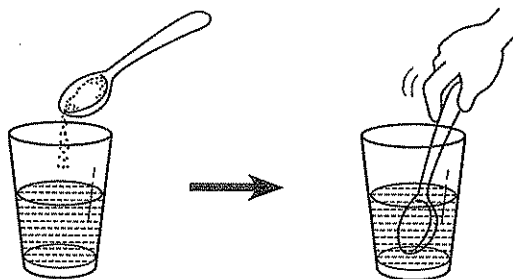
Experiments

Try this.

1. Fill 2 glasses with water.



2. Put some sugar in the first glass. Stir it.



3. What happens to the sugar?

It dissolves.

4. Put some salt into the second glass of water. Stir it.

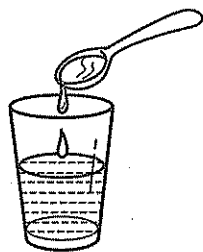
5. What happens to the salt?

It d _ _ _ _ _ .

This experiment shows that salt and sugar dissolve in water.

Try this.

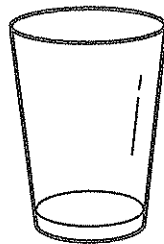
1. Fill a glass with water.
2. Add in a teaspoon of oil. Stir it.



3. What happens to the oil?

It does not d _ _ _ _ _ .

Draw what you see in the glass of water and oil.



Is the oil on top or below the water?

More experiments

1. Add in some sand into a glass of water. Stir it.
2. What happens to the sand?

It does not d _ _ _ _ _ .

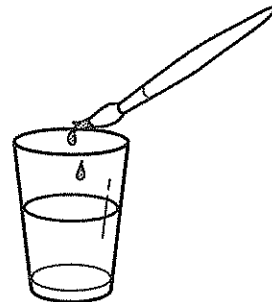
Draw what you see in the glass of water and sand.



Is the sand on top or at the bottom?

Try this.

1. Fill 2 glasses with water.
2. Use a paintbrush and put in some red paint into one glass. Stir it.





3. What happens to the water?

It turns ____ ____ ____.

4. Now put in some blue paint into the other glass. Stir it.

5. What happens to the water?

It turns ____ ____ ____ ____.

This experiment shows that the water changes into the same colour as the colour of the paint.

Fill in each blank with the correct answer.

1. If you mix yellow paint with water, it turns ____ ____ ____ ____ ____.

2. If you mix green paint with water, it turns ____ ____ ____ ____ ____.

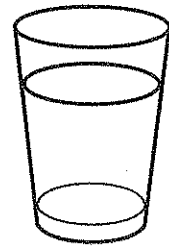
What will happen?



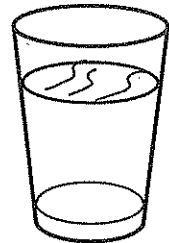
Match each object with the correct glass.



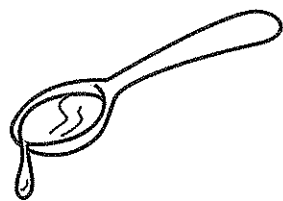
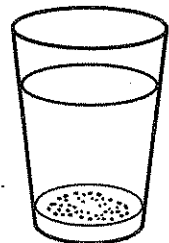
sand



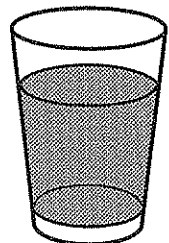
sugar



tube of paint



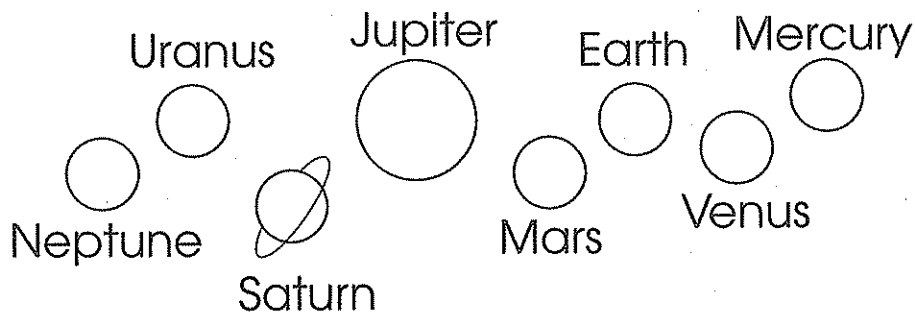
a teaspoon of oil



Solar system

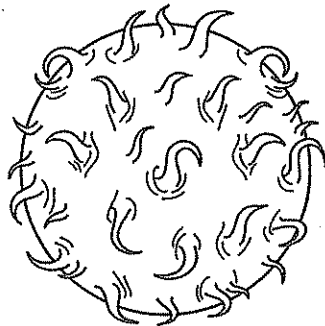


The word 'solar' means 'sun'. The solar system is made up of the sun and eight planets. The eight planets move around the sun.



The solar system

The solar system is a small part of the whole universe. The sun is just one of the many stars in the universe.



The sun



The eight planets



If you have a difficult time remembering the names of the planets, just remember this short phrase.

Fill in each blank with the name of a planet.

Use the words in the box to help you.

My — M _ _ _ _ _

Very — V _ _ _ _

Eager — E _ _ _ _

Mum — M _ _ _

Just — J _ _ _ _ _

Served — S _ _ _ _ _

Us — U _ _ _ _

Nuts — N _ _ _ _ _

Mercury

Venus

Earth

Mars

Jupiter

Saturn

Uranus

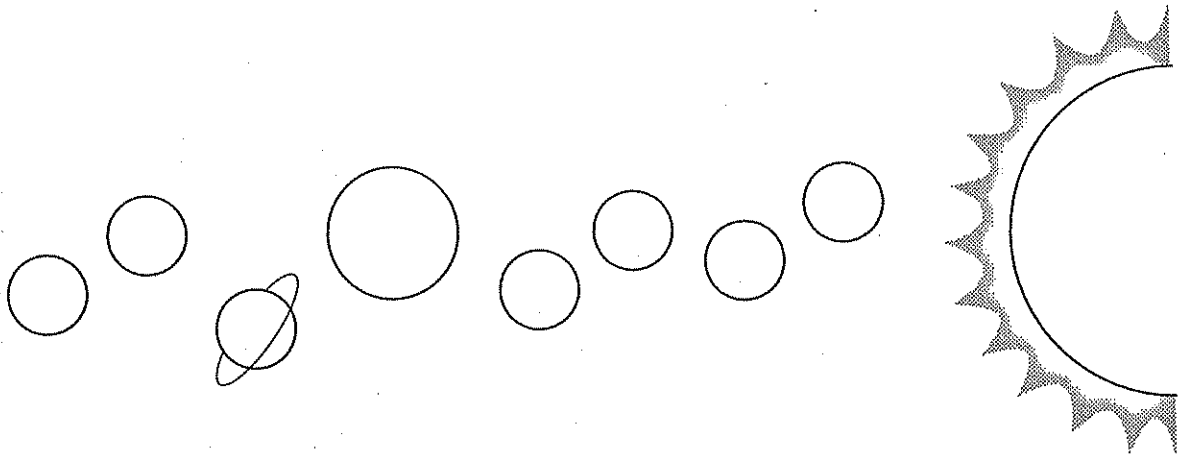
Neptune



The planets



Label the eight planets.



Mercury is closest to the sun.

Venus is very bright.

Earth is the only planet that supports life.

Mars is a red planet.

Jupiter is the largest planet.

Saturn is surrounded by seven rings.

Uranus has the most moons.

Neptune is the furthest planet from the sun.



Find the planets



Find and circle the names of each planet.

Mercury

Venus

Earth

Mars

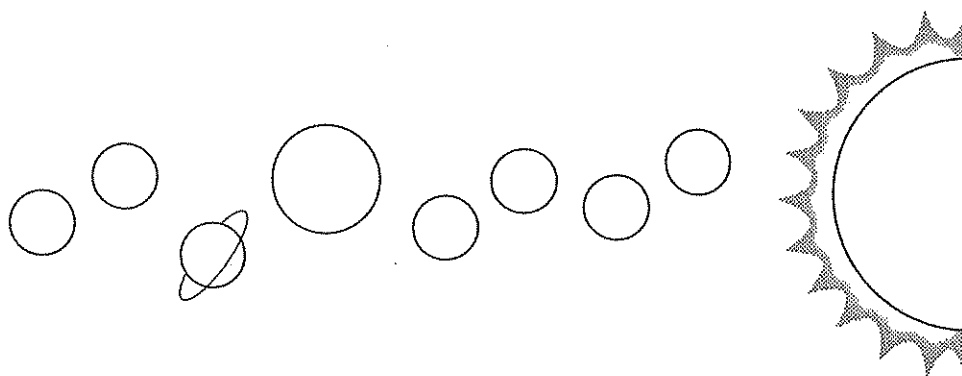
Jupiter

Saturn

Uranus

Neptune

a	s	d	f	g	h	j	k	l	q
z	p	m	e	r	c	u	r	y	w
j	u	z	x	e	a	r	t	h	e
u	t	i	v	e	r	s	e	f	r
p	c	v	b	n	m	a	k	j	t
i	v	v	n	e	p	t	u	n	e
t	e	i	e	r	g	u	w	d	y
e	n	o	w	m	a	r	s	e	u
r	u	n	t	f	s	n	a	s	i
h	s	j	u	r	a	n	u	s	o



Sun

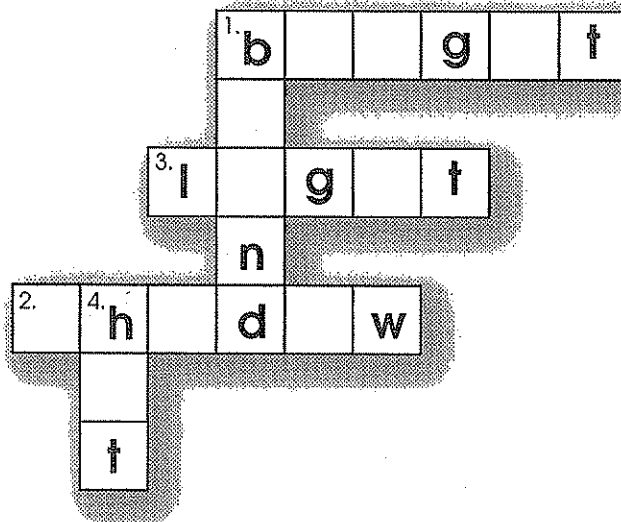


The sun is like a hot burning ball. It is very bright. The sun gives us heat and light. When we stand under the sun, we can see our shadow.

We should not look at the sun directly as it can cause us to be blind.



Complete the crossword puzzle.



Across:

1. Sunlight is very _____.
2. We see our _____ when we stand under the sun.
3. The sun gives us _____ so that we can see.

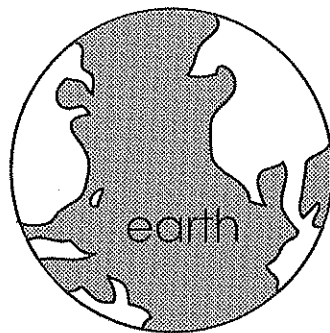
Down:

1. Looking directly at the sun can cause us to become _____.
4. The sun can make us feel _____.

Earth



The earth is the third planet from the sun. It is the only planet with living things. It is not too near or too far away from the sun, so it is not too hot or too cold for living things to live. It also has air and water for living things.



Rearrange the letters to form a word.

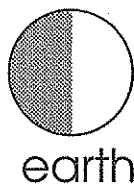
1. The earth is the _____ (irdth) planet from the sun.
2. There are _____ (lviing) things on earth.
3. On earth, there is air and _____ (terwa).



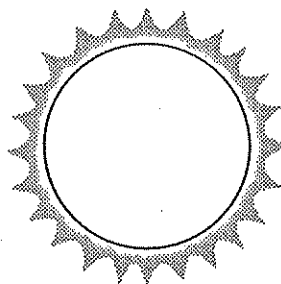
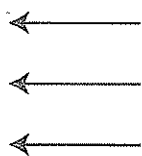
Spinning of the earth



The earth takes 24 hours to make one complete turn on its axis. Half of the earth facing the sun is having daytime. The other half facing away from the sun is having night-time. This spinning of the earth causes day and night.



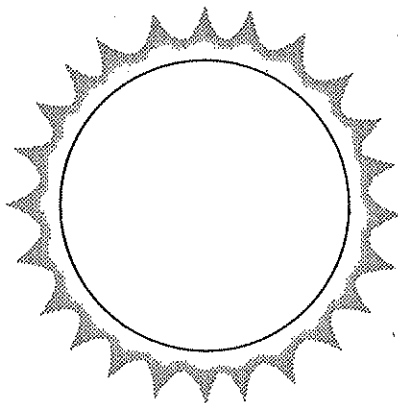
earth



sun

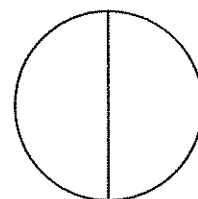
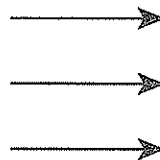


Colour the part of the earth that is experiencing night-time.



sun

sunlight



earth

Day and night



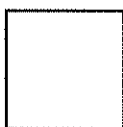
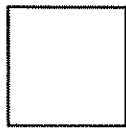
We do different things during the day and night.
We go to school in the day and sleep at night.

At night, the sky is dark. We do not see the sun
because the earth faces away from the sun. If the
sky is clear, we can see the moon.



When do we carry out each activity below?

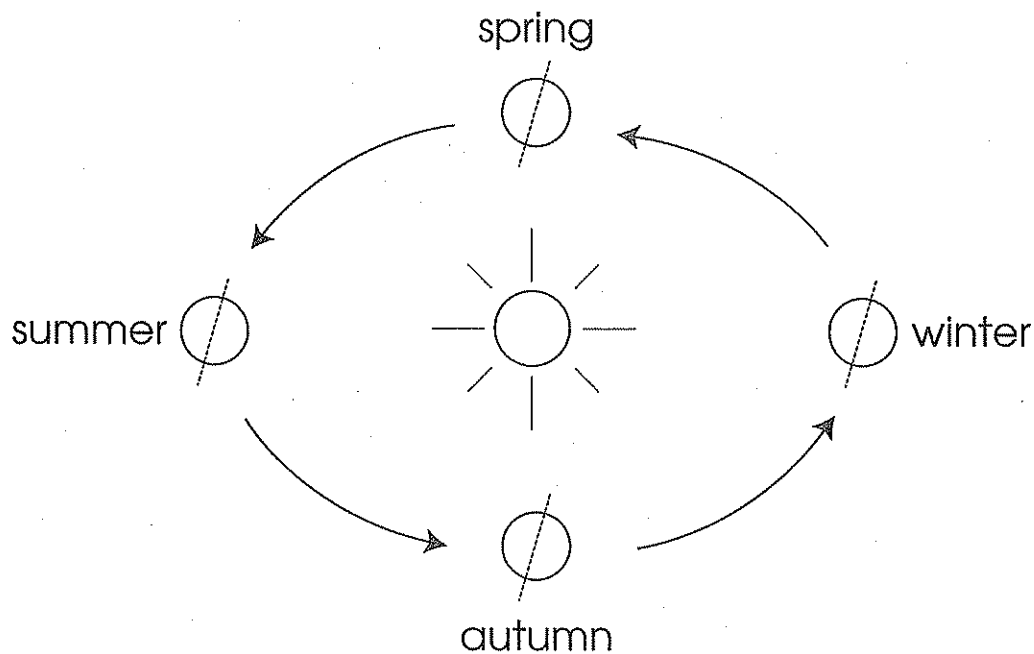
Draw the sun  or moon  in each box.



Revolution



The earth takes a year or about 365 days to move around the sun. One turn around the sun is called a revolution. We can say that the earth takes 1 year to make a revolution around the sun. This revolution causes the four seasons — spring, summer, autumn and winter.



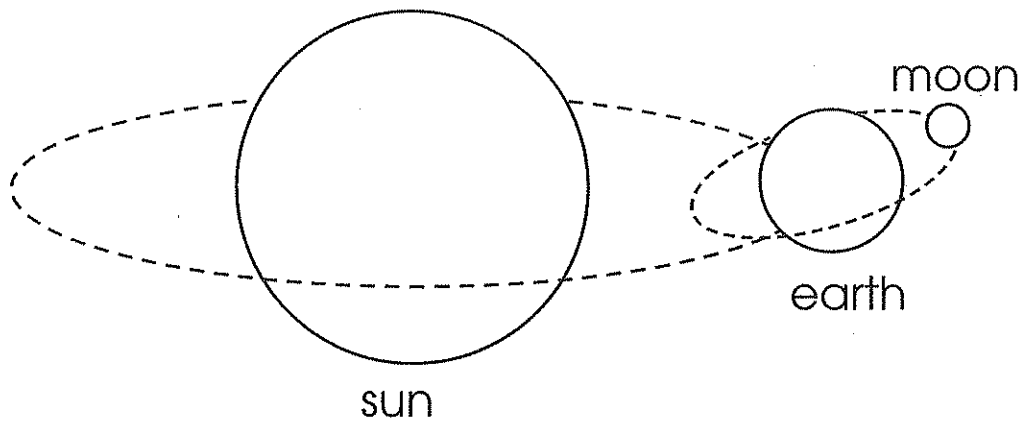
Different planets take different time to move around the sun. The nearer the planet is to the sun, the shorter time it takes to make one revolution. The further the planet is from the sun, the longer time it takes to make one revolution.



The orbit



Trace the path of the earth and moon as they move around the sun. This path is called an orbit. It is oval-shaped.



The moon takes 28 days to move around the earth. The earth takes about 365 days to move around the sun.

The moon is the only natural satellite of the earth. The moon was first visited by a Soviet spacecraft in 1959. It is the only object in space that has been visited by humans.



The moon

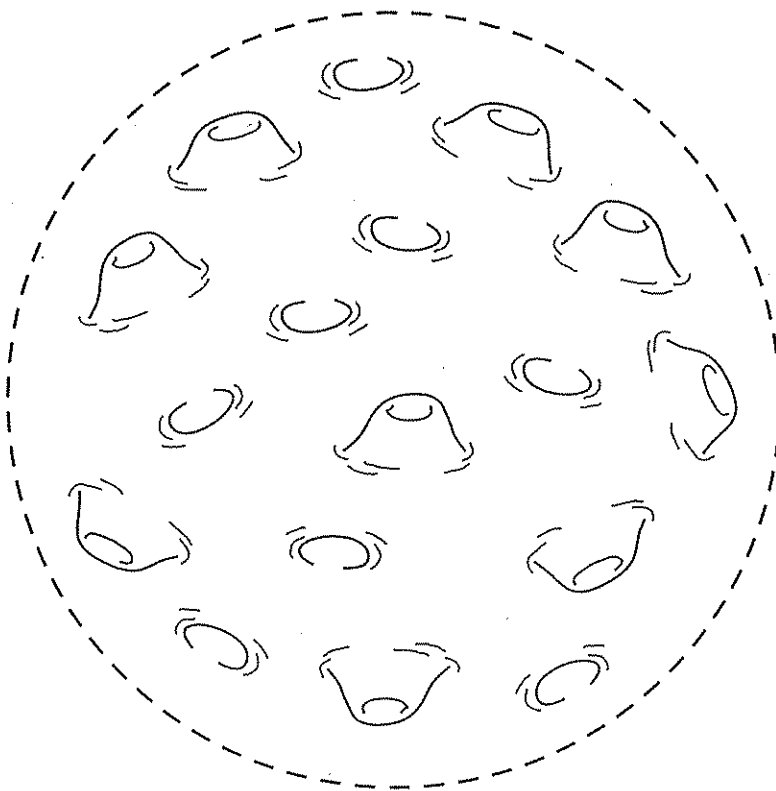


The moon is our nearest neighbour in the solar system. It is not a planet. The moon does not give out its own light. It bounces or reflects light from the sun to our eyes.

It moves around the earth in 28 days. As the earth moves round the sun, the moon also moves around the sun as well as the earth.



Trace the dotted lines to complete the picture of the moon.



How does the moon look like?

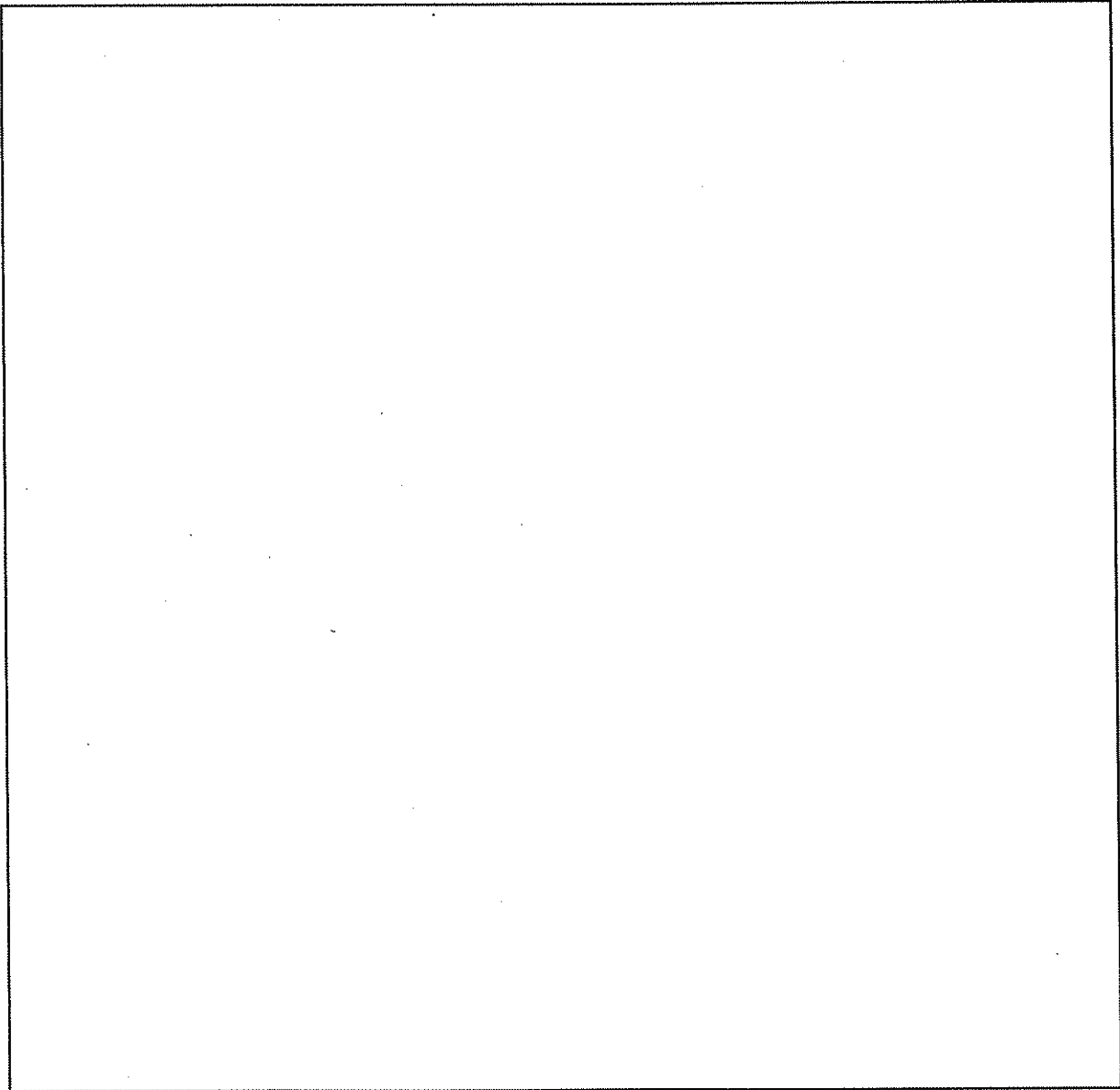


How does the moon look like?

The moon is circle-shaped. On the moon's face, there are many holes called craters.

Can you draw the moon in the box?

Colour the moon yellow.

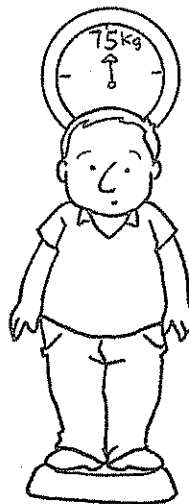


Our weight on the moon

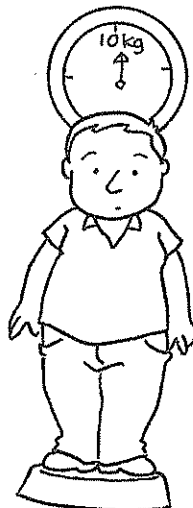


Did you know that your weight on the moon is less than your weight on earth?

Fill in each blank with the words 'earth' or 'moon'.



This is his weight on _____.



This is his weight on the _____.

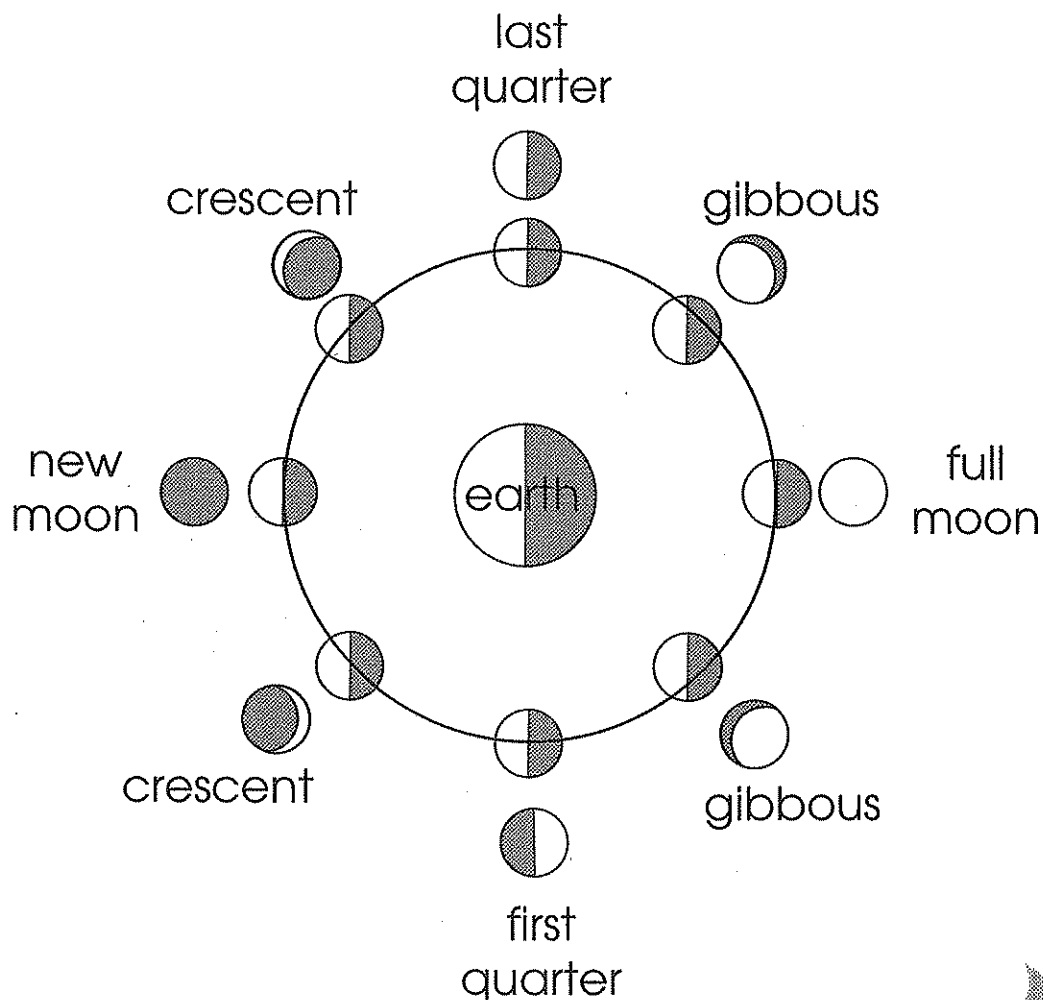


Phases of the moon



The moon always has the shape of a sphere (ball) but when we look at the moon, its shape always changes. The shape of the moon changes because of its movement around the Earth. These changes in shapes are called phases.

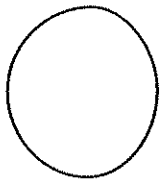
The phases of the moon appear in this order:



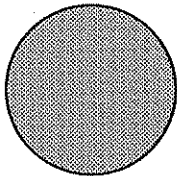
Types of moon



Match each picture with its name.



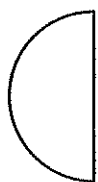
● crescent



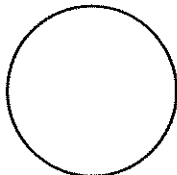
● half moon



● full moon



● new moon

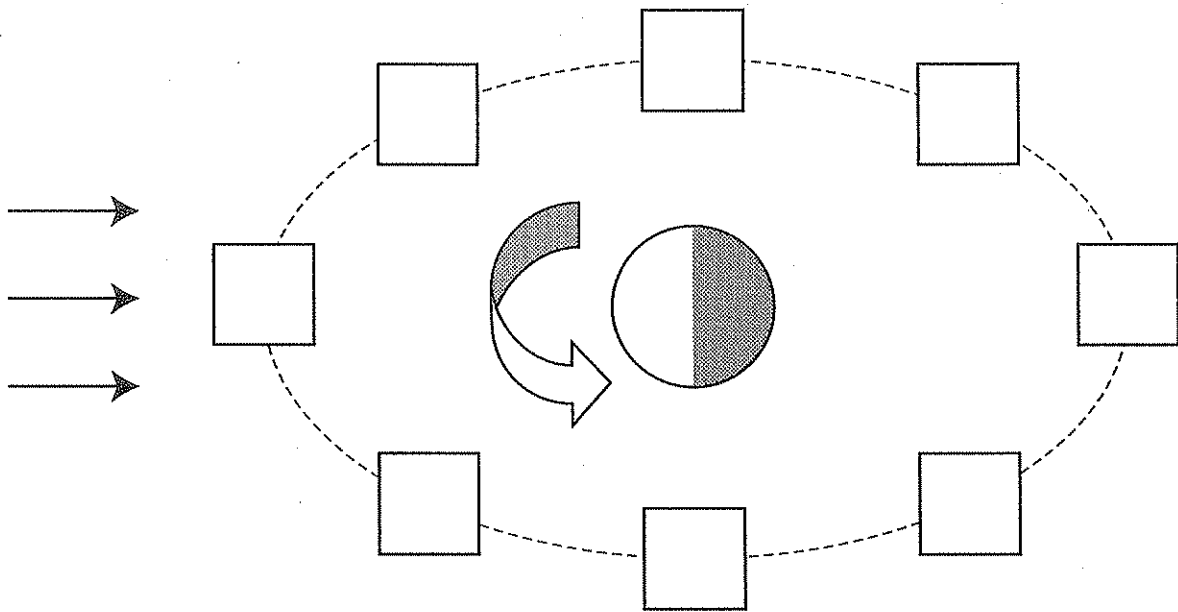


● gibbous

The missing part



Draw in the missing phases of the moon.
Use the pictures below to help you.



-  new moon
-  crescent
-  first quarter
-  gibbous
-  full moon
-  gibbous
-  last quarter
-  crescent



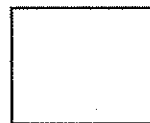
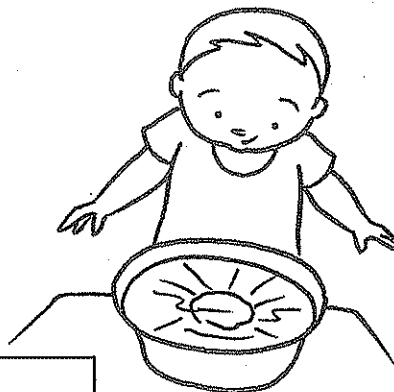
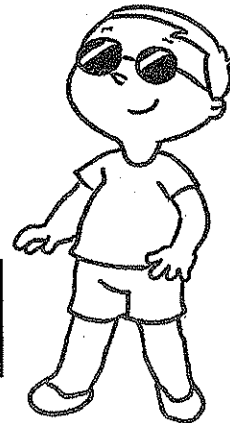
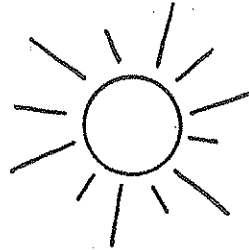
Looking at the sun safely



We should not look at the sun directly, even when we are wearing sunglasses. We can look at the sun safely in a few ways without having to look at it directly.



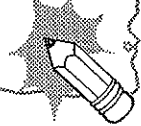
Put a tick (✓) for the correct ways of looking at the Sun without spoiling our eyes.



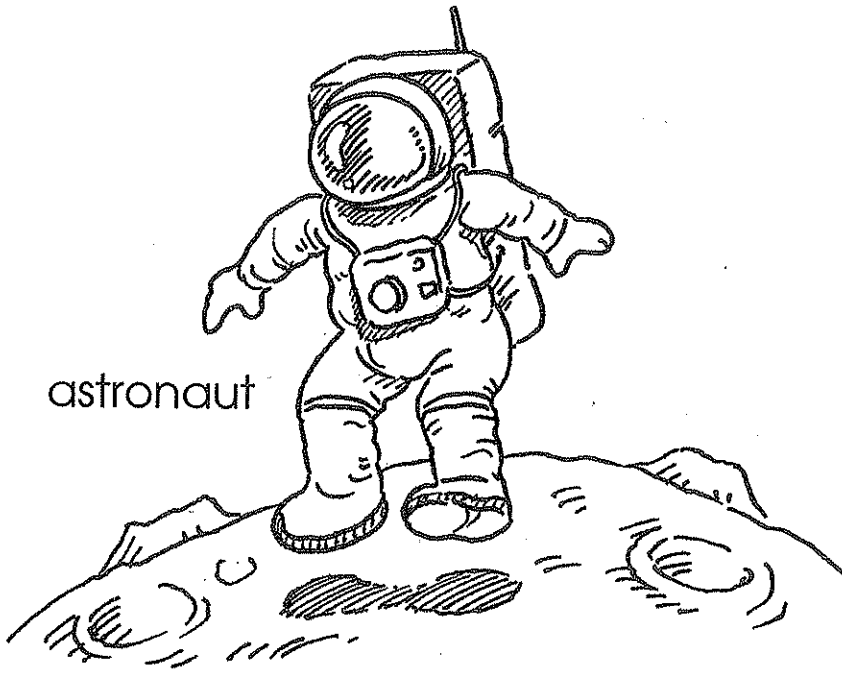
Travel to space



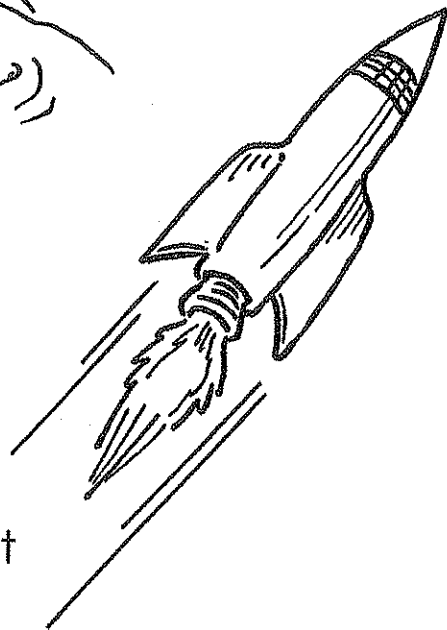
Man can travel to space in a rocket. The man who works in or travels to space is called an astronaut. An astronaut must wear a spacesuit to protect himself.



Colour the picture.



astronaut

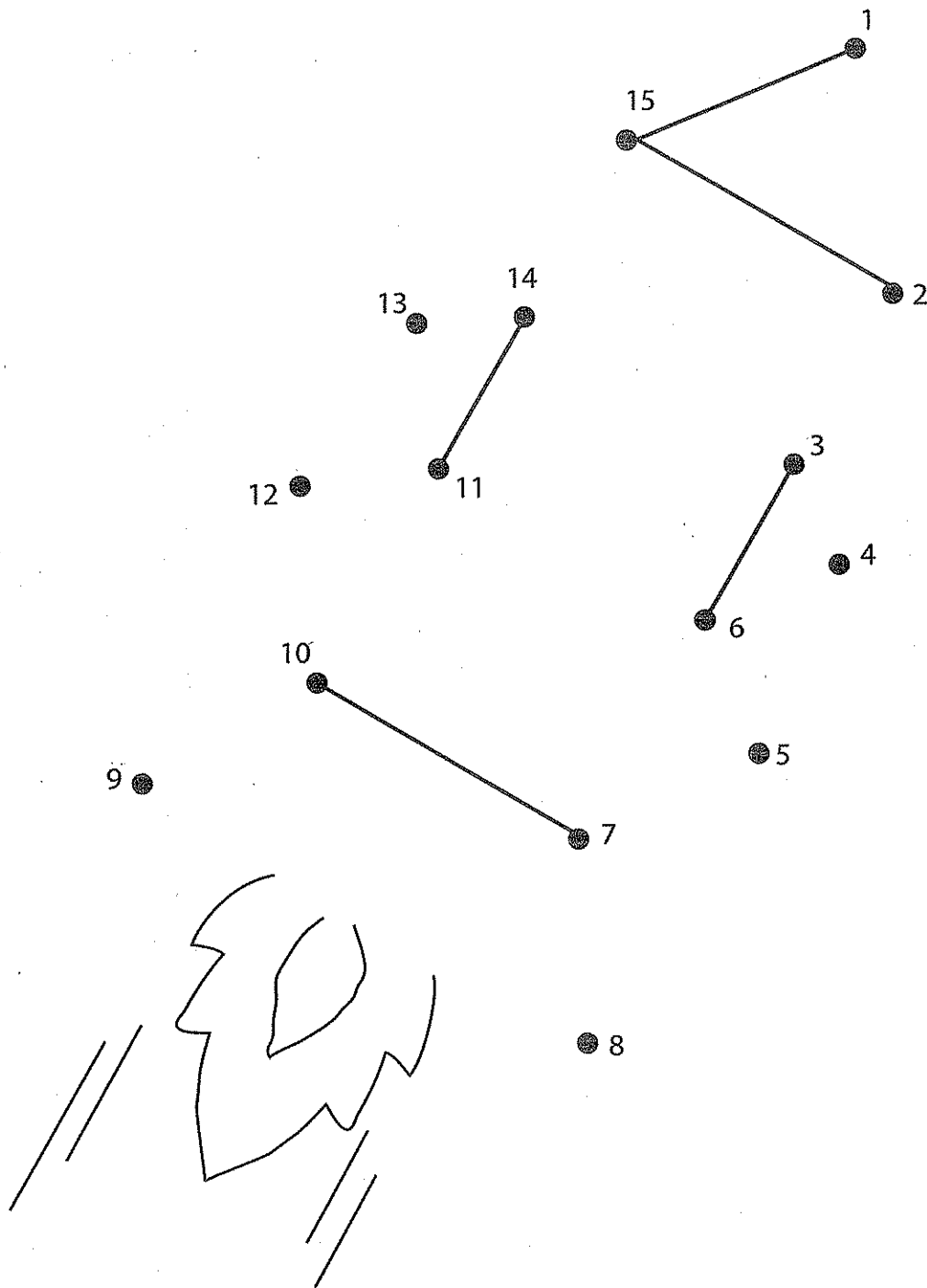


rocket

What am I?



Join the dots to find the object.



Colours

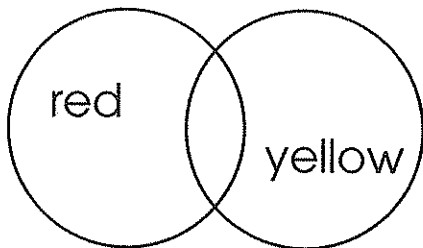


Light helps us to see colours. Without light, things will appear dark and black.

We can mix different colours to get other colours.

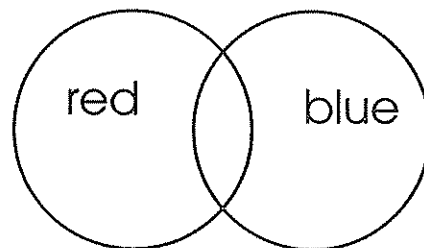


When two colours are mixed, you will get a new colour. Colour the circles to find the new colour. Then trace the dotted words.



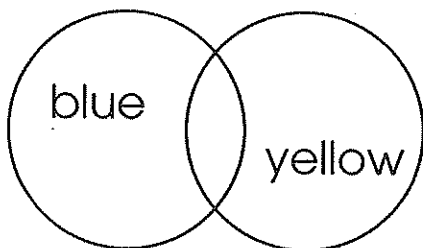
red + yellow

= orange



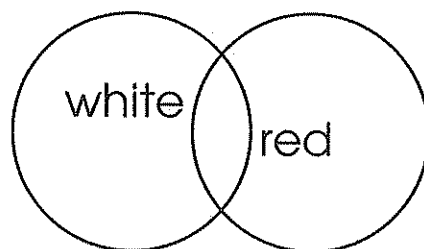
red + blue

= purple



blue + yellow

= green



white + red

= pink



Rainbow



A rainbow has seven colours. They are:

1 red

2 orange

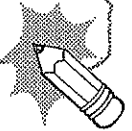
3 yellow

4 green

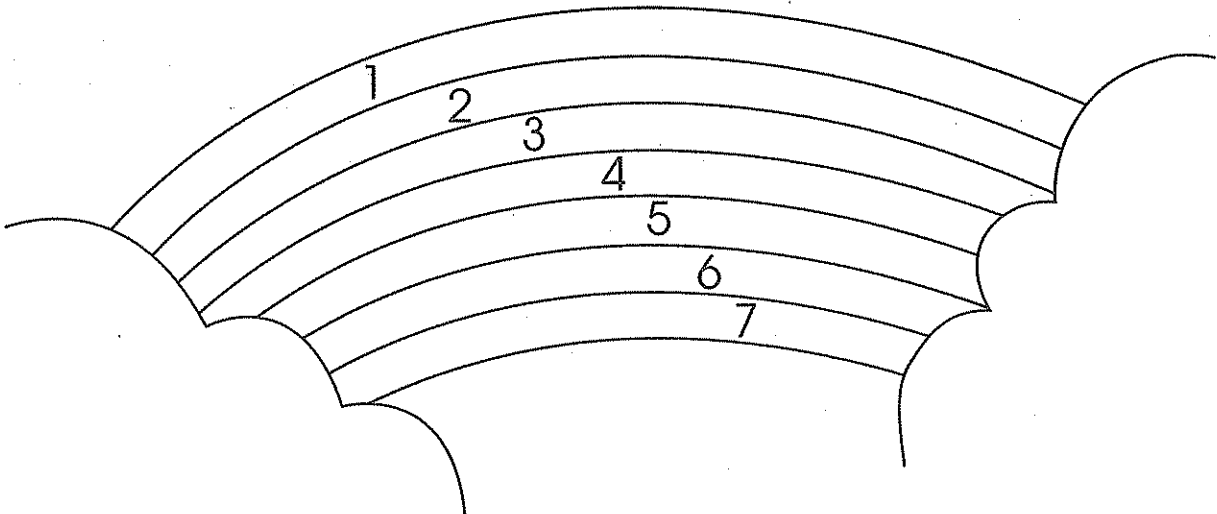
5 blue

6 indigo

7 violet



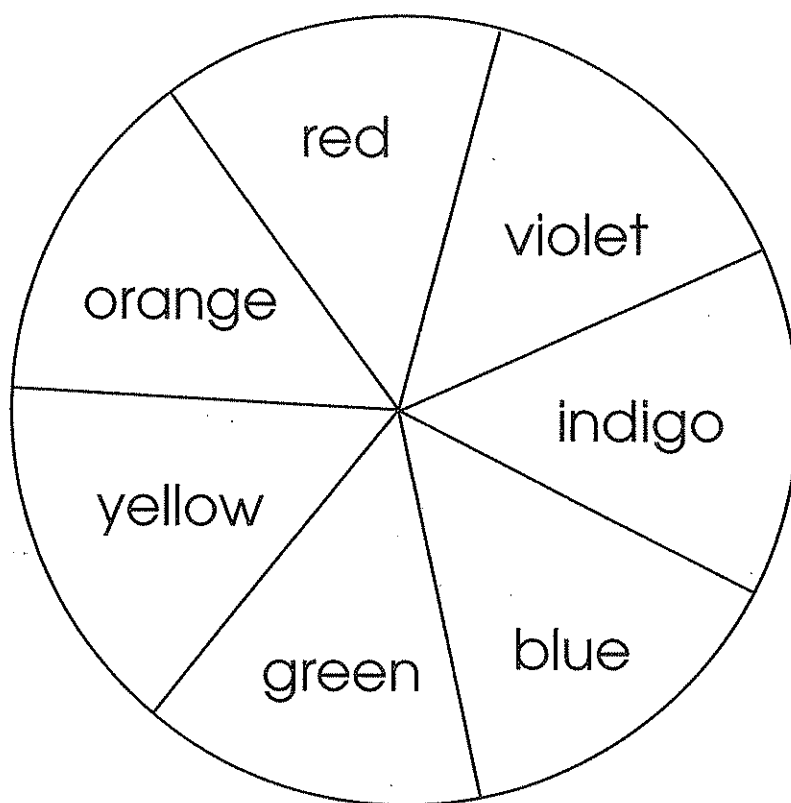
Use the code to colour the rainbow.



Make a colour spinner



1. Trace the circle below onto a piece of white card.
2. Colour the circle with the colours as shown on this page.
3. Make a hole in the centre of the circle and poke a short pencil through the hole.
4. Spin the card.



What colour do you see? _____



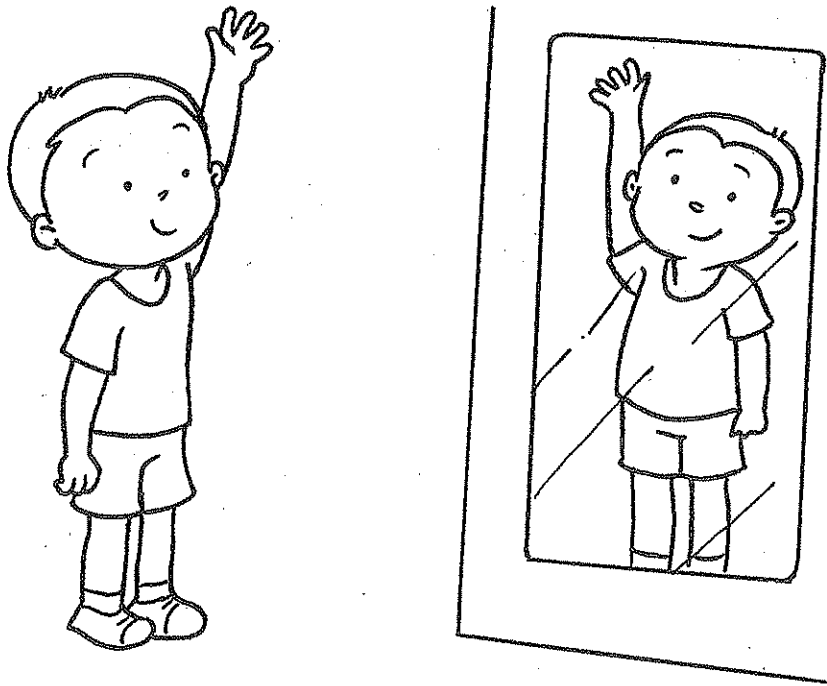
Mirrors



A mirror is a reflective surface that is able to form an image.



Stand in front of a mirror. Now raise your left hand.
What do you see?



I see my _____ hand.

Images



1. Write down 3 words: CAN, BUS and KEN on three separate pieces of paper. Make them big.
2. Put the words in front of the mirror.
3. Copy down what you see in the mirror in the boxes.

Image 1

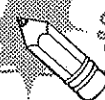
Image 2

Image 3

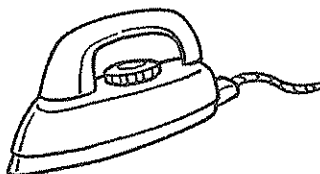
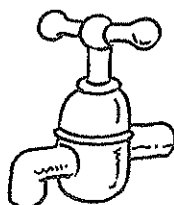
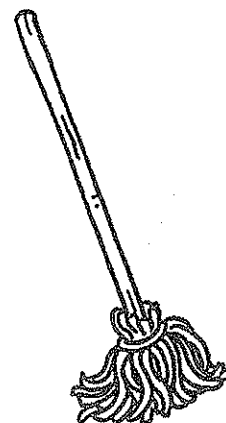
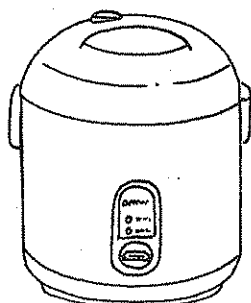
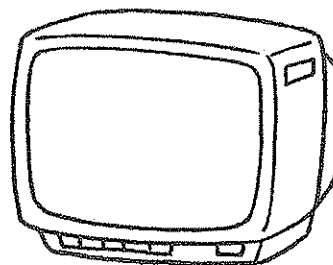
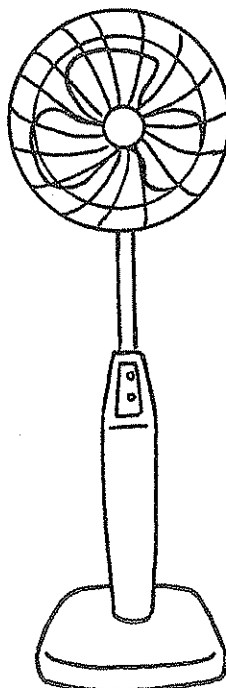
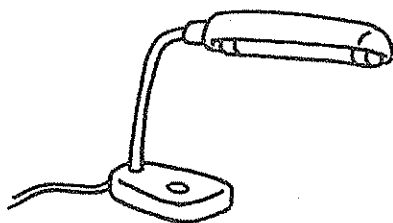
Electricity



An electrical appliance is an object that uses electricity to help you do work.



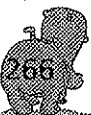
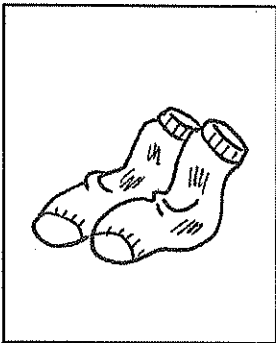
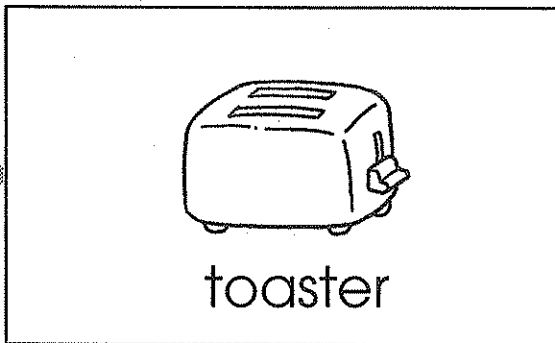
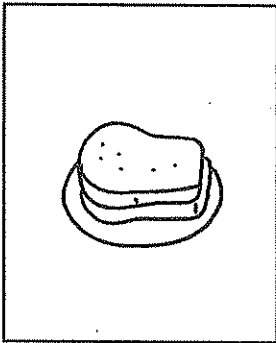
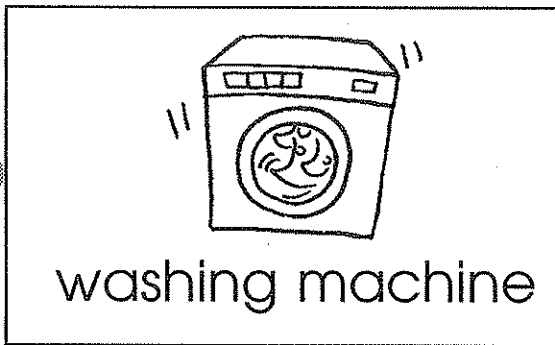
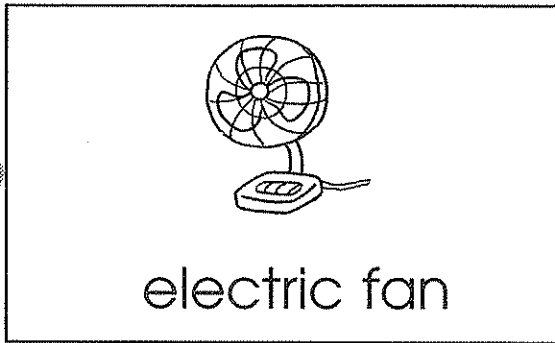
Which objects use electricity to work?
Circle them.



Electrical appliances



Match each picture with the correct appliance.



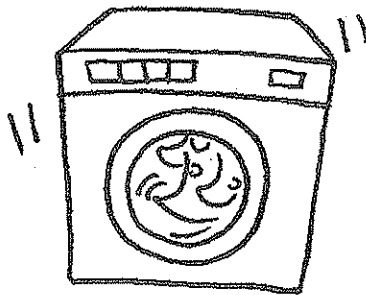
Importance of electricity



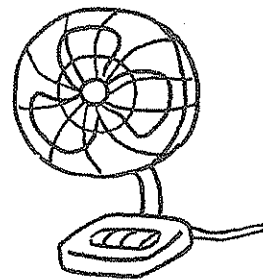
Electricity is very important. Things around us need electricity to work. Without electricity, our life will be different.



light bulb



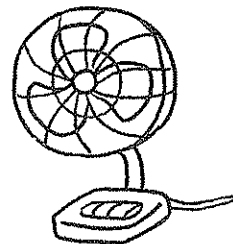
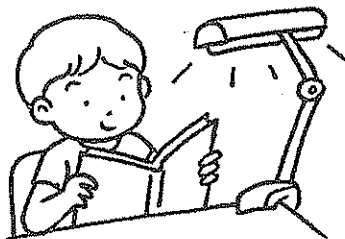
washing machine



electric fan



Circle the pictures that show what will happen if we do not have electricity.

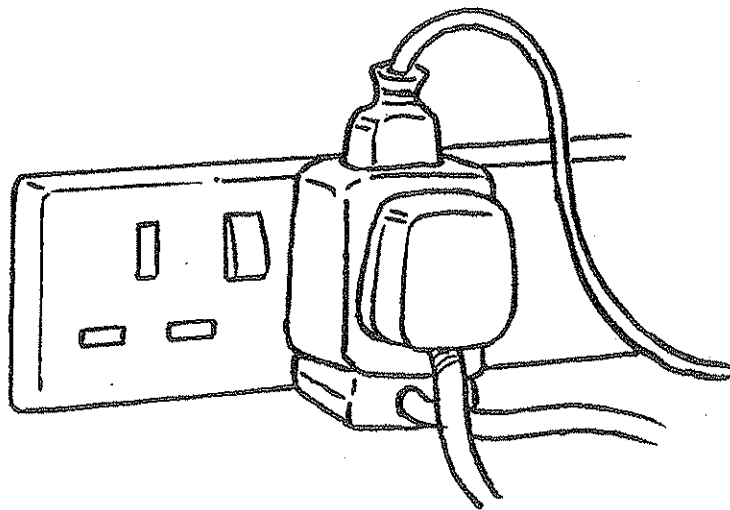


Batteries and power stations

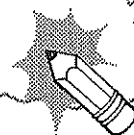


We get electricity from batteries and power stations.

Power stations provide electricity to our homes and schools through wires called cables. When we connect our appliances to the power point, we get electricity.



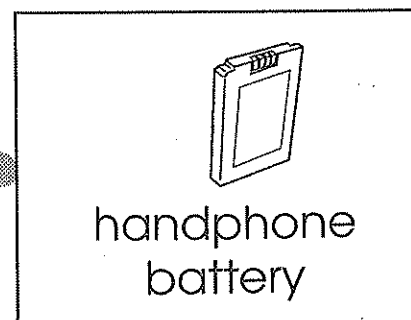
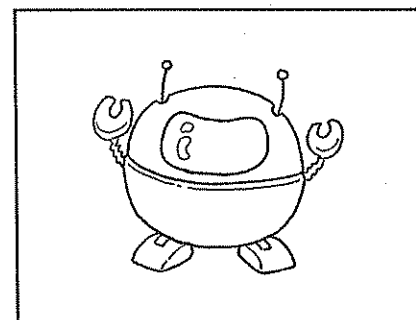
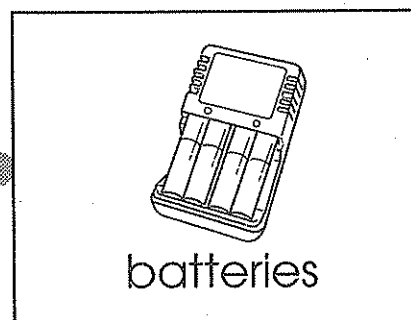
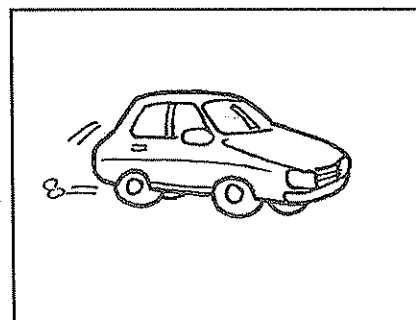
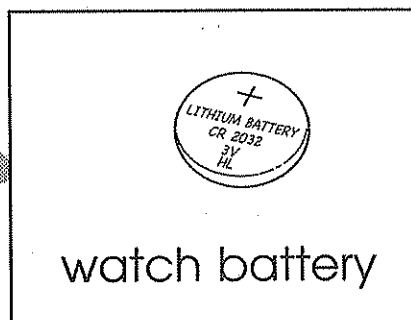
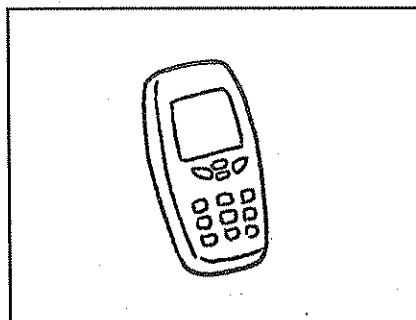
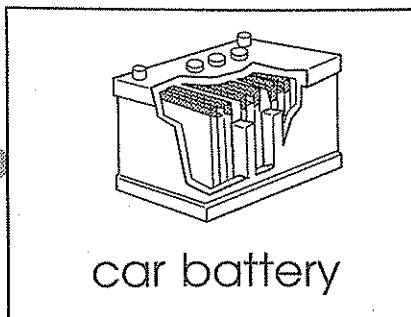
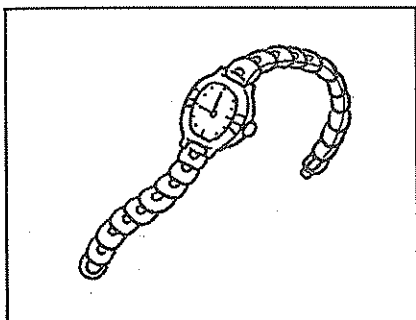
Many appliances work using batteries. These appliances include handphones, cameras, cars and watches.



Batteries



Match each picture with the correct battery.

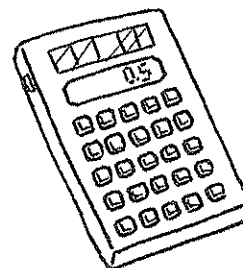
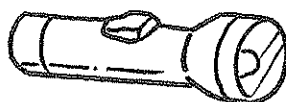
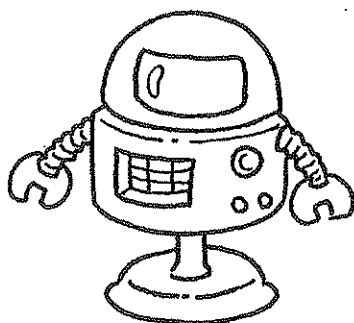
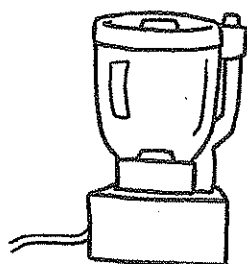
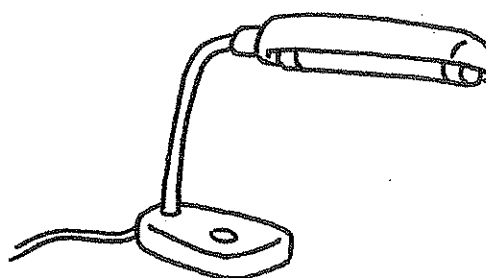
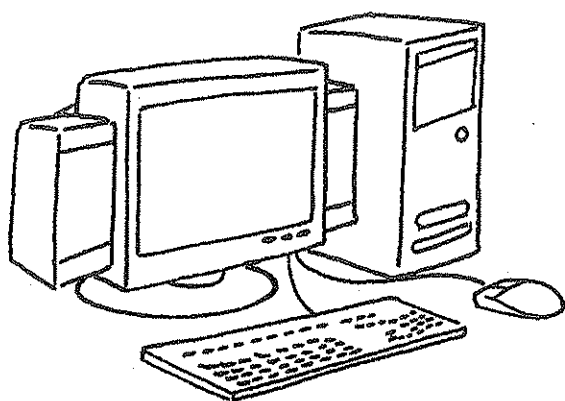
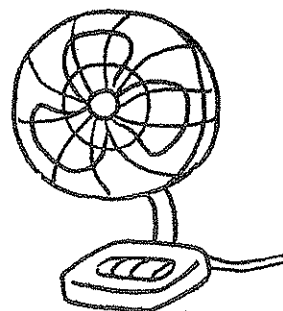
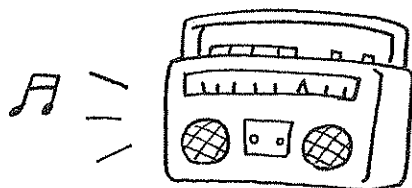


More electricity



Colour the appliances that use batteries green.

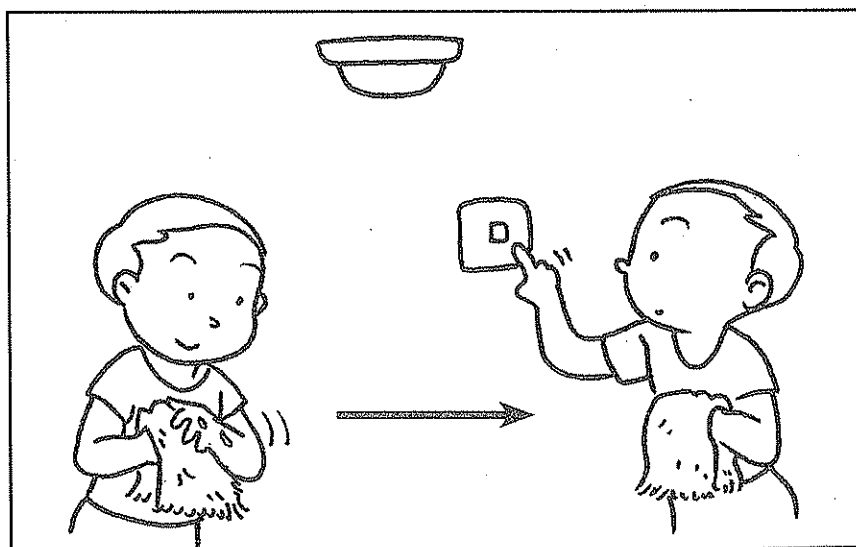
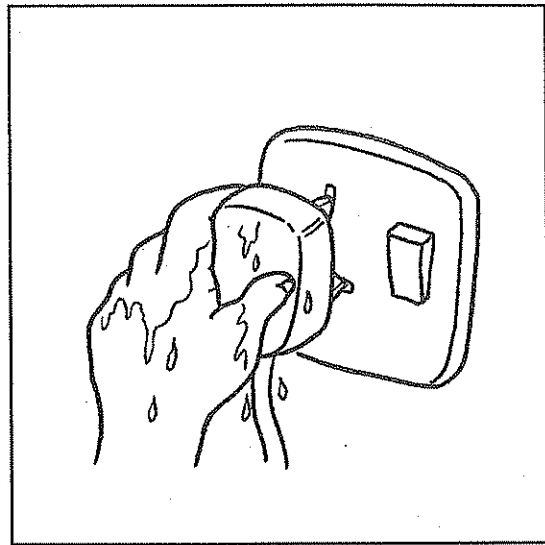
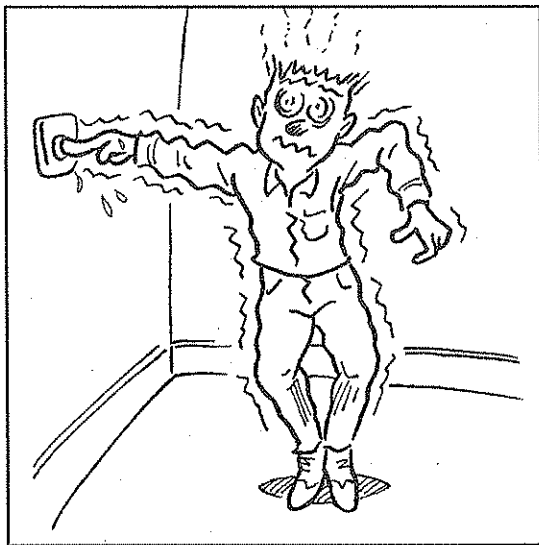
Colour the appliances that use the electrical power point red.



How to use electricity safely

We should not play with electricity. We should not touch the switch with wet hands. We should not use appliances with broken wires.

Cross ☒ out the wrong actions.

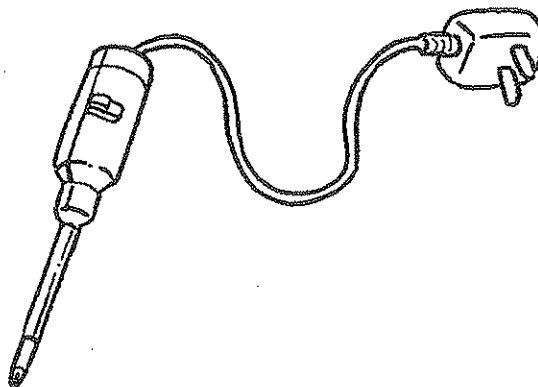
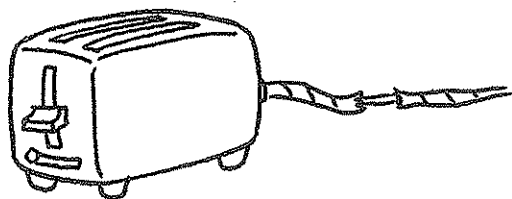
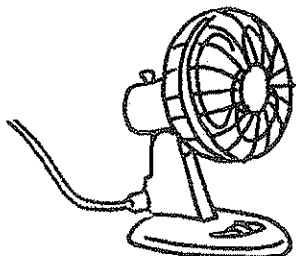
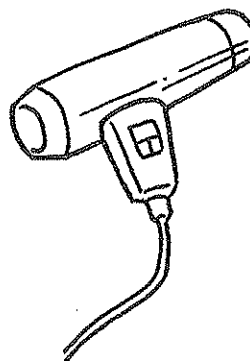
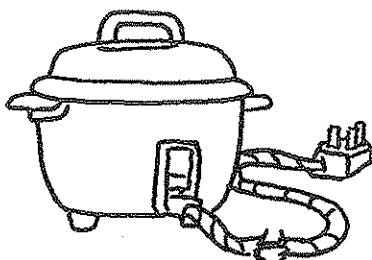
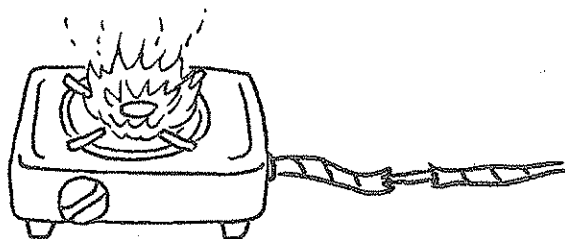
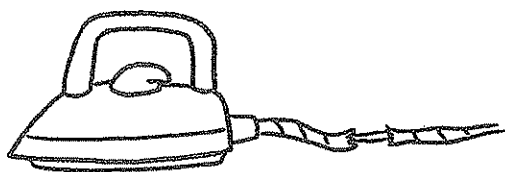


Using the right appliance



Circle the appliances that we can use.

Cross ☐ out the appliances that we should not use.

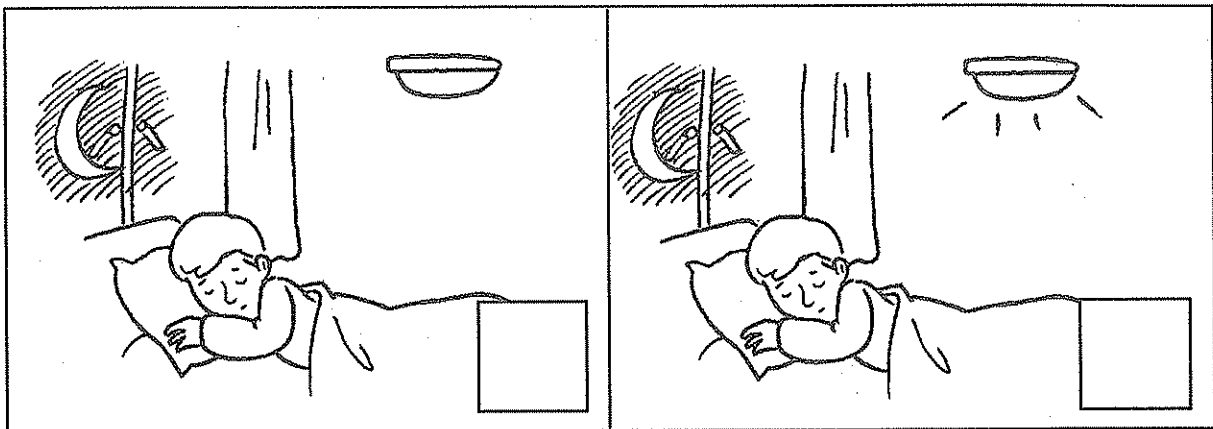


Use electricity wisely

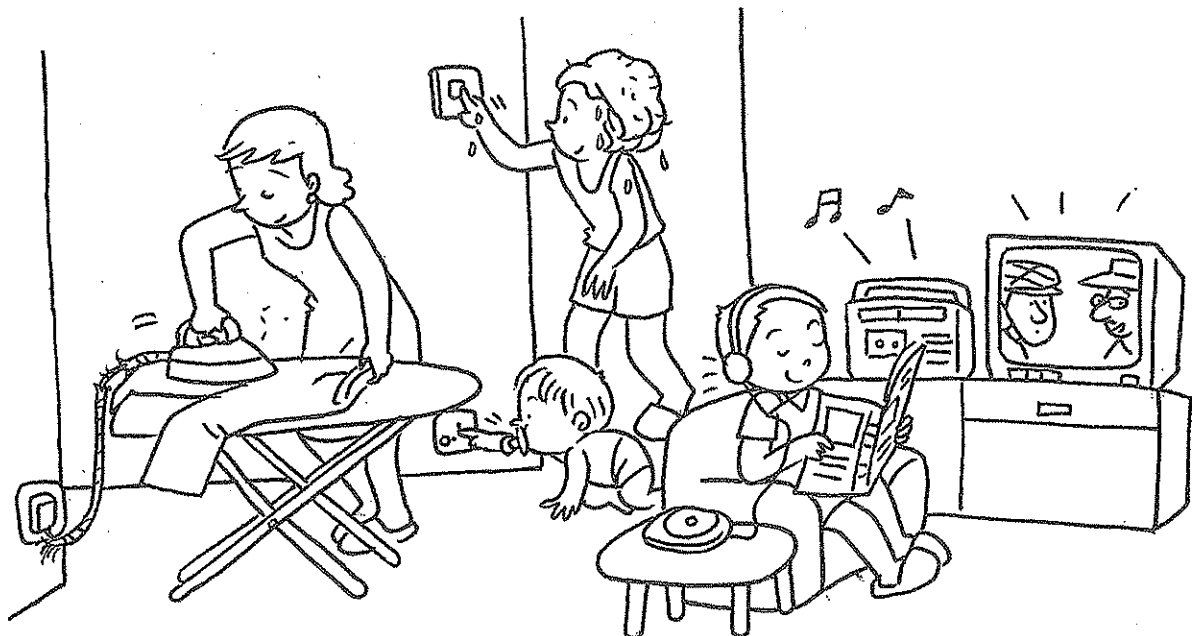


Do not waste electricity because it is precious. We should always turn off the light when we are not using it.

Cross ☐ out the picture that shows wastage of electricity.



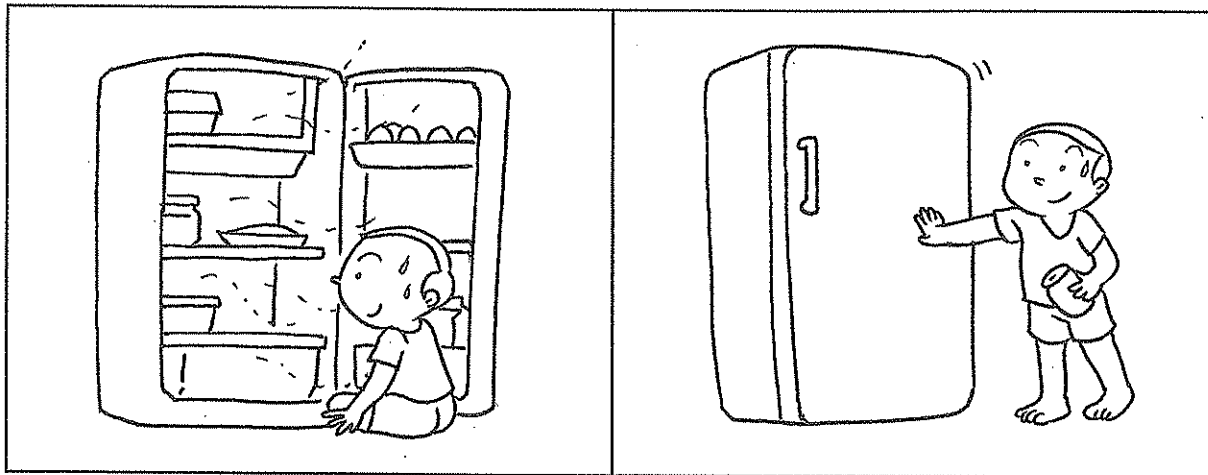
This picture shows the incorrect use of electricity.
Colour the picture.



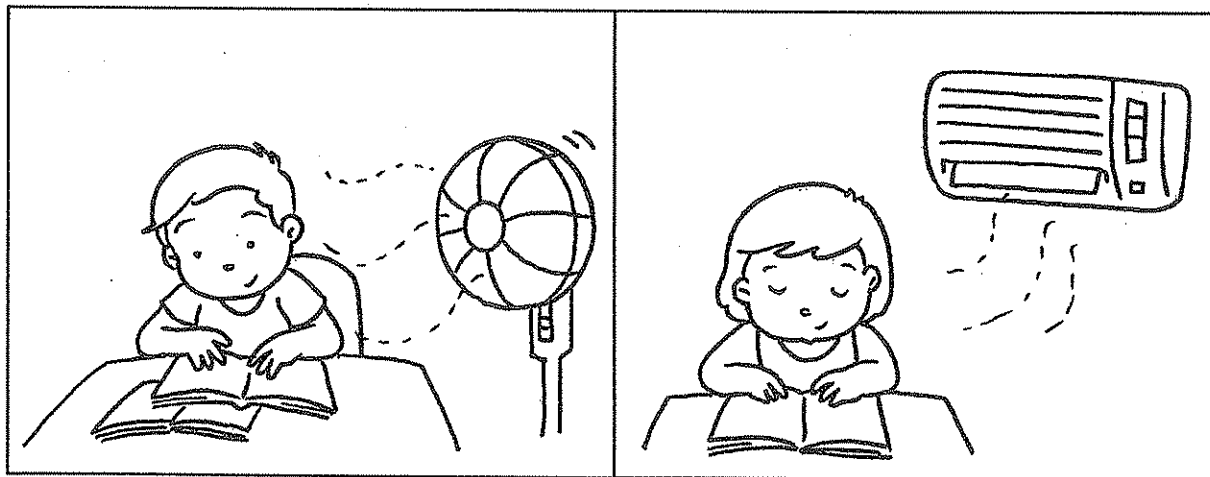
Saving electricity



We should not leave the refrigerator door open for too long.



We should use the electric fan instead of the air conditioner.
The air conditioner uses more electricity.

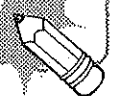
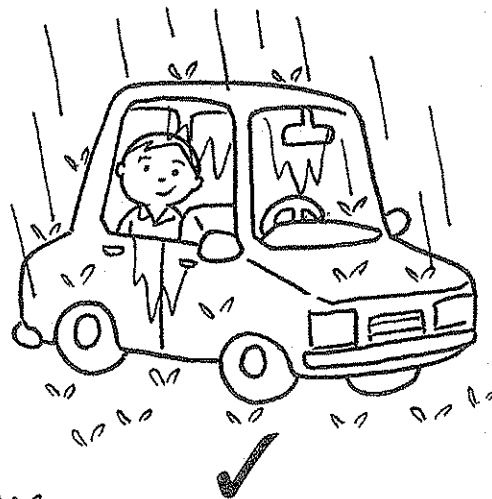


Lightning



Lightning is electricity. It appears as a flash of light. It is followed by a loud crack of thunder. Lightning can cause serious injuries and burns.

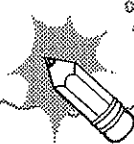
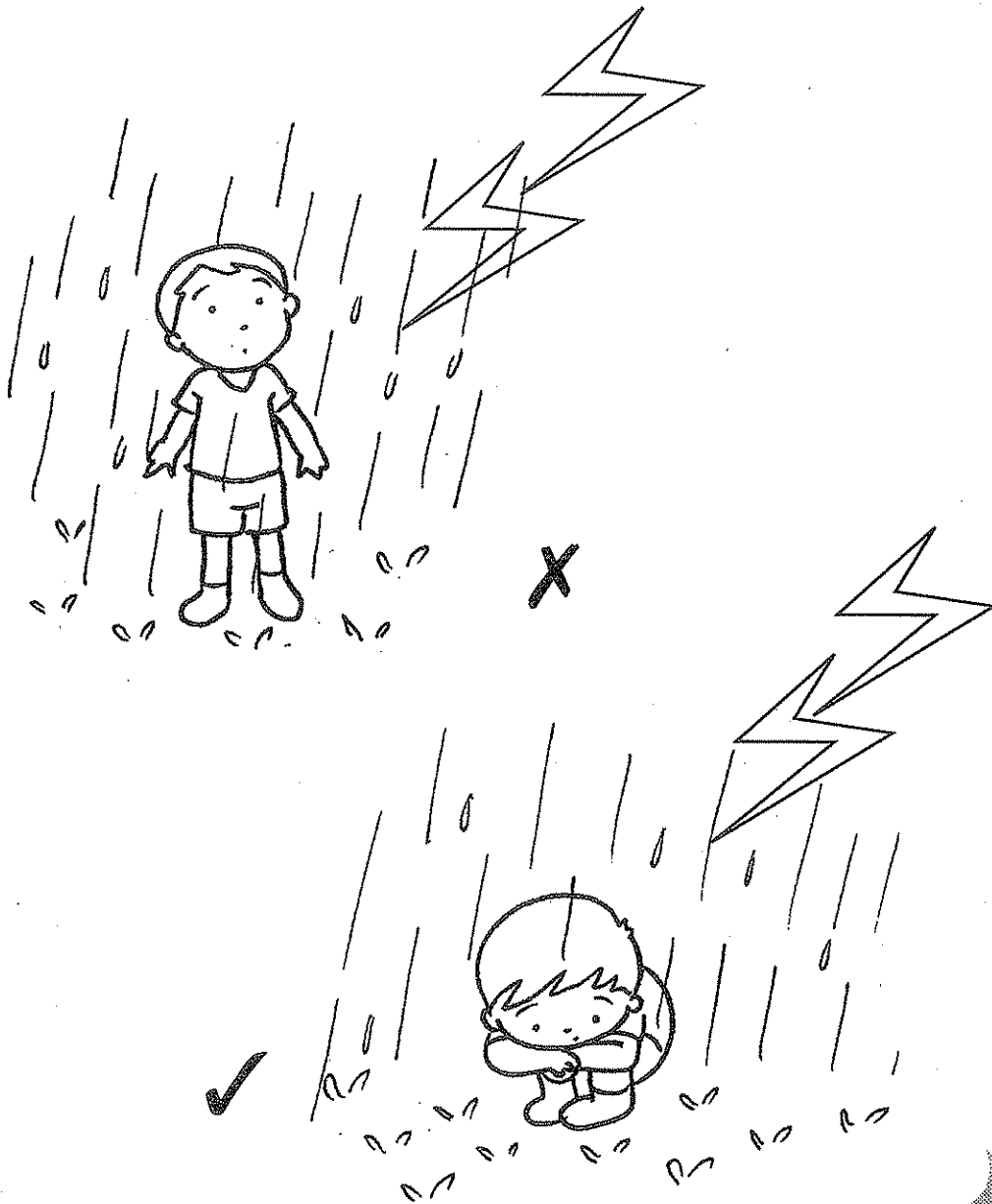
When there is a heavy downpour and there is lightning, we should remain inside our home or in a car. If you need to take shelter, do not stand under a tree as lightning may strike it.



More about lightning



If you are in an open field or beach during a thunderstorm, you should squat down and be close to the ground.



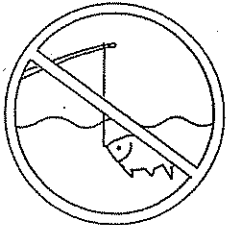
Protect the earth



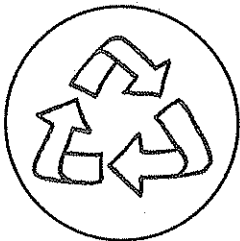
Match each sign with its meaning.



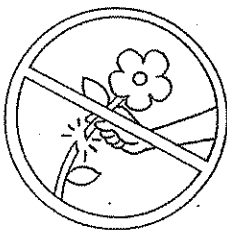
No fishing



Save water



No plucking



Recycle



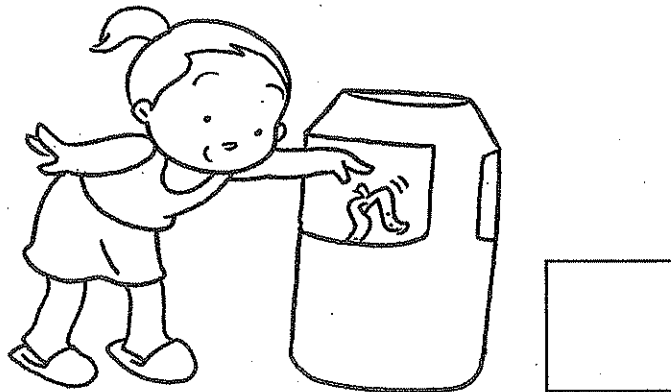
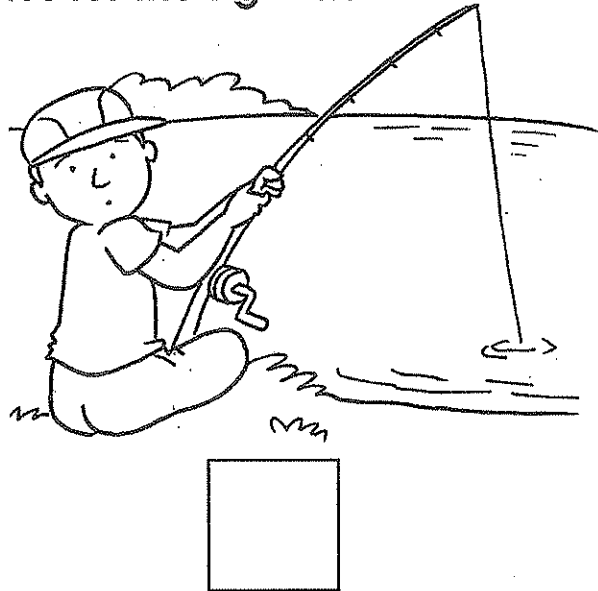
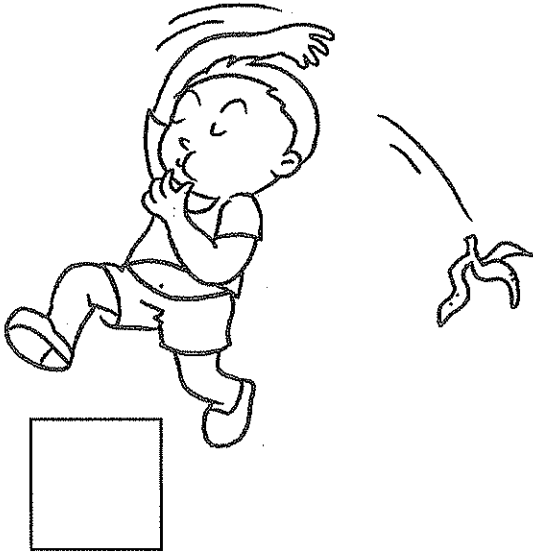
No littering



The right action



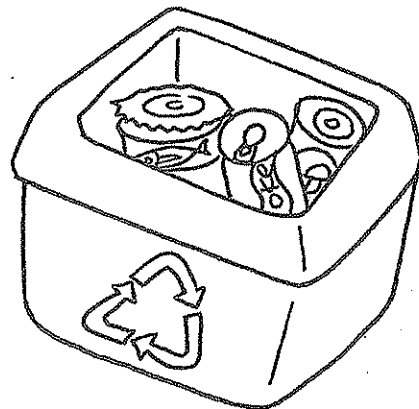
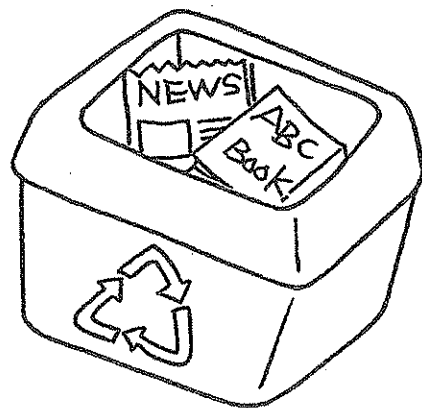
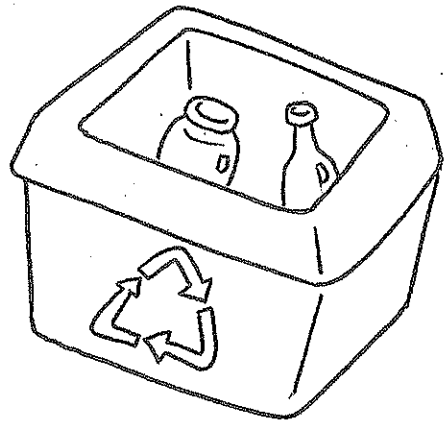
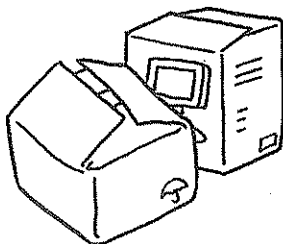
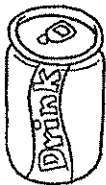
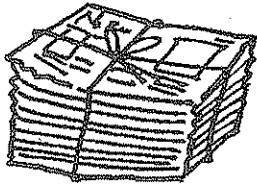
Put a tick ☒ in the correct boxes for the right action.



Recycling

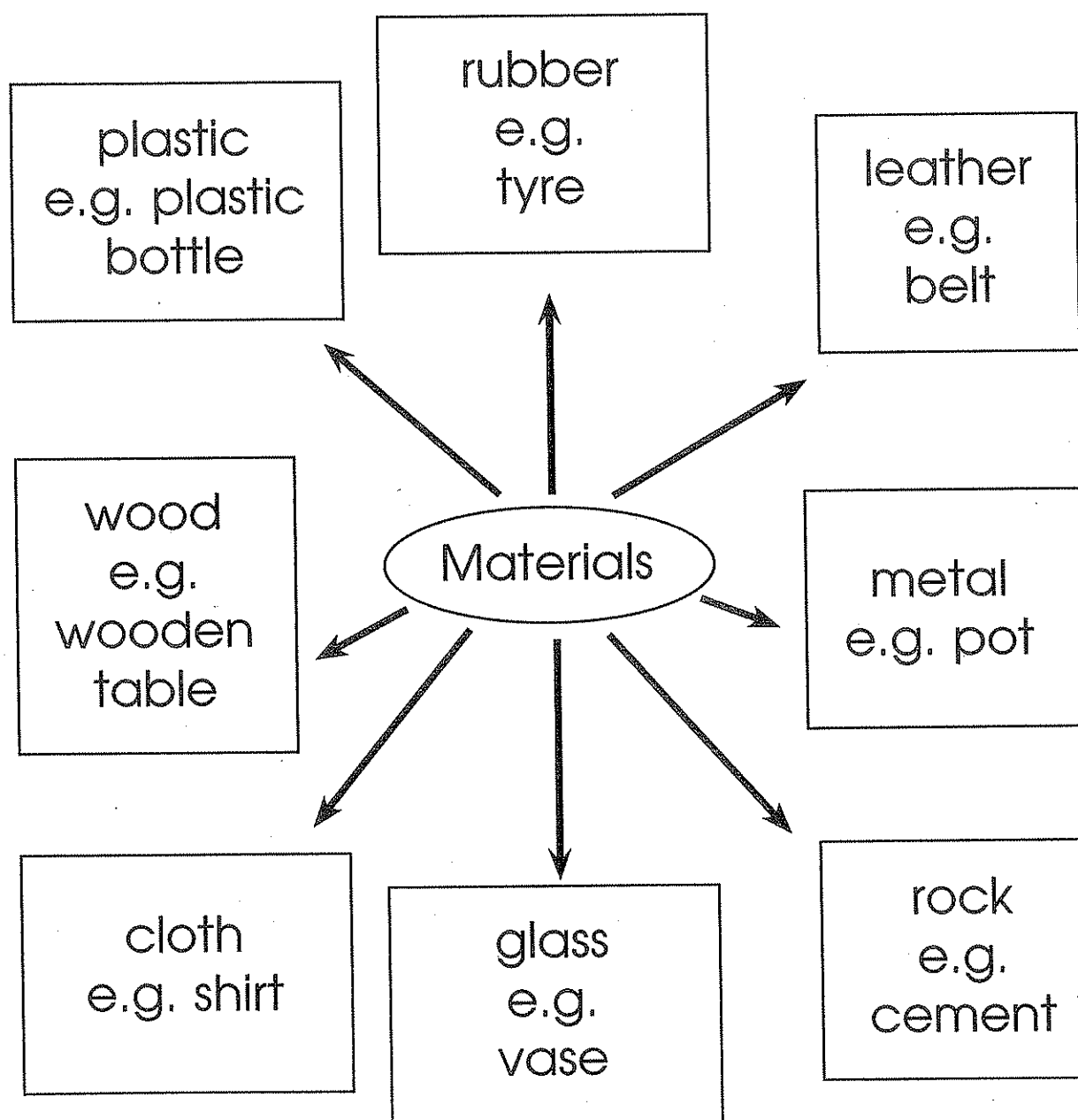


Match each object with the correct recycling bin.

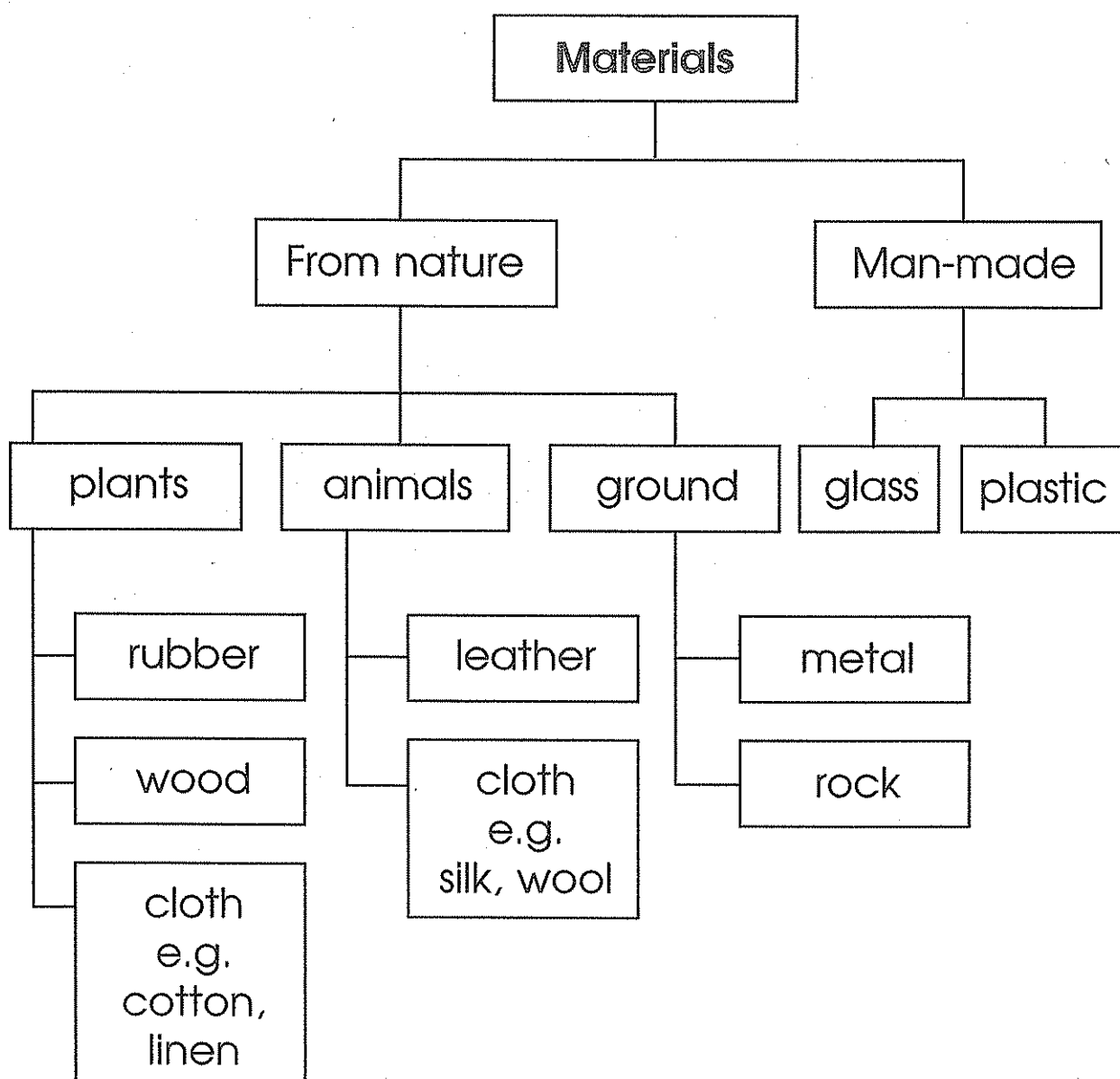


Materials

Materials are used to make things around us. There are different types of materials.



Some materials come from plants, some from animals and others from the ground. Some materials are made in the factories.



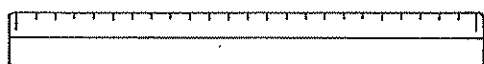
Plastics



Plastics are man-made materials. They are made in a factory. Some plastics are hard and some are soft. Some can be bent and some can break easily. Plastics are waterproof (do not allow water to go through). We can see through some plastics but not others.



Match each picture with the words that correctly describes it.



plastic ruler



plastic bottle

light

breaks easily

waterproof

soft

can see through

hard

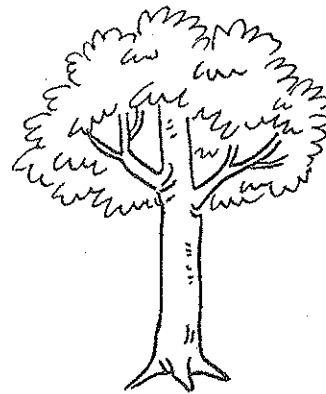
light

Wood

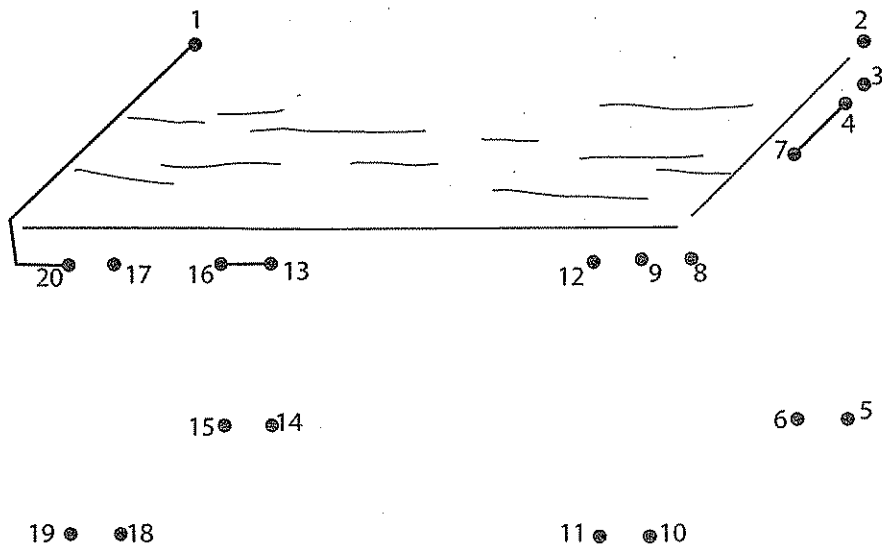


Wood comes from trees. It comes from tree trunks and tree branches.

Wood can be used to make paper, furniture, houses and boats.



Connect the dots to find the picture.



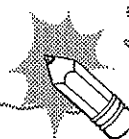
This is a _____.

It is made of _____.

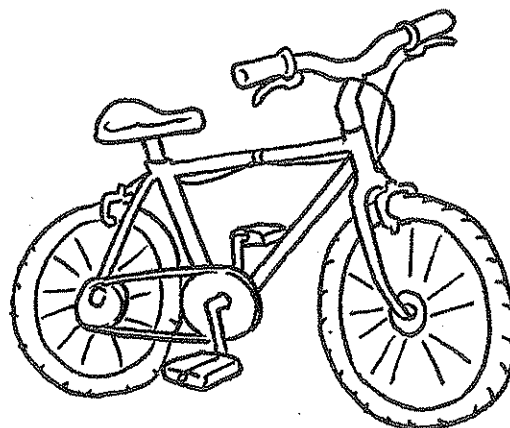
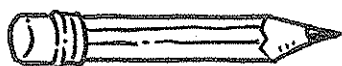
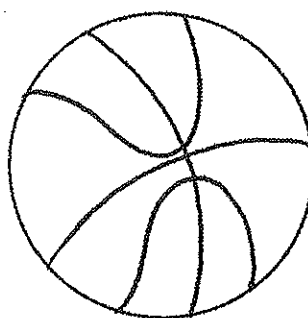
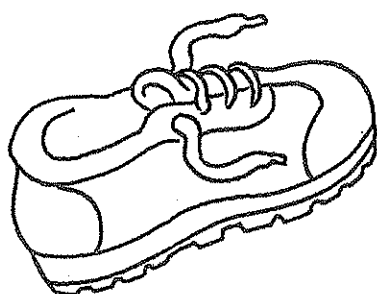
Rubber



Rubber is made from a white milky liquid called latex from the rubber tree. Rubber is soft and it can be stretched.



Use an arrow to show the parts that are made of rubber.

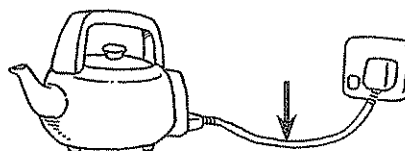
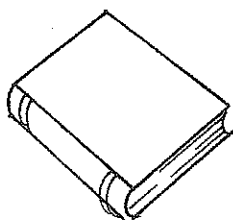
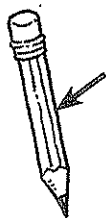
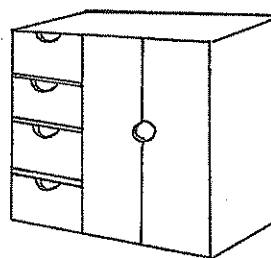
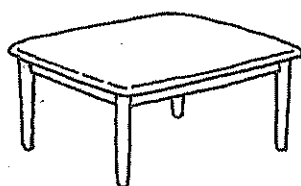
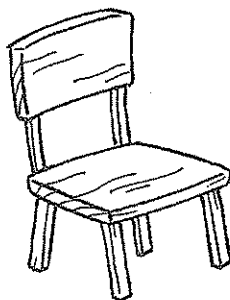
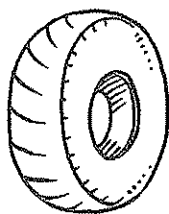


What are they made of?



Write 'r' for the things that are made of rubber.

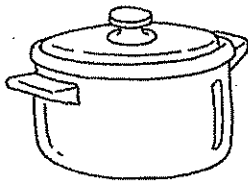
Write 'w' for the things that are made of wood.



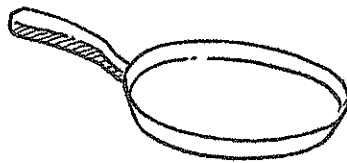
Metals



Metals come from the ground. They are strong, hard and shiny.



pot



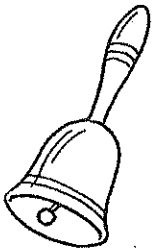
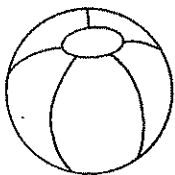
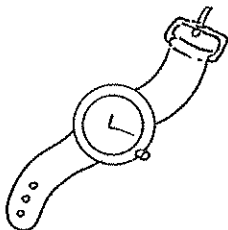
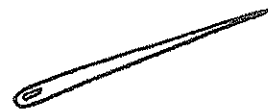
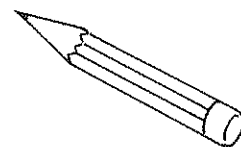
pan



knife



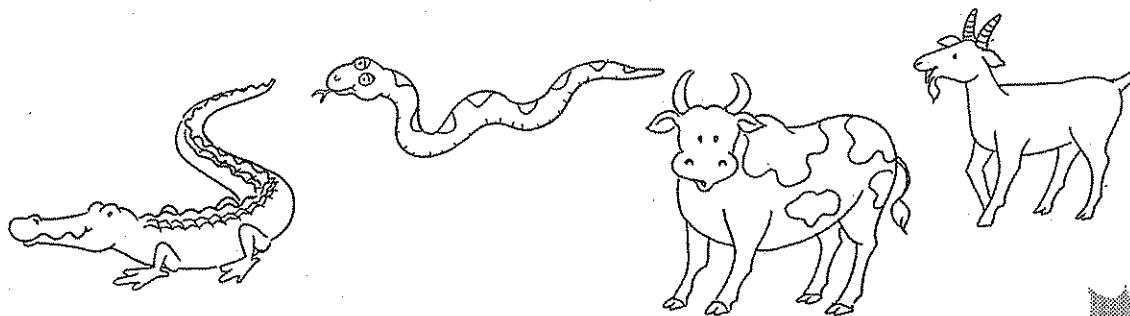
Tick ☒ the objects that are made of metals.


☐
☐

☐
☐

☐
☐


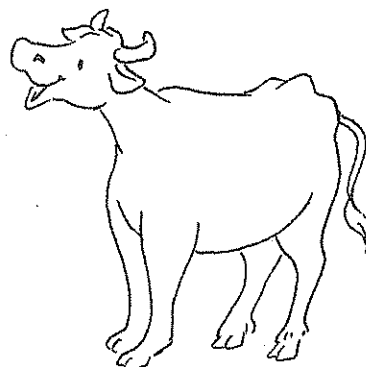
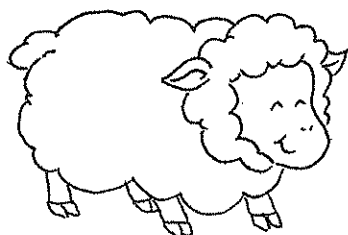
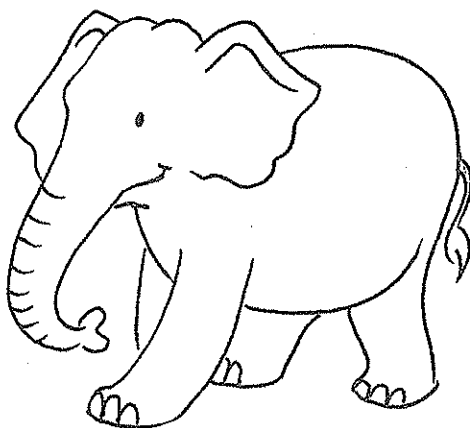
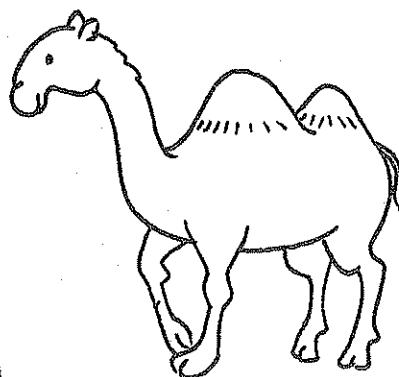
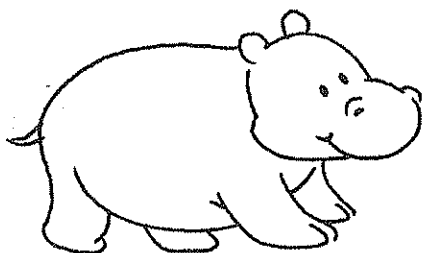
Leather



Leather is obtained from the skin of animals. These animals include crocodiles, snakes, cows and goats.



Circle the animals with skins that can be made into leather.



Cloth



Some types of cloth come from plants; others come from animals.

Plants	Animals
Cotton comes from the cotton plant. Linen comes from the flax plant.	Wool comes from sheep. Silk comes from silkworms.

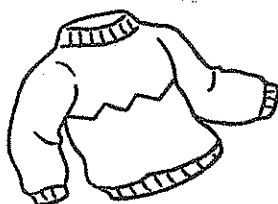
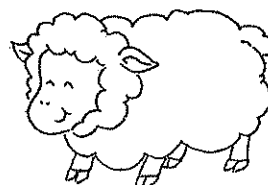
Match the clothes with the correct plant or animal.



scarf



sheep



woollen sweater



silkworm



T-shirt



cotton plant



Rocks

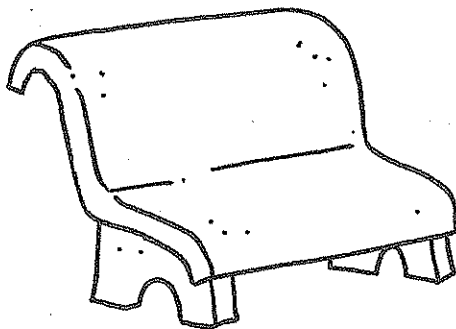
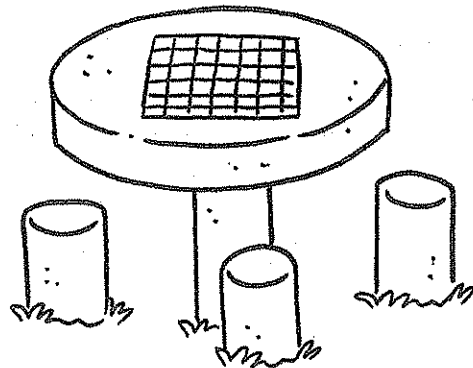


Rocks are hard, strong and heavy. There are many different types of rocks — stone, marble and granite.

They can be used to make furniture, tiles, vases and houses.



Circle the objects that are made from rocks.

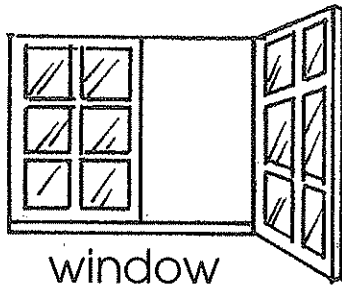


Glass



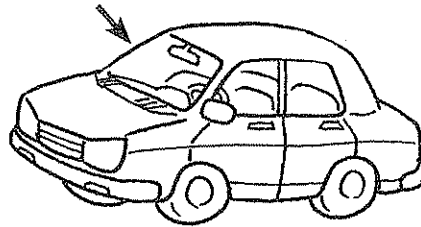
Glass is a hard material made from sand. It is very hard but breaks easily. You can see through glass.

Glass is used to make the windows in homes and windscreens of cars.



window

windscreen



Match each sentence with the correct answer.

Toys are not made of glass ●

● because they let light come into the house.

Windows are made of glass ●

● because they break easily.

A fish tank is made of glass ●

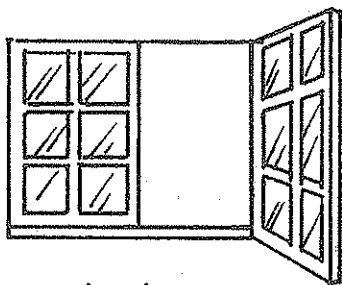
● because it is waterproof.



More glass



Circle the things that allow light to pass through.



window



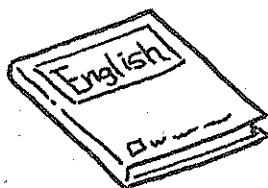
magnifying glass



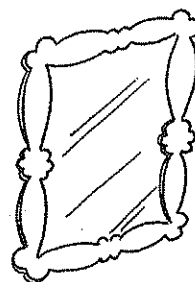
bulb



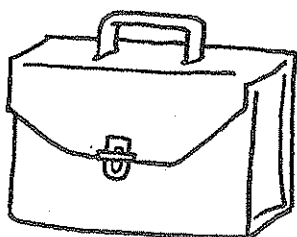
glass



book



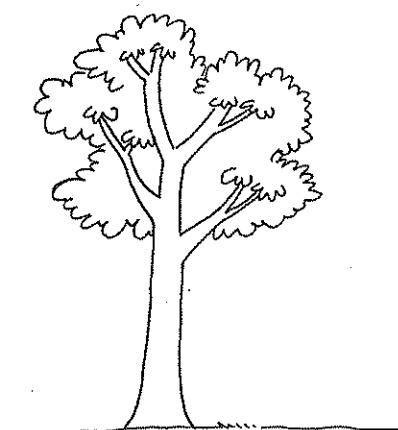
mirror



briefcase



bottle

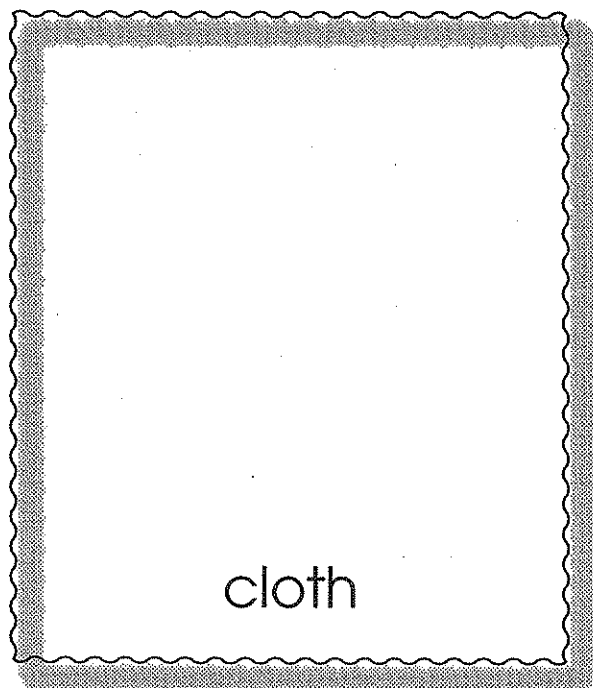
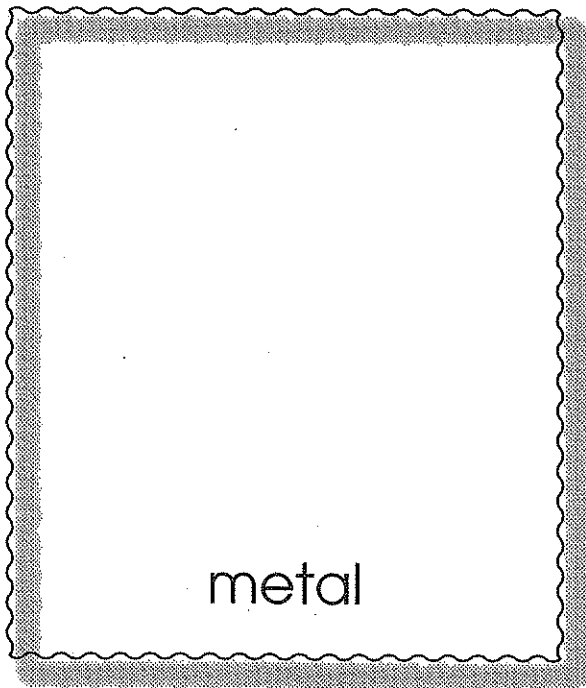
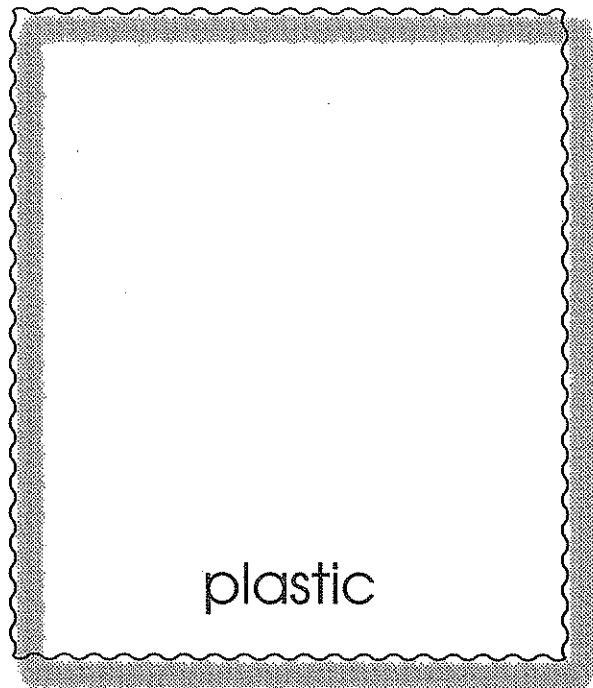
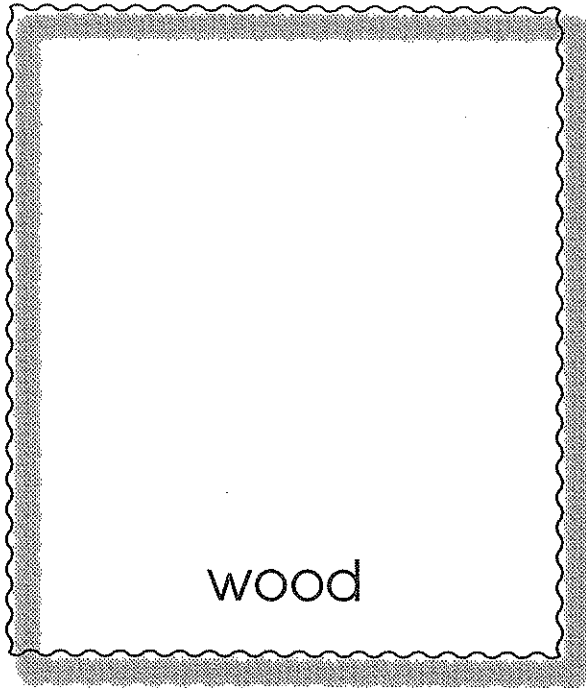


tree

More materials



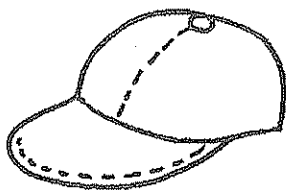
Draw one thing that is made of ...



What are they made from?



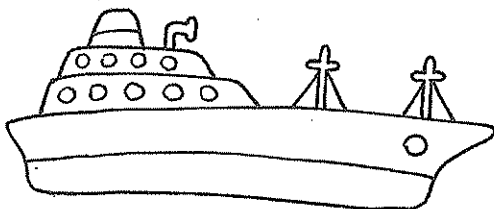
What is each object made of?
Match the object to its material.



• metal



• stone



• cloth

Things that float or sink

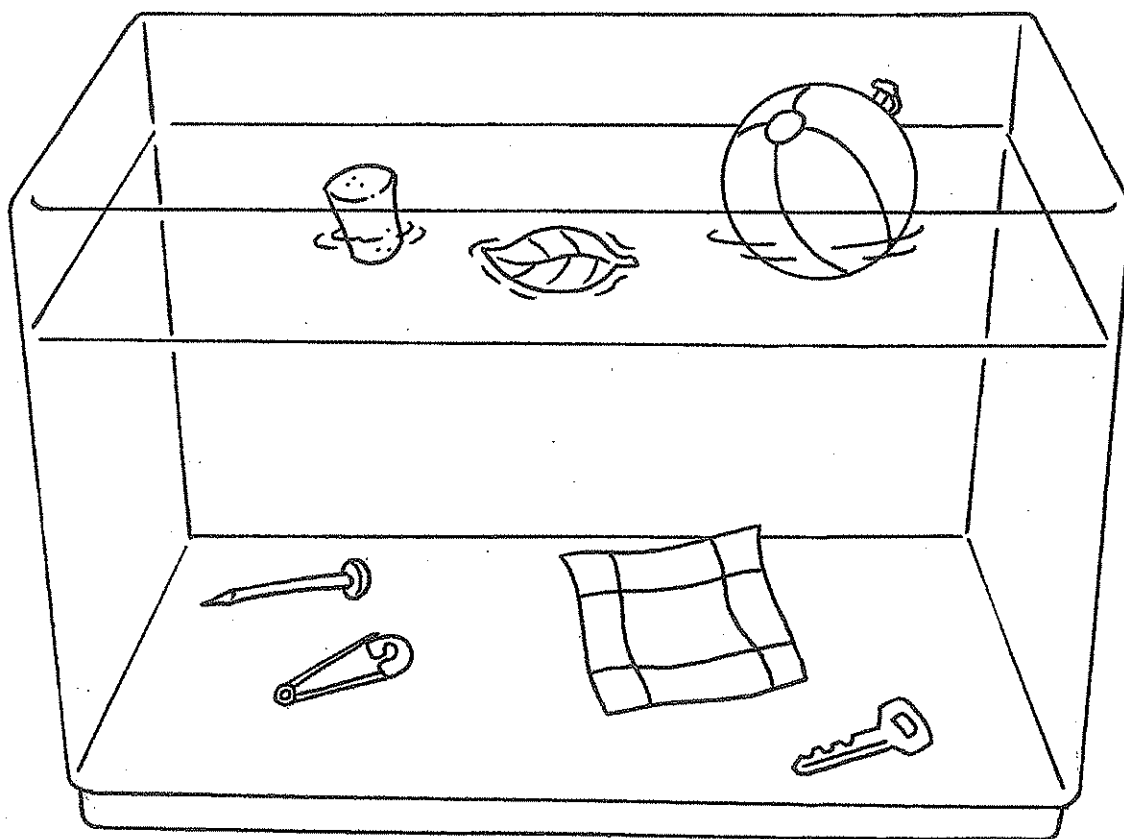


Some things float on water. Some things sink in water.



Cross ☒ out the things that float.

Tick ☐ the things that sink.

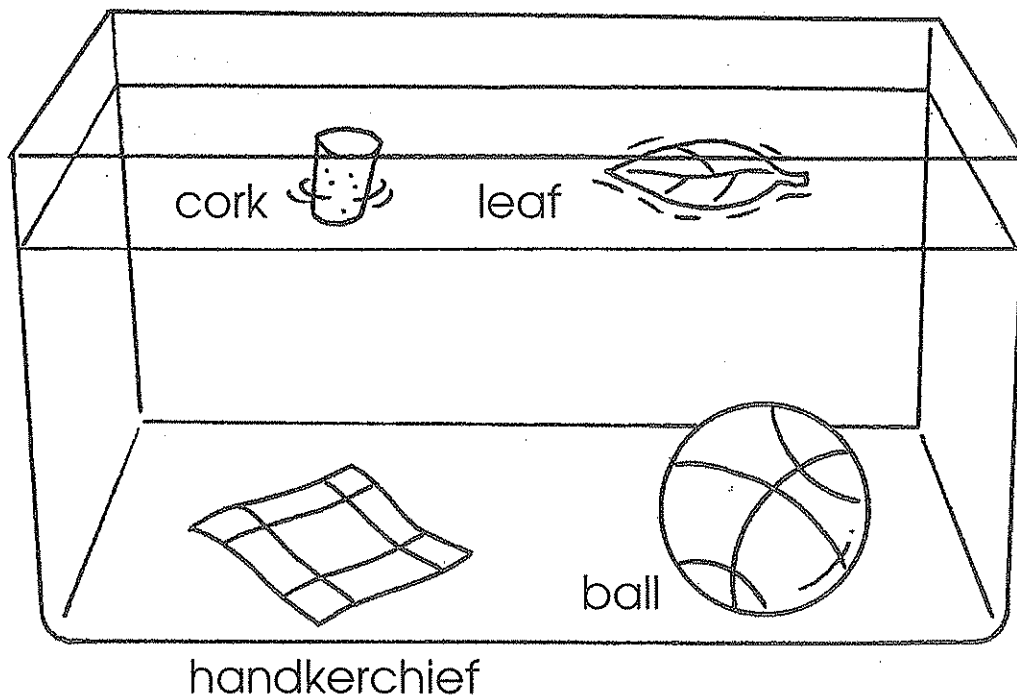


Do they float or sink?



Below are some objects that float and sink.
Find and circle them in the puzzle.

e	y	h	h	k	o	j	g	c	d	w	y
d	a	s	c	o	r	k	r	l	s	d	g
c	w	q	r	f	f	s	v	e	j	g	f
c	s	d	f	g	h	j	k	a	u	g	s
b	a	l	l	d	f	r	g	f	d	f	c
h	a	p	s	k	m	d	a	y	c	r	k
h	a	n	d	k	e	r	c	h	i	e	f



Light



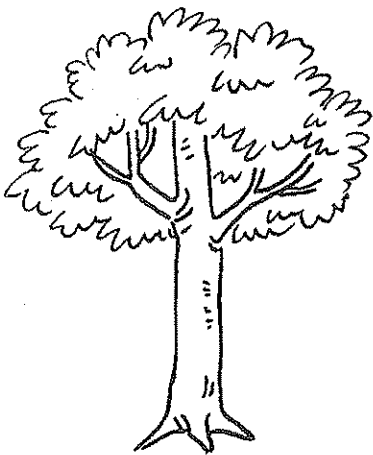
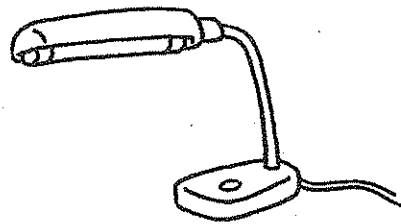
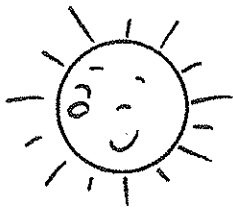
Light helps us to see colours, shapes and sizes clearly around us. Without light, we cannot see things.

The sun and stars give us light.

Light bulbs, torches and burning objects give us light too.



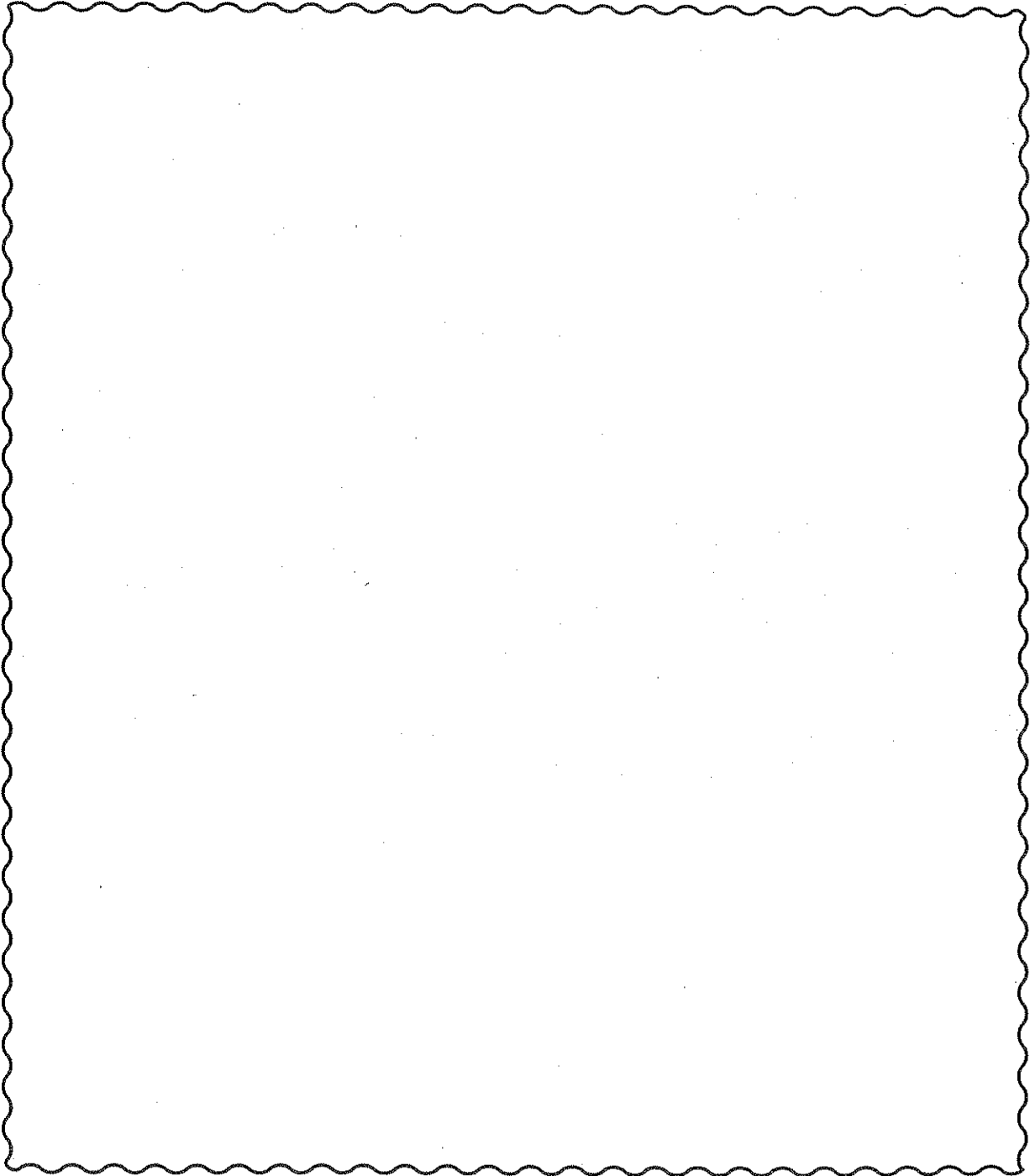
Circle the objects that give us light.



Where does light come from?



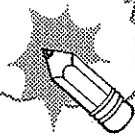
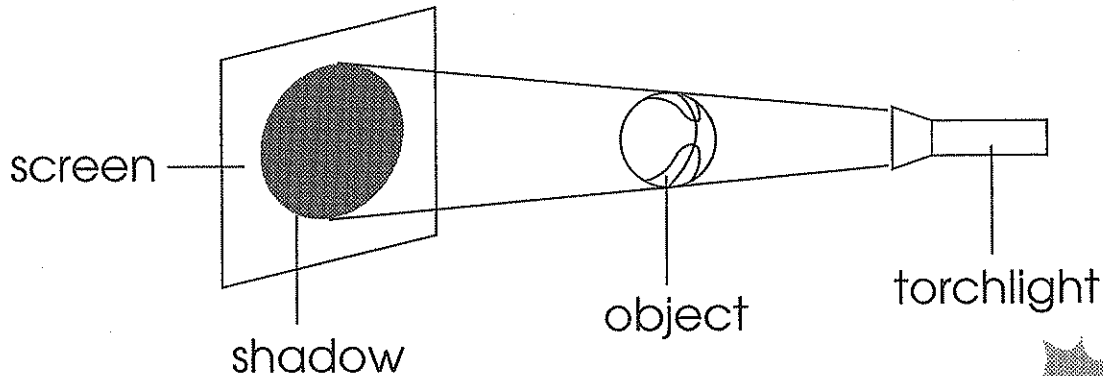
What objects give us light?
Draw some of them in the box.



Shadows and light

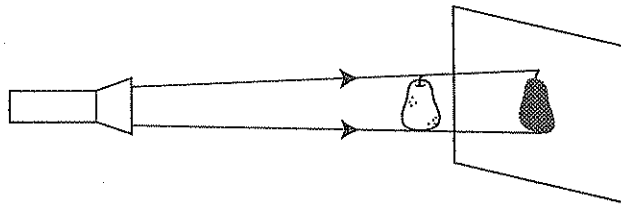


Shadows are dark shapes. They are formed when objects block the light from passing through them.

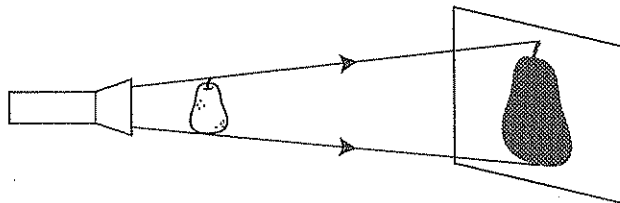


Circle the correct answer.

The shadow becomes (smaller / bigger) when the pear is far away from the torch.



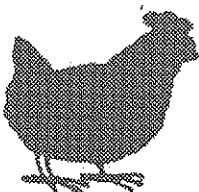
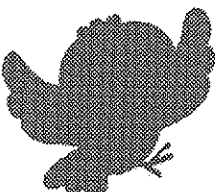
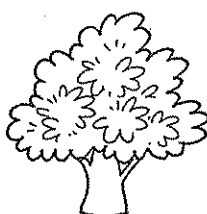
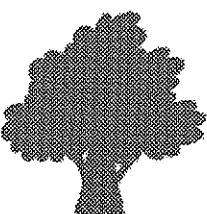
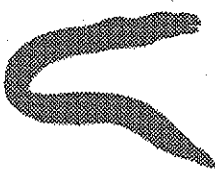
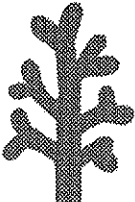
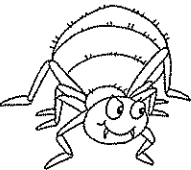
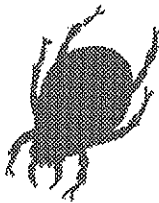
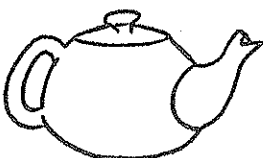
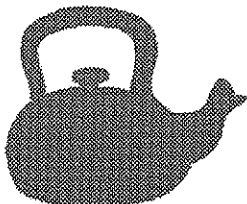
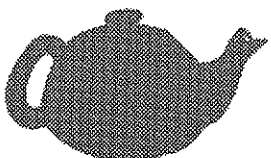
The shadow becomes (smaller / bigger) when the pear is near to the torch.



Find my shadow



Circle the correct shadow of the object.

Object	Shadow	
		
		
		
		
		

More on shadows



Which pictures show the correct shadows?

Put a tick ☒ in the correct boxes.

