

Science

Science

Earth Science

Earth's Weather

Genre	Comprehension Skill	Text Features	Science Content
Nonfiction	Draw Conclusions	• Captions • Diagrams • Glossary	Weather

Scott Foresman Science 2.6



scottforesman.com



by Christine Wolf

Vocabulary

condense
evaporate
hibernate
hurricane
lightning
migrate
tornado
water cycle

Picture Credits

Every effort has been made to secure permission and provide appropriate credit for photographic material. The publisher deeply regrets any omission and pledges to correct errors called to its attention in subsequent editions.

Photo locators denoted as follows: Top (T), Center (C), Bottom (B), Left (L), Right (R), Background (Bkgd).

Opener: Digital Vision; 2 (R) Digital Vision; 3 Digital Vision; 4 Digital Vision; 5 (T, B) Joanna Van Gruisen/Ardea; 8 (TR, BR) Getty Images; 9 (TL, BL) Getty Images; 10 (R, BL) Getty Images; 11 (TR) Digital Vision; 12 (R) Getty Images; 14 (R) Getty Images; 15 (TR) William H. Mullins/Photo Researchers, Inc.; 16 (R, Bkgd) Getty Images; 18 Digital Vision; 20 Digital Vision; 21 Getty Images; 22 Getty Images.

Unless otherwise acknowledged, all photographs are the copyright © of Dorling Kindersley, a division of Pearson.

ISBN: 0-328-13785-5

Copyright © Pearson Education, Inc. All Rights Reserved. Printed in the United States of America. This publication is protected by Copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permission(s), write to Permissions Department, Scott Foresman, 1900 East Lake Avenue, Glenview, Illinois 60025.

3 4 5 6 7 8 9 10 V010 13 12 11 10 09 08 07 06 05



Earth's Weather

by Christine Wolf





What makes weather wet or dry?

Rain, hail, and snow are kinds of wet weather. Clouds are made of lots of water droplets and tiny bits of ice. The clouds get big and heavy.

When the air is warm the droplets can fall to the ground as rain. When the air is cold they may fall down as sleet or snow.



What is weather?

Weather happens because of changes in Earth's temperature. Days can be hot or cold, wet or dry. Different kinds of clouds and wind are also a part of weather.

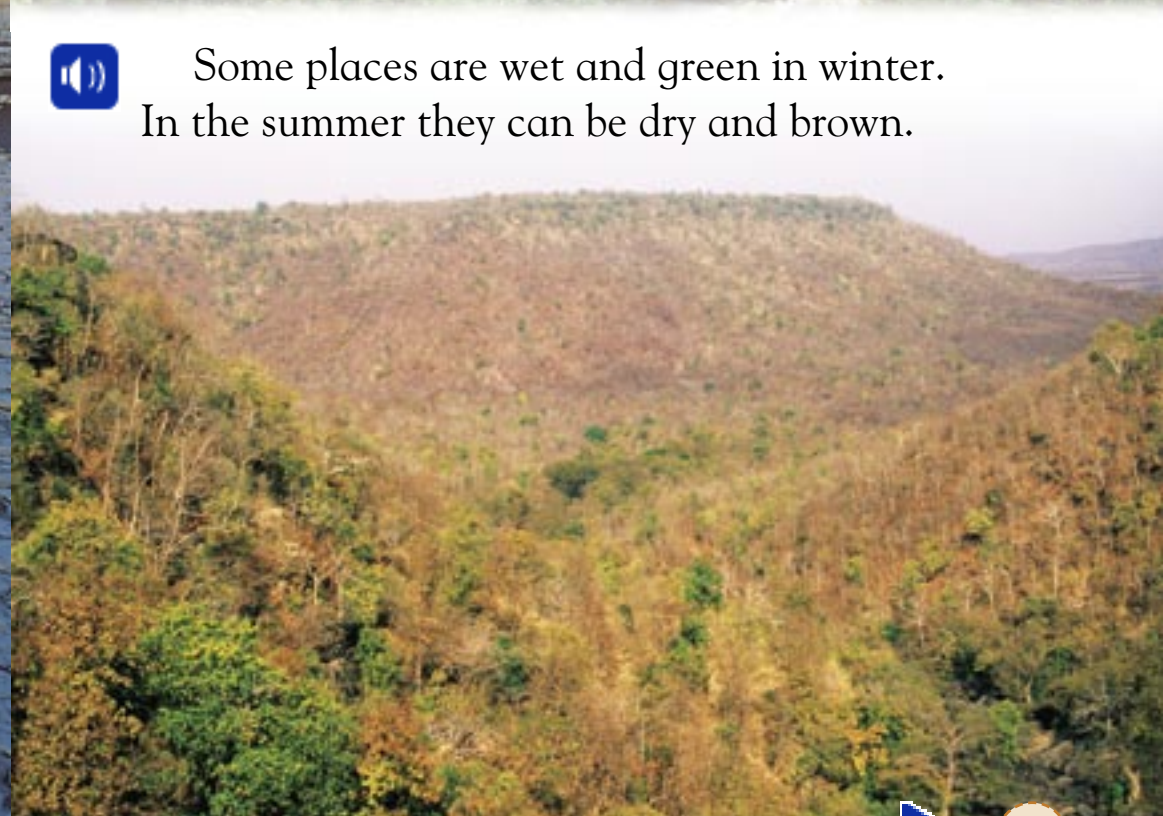




Some places do not get a lot of rain. These places have very dry weather. When there is not enough rain for plants and animals to live, it is called a drought.



Some places are wet and green in winter. In the summer they can be dry and brown.





The Water Cycle

Clouds rise
and cool, and
rain falls.

Water vapor rises
from the land.

Water flows
back to the ocean.

The wheel on a bicycle goes
around in a circle. Water in Earth's
water cycle also goes round and round.



Earth's water keeps moving between the
oceans, the sky, and the land. Water **evaporates**
from the ocean and rises to form clouds.

The water vapor in clouds gets cold and
changes, or **condenses**, back to water droplets.
The water droplets fall back to the ground.

Rain gathers in rivers and runs to oceans. The
Sun heats the oceans and the cycle begins again.

Clouds form as
the vapor cools.

Water vapor
rises from
the ocean.



The Four Seasons

Many parts of the world have four seasons. They are spring, summer, fall, and winter. Each season has its own weather.



spring



summer



fall



winter



The four seasons together last one year. In each season days can be longer or shorter. Animals and plants behave differently in each season too.



Spring

Spring is the season of change and growth. Often, spring has rainy days and cool nights. Small plants begin to grow in spring.



You may see new green leaves on trees. Many baby animals are born in the spring. Lots of flowers can bloom. What is spring like where you live?



Summer

Summer is often hot and sunny. Summer has more hours of daylight than spring. The Sun is high in the sky. Many people like to be outside in the summer.



Baby animals grow up in the summer. Many fruits and vegetables get ripe in the summer. What is summer like where you live?



Fall

In fall the temperature cools down. There are fewer hours of daylight than in summer. Leaves may change color, and some leaves fall off the trees.

In the fall many animals begin to prepare for the winter. Some animals, such as squirrels, gather and store food.



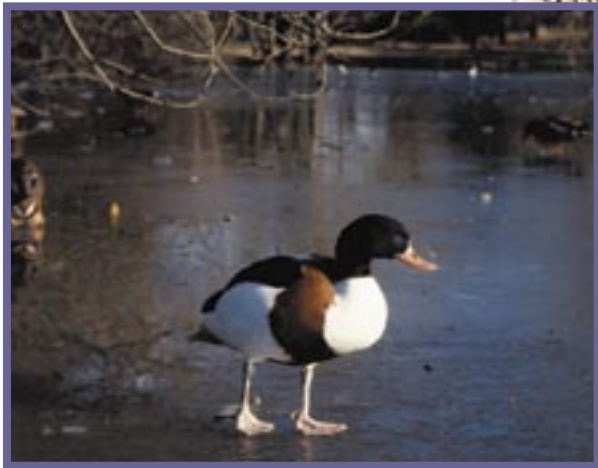
Other animals, such as Canada geese, travel, or **migrate**, to warmer places. What is fall like where you live?





Winter

Winter is the coldest season. In many places, snow falls, lakes and ponds freeze, and icicles form. Winter has the fewest hours of daylight. The Sun is low in the sky.



Some animals hibernate in winter. **Hibernate** means to hide away and sleep. Animals that hibernate fatten up so their bodies can stay warm as they sleep. What is winter like where you live?





Dangerous Weather

Sometimes wet weather can be dangerous.

Thunderstorms often form on hot summer days.

They can bring heavy rain, hail, thunder, and lightning.

Lightning is a flash of light in the sky. Thunder is the sound that follows lightning.



Staying Safe In A Thunderstorm

Staying safe from lightning means finding shelter in a building. It also helps to stay away from water, metal objects, and trees.





Staying Safe In a Tornado

Tornadoes are made up of strong winds that move in a circle. Air inside a tornado acts like a giant straw. Everything in a tornado's path gets sucked up into the sky.



Tornadoes can be unexpected. If you are ever caught in a tornado you should find shelter indoors. You should stay in the basement or under the stairs. Keep away from windows, water, and metal objects.





Staying Safe In a Hurricane

When many thunderstorms join together, a **hurricane** may form. Heavy rains fall during hurricanes. Strong winds blow and knock down buildings and trees.



When a hurricane is coming, people who live near the beach move away from the water so they can stay away from huge waves. People board up windows and bring inside things that might fly around.



Glossary

condense	to change from water vapor to water droplets
evaporate	to change from water to water vapor
hibernate	to hide away and sleep through winter
hurricane	a very strong storm that starts over the ocean
lightning	a flash of light in the sky
migrate	to move to a warmer place when winter is coming
tornado	a circling column of air
water cycle	the movement of water from Earth to the sky and back again

What did you learn?

1. What is one difference between fall and spring?
2. What is the difference between hibernating and migrating? How are these two behaviors similar?
3. **Writing in Science** Sometimes wet weather can be dangerous. In your own words, write to tell about the different kinds of dangerous weather. Use words from the book as you write.
4.  **Draw Conclusions** The ground is wet. The air is cool. There are tulips poking through the soil. Baby geese are sitting near their mother in the green grass. What season do you think it might be?

