

Weather Factors • Guided Reading and Study

Precipitation (pp. 567–571)

This section explains how rain, snow, and other common types of precipitation occur and how they are measured. The section also describes how scientists try to produce rain from clouds.

Use Target Reading Skills

As you preview the section headings, write what you know about precipitation in the box What You Know. As you read the section, complete the What You Learned box.

What You Know	
1.	Precipitation can be rain or snow.
2.	
3.	

What You Learned	
1.	
2.	
3.	

Introduction (p. 567)

1. What is precipitation?

2. Is the following sentence true or false? All clouds produce precipitation.

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Precipitation *(continued)*

Types of Precipitation (pp. 568–570)

3. Complete the compare/contrast table that shows three types of precipitation.

Type of Precipitation	Description and Size
Rain	a.
Sleet	b.
Hail	c.

d. How are rain, sleet, and hail similar and how are they different?

e. Order the sizes of rain, sleet, and hail from smallest to largest.

f. Explain which type of precipitation would cause the most damage when it hits the ground.

4. Is the following sentence true or false? The most common kind of precipitation is snow. _____

5. How do mist and drizzle differ from rain?

6. How can freezing rain cause power failures?

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Match the type of precipitation with how it forms.

Precipitation	How It Forms
___ 7. sleet	a. Water vapor in a cloud is converted directly into ice crystals.
___ 8. freezing rain	b. Ice pellets add layers of ice as they are carried up and down in a cumulonimbus cloud.
___ 9. hail	c. Raindrops freeze after they hit the ground or other cold surfaces.
___ 10. snow	d. Raindrops freeze into tiny particles of ice as they fall through the air.

11. What damage can large hailstones do?

12. Long periods of unusually low precipitation are called _____.

13. Circle the letter of each sentence that is true about cloud seeding.
a. It is the most common way to produce rain from clouds.
b. It adds water vapor to the air so clouds will form.
c. It adds particles to clouds so water vapor can condense.
d. It works on water droplets below 0°C.

Measuring Precipitation (pp. 570–571)

14. Meteorologists often collect rainfall with a(n) _____.

15. Is the following sentence true or false? On average, 10 centimeters of snow contains about the same amount of water as 5 centimeters of rain.
