

When Lightning Strikes

Thunder provides a wake-up call to head indoors.



World Almanac for Kids

"When thunder roars, go indoors," says meteorologist Ron Holle.

Scientists say lightning strikes the surface of Earth about 100 times each second. Thunderstorms are most frequent during the spring and summer.

Experts¹ warn people to be especially aware of the dangers of lightning during those seasons.

Forces of Nature

Lightning is the flash of light that occurs when electricity moves between clouds or between a cloud and the ground. The huge spark of electricity is like the tiny kind you get when you run a comb through your hair or scuff your feet on a carpet—only much stronger.

A lightning bolt that crackles through the air can reach a temperature of 60,000 degrees Fahrenheit. That is about five times hotter than the sun! The intense heat from lightning causes the surrounding air to expand, resulting in the loud sound known as thunder.

Thunder is nature's warning to head indoors. As **meteorologist** Ron Holle from Tucson, Arizona told *Weekly Reader*, "When thunder roars, go indoors." A meteorologist is a scientist who studies weather.

Holle also recommends following the 30-30 rule. If you hear thunder fewer than 30 seconds after you see lightning, head indoors—the storm is only about 6 miles away. After the storm ends, wait 30 minutes before going outside. To determine how far away lightning is, count the seconds between the flash and the thunder. Every 10 seconds equals 2 miles.

Play It Safe

Lightning strikes the ground in the United States about 25 million times each year! Although getting hit by lightning is unlikely, it is

¹ **expert:** a person with special skill in or knowledge of a subject

Reading Passage

important to stay safe. In the United States, about 60 people are killed each year by lightning.

To stay safe, follow the golden rule—head for cover. "There is no place outside that is safe from lightning," Holle said firmly. "There are two safe places—inside a [**permanent**²] building or a metal-topped vehicle."

Lightning Safety Tips

Lightning expert Ron Holle shared the following tips with *Weekly Reader*:

- Find shelter in a building or a metal-topped vehicle (not a convertible), and close the windows.
- If you're caught outdoors, stay away from open spaces, and avoid standing near tall objects, such as trees.
- Avoid using electrical equipment, such as computers, TVs, and phones. (Cell phones are safe to use.)
- Stay away from sinks and showers. Lightning can travel through water pipes.
- Wait 30 minutes after the last sound of thunder or flash of lightning before going outside.

² **permanent**: lasting or intended to last for a very long time

Name: _____

Date: _____

1. If you hear thunder fewer than ____ seconds after a lightning flash, you should go indoors.

- A 2
- B 6
- C 10
- D 30

2. How is this passage organized?

- A It explains what lightning is and then explains how to protect yourself from it.
- B It introduces meteorologist Ron Holle and then explains what lightning is.
- C It explains how to protect yourself from lightning and then describes thunderstorms.
- D It explains what meteorologists do and then praises them for their hard work.

3. Where would be a good place to take shelter during a thunderstorm?

- A a bathroom
- B a baseball field
- C a swimming pool
- D a van

4. Read the following sentence: "The huge spark of electricity is like the tiny kind you get when you run a comb through your hair or scuff your feet on a carpet—only much stronger."

The word **spark** most nearly means

- A crash
- B flash
- C attack
- D wave

5. Which of the following is NOT an important topic of this passage?

- A lightning
- B thunderstorms
- C cell phones
- D personal safety

6. What is lightning?

7. Why should you avoid using electrical equipment during a thunderstorm?

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

_____ landlines are dangerous to use during a thunderstorm, cell phones are fine.

- A Although
- B Because
- C After
- D However

9. Read the following sentence.

When thunder roars, you should head indoors for protection.

Answer the questions below based on the information provided in the sentence you just read. One of the questions has already been answered for you.

1. Who is the main subject of the sentence? you

2. What should you do? _____

3. When? _____

4. Why? _____

10. Vocabulary Word: frequent: happening often; common.

Use the vocabulary word in a sentence: _____

Teacher Guide & Answers

Passage Reading Level: Lexile 950

Featured Text Structure: Descriptive – the writer explains, defines, or illustrates a concept or topic

Passage Summary: “When Lightning Strikes” explains what lightning is and offers advice on how to protect yourself from it.

1. If you hear thunder fewer than ____ seconds after a lightning flash, you should go indoors.

- A 2
- B 6
- C 10
- D **30**

2. How is this passage organized?

- A **It explains what lightning is and then explains how to protect yourself from it.**
- B It introduces meteorologist Ron Holle and then explains what lightning is.
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- A crash
- B **flash**
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5. Which of the following is NOT an important topic of this passage?

- A lightning
- B thunderstorms
- C **cell phones**
- D personal safety

6. What is lightning?

Suggested answer: Lightning is the flash of light created when electricity moves between clouds or between a cloud and the ground.

7. Why should you avoid using electrical equipment during a thunderstorm?

Suggested answer: Lightning is a form of electricity, so it could travel easily through electrical equipment to you.

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

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- A **Although**
- B Because
- C After
- D However

9. Read the following sentence.

When thunder roars, you should head indoors for protection.

Answer the following questions based on the information provided in the sentence you just read. One of the questions has already been answered for you.

1. Who is the main subject of this sentence? you
2. What should you do? **head indoors**
3. When? **when thunder roars**
4. Why? **for protection**

10. **Vocabulary Word:** frequent: happening often; common.

Use the vocabulary word in a sentence: answers may vary.