

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. Experts 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 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] 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.

Name: _____ Date: _____

1. What is the golden rule of lightning safety?

- A. Don't stand under trees.
- B. Avoid using electronics.
- C. Stay away from open spaces.
- D. Head for cover.

2. What does the author describe at the end of the passage?

- A. how to stay safe from lightning
- B. how lightning is created
- C. how thunder is created
- D. what a meteorologist is

3. The time between a lightning strike and thunder indicates the distance of the storm.

What evidence from the passage supports this conclusion?

- A. "Thunder is nature's warning to head indoors."
- B. "Count the seconds between the flash and the thunder. Every 10 seconds equals 2 miles."
- C. "Wait 30 minutes after the last sound of thunder or flash of lightning before going outside."
- D. "If you hear thunder fewer than 30 seconds after you see lightning, head indoors."

4. "Find shelter in a building or a metal-topped vehicle (not a convertible), and close the windows."

Based on this safety tip, what can you conclude about the safety of cars during lightning?

- A. All cars, regardless of type, will protect you from lightning.
- B. B Cars are less safe than buildings during lightning.
- C. The rubber tires of a car protect you from lightning.
- D. The metal roof of a car protects you from lightning.

5. What is this passage mostly about?

- A. why lightning storms are dangerous
- B. the relationship between thunder and lightning
- C. facts about lightning and safety tips
- D. how meteorologists study the weather

6. Read the following sentence: "The intense heat from lightning causes the surrounding air to expand, resulting in the loud sound known as thunder."

What does the word "resulting" mean?

- A. to allow someone to do something
- B. to become smaller
- C. to make a quiet noise
- D. to cause something to happen

7. Choose the answer that best completes the sentence below.

It is important to stay safe during thunderstorms, _____ it is unlikely that you will be struck by lightning during your lifetime.

- A. initially
- B. moreover
- C. in summary
- D. even though

8. Define lightning.

9. What is the 30-30 rule?

10. Explain how the timing between lightning and thunder can help you stay safe during a thunderstorm.
