



Name: \_\_\_\_\_

# All About Thunderstorms

Have you ever looked out the window and seen the sky turn a dark, moody gray? Suddenly, a jagged streak of light flashes across the clouds, followed by a giant rumble that makes your windows shake. You are witnessing a thunderstorm!

## How Do They Start?

Thunderstorms need three main ingredients to form: moisture, unstable air, and "lift." Imagine warm, wet air near the ground. Because warm air is lighter than cold air, it starts to rise upward like a balloon. As it climbs higher into the sky, it cools down and turns into big, fluffy clouds called cumulonimbus clouds. These are often called "thunderheads" because they look like giant pieces of cauliflower reaching for the stars.

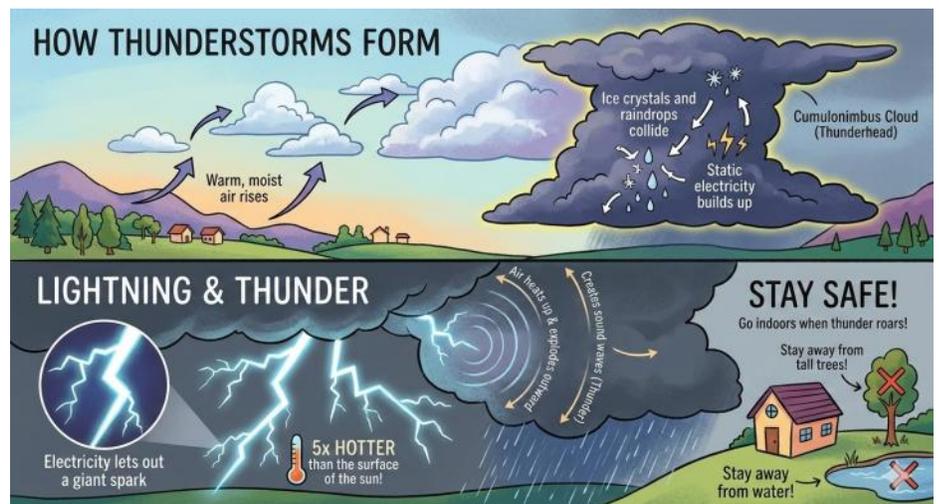
## Lightning and Thunder

Inside those tall clouds, ice crystals and raindrops are bumping into each other. All that bumping creates static electricity—just like when you rub your socks on a carpet and then touch a doorknob! When the electricity builds up too much, it lets out a giant spark. This is lightning.

Lightning is incredibly hot. In fact, it is five times hotter than the surface of the sun! When lightning flashes, it heats up the air around it so fast that the air explodes outward. That explosion creates the sound wave we call thunder. Because light travels faster than sound, you always see the flash before you hear the "boom."

## Staying Safe

Thunderstorms can be exciting, but they are also very powerful. If you hear thunder, it means you are close enough to be struck by lightning. The best rule to remember is: "When thunder roars, go indoors!" Stay away from tall trees, water, and metal objects until the storm passes and the sun peeks out again.





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1. Based on the section "How Do They Start?", how is the text organized?
  - A. It compares thunderstorms to snowstorms.
  - B. It describes a problem and offers a solution.
  - C. It explains the causes that make a thunderstorm form.
  - D. It lists the events of a storm in the order they happen.
  
2. In the sentence, "Suddenly, a giant rumble makes your windows shake," what does the word rumble most likely mean?
  - A. A deep, heavy sound
  - B. A bright light
  - C. A cold wind
  - D. A type of cloud
  
3. Why does the author compare the clouds to "static electricity" and "rubbing socks on a carpet"?
  - A. To show that storms are tiny and harmless.
  - B. To help the reader understand how electricity builds up in a cloud using a familiar example.
  - C. To explain why clouds are soft like socks.
  - D. To warn readers not to wear socks during a storm.
  
4. If you see a flash of lightning and then hear thunder ten seconds later, what can you infer?
  - A. The storm is moving away from you.
  - B. The lightning and thunder happened at the exact same time.
  - C. The light reached your eyes faster than the sound reached your ears.
  - D. It is about to start snowing.
  
5. Look at the section "How Do They Start?" Why does the author use the word "ingredients" to describe moisture, air, and lift?
  - A. Because you can eat a thunderstorm.
  - B. To show that these three things must mix together for a storm to happen.
  - C. To explain that storms only happen in kitchens.
  - D. To show that storms are very small.
  
6. Which sentence from the text best supports the idea that light moves faster than sound?
  - A. "Lightning is incredibly hot."
  - B. "The explosion creates the sound wave we call thunder."
  - C. "You always see the flash before you hear the 'boom.'"
  - D. "A giant rumble makes your windows shake."