

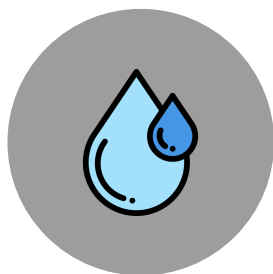


Helping Kids Understand Thunderstorms

Wind, rain, loud noises, and flashes of light. It's a combination that can be just plain scary. But if you understand what's happening, that fear can turn into wonder.

Nature is amazing! Help your kiddos grow an understanding and appreciation with these activities from weatherwizkids.com.

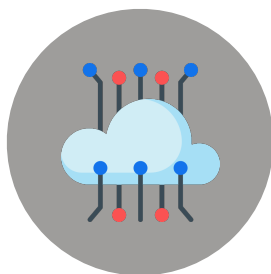
What Makes A Thunderstorm?



Moisture

Moisture forms clouds and rain from a body of water.

+



Unstable Air

Warm air below and cold air above.

+



Lift

Differences in air density. From fronts, breezes, or mountains.

=



Thunderstorm

Making Rain

rookieparenting.com

Materials:

- A Clear Bottle
- Water
- Sunlight

Steps:

1. Fill the bottle with about 1 inch of water.
2. Place the water by a window that receives direct sunlight.
3. Wait several hours and you will see water droplets on the bottle.

Explanation:

In nature, we have a body of water, with warm air below the cloud and cold air above. In this experiment, we are using the barrier of the bottle to represent the cloud. The greenhouse effect makes the air inside the bottle warmer than the air outside the bottle. In nature when water vapor rises it condenses and forms clouds. When the clouds become too heavy they start raining. In this experiment, when the water vapor rises it condenses into water droplets on the bottle. When the water droplets become too big and heavy they fall to simulate rain.



Making Lightning

weatherwizkids.com

Materials:

- Wint-O-Green or Pep-O-Mint LifeSavers
- Dark Room
- Mirror

Steps:

1. Go into a really dark room and stand in front of a mirror.
2. Put the minty Lifesaver in your mouth.
3. While keeping your mouth open break up the LifeSaver with your teeth and look for sparks (bluish flashes of light).



Explanation:

When you break the LifeSaver apart, you're breaking apart sugars inside the candy. The sugars release little electrical charges in the air. These charges attract the oppositely charged nitrogen in the air. When the two meet, they react in a tiny spark that you can see.

Making Thunder

weatherwizkids.com

Materials:

- A brown paper lunch bag

Steps:

1. Blow into the paper lunch bag and fill it with air.
2. Twist the open end and close with your hand.
3. Quickly have the child stomp on the bag or clap the bag between both hands until it "pops".
4. Hear the sound of homemade "Thunder".



Explanation:

Hitting the bag causes the air inside the bag to compress quickly so that the pressure breaks the bag. In nature, thunder follows lightning. As lightning strikes, energy is given off that quickly heats the air that it passes through. This heated air quickly expands producing energetic waves of air resulting in a sound called thunder.

*** Talk About It:** Use these experiments to explain to your child in a calm and fun manner what is happening when thunderstorms appear. Remind them during the storm what they've learned from these experiments and turn fear into knowledge.