WEATHER

The combination of solar radiation, rain, snow, clouds, air pressure, wind, and humidity in the atmosphere during a short time period

FUN FACTS:

• Meteorology is the study of weather.
• Forecasters use computer models to make predictions.
• NASA doesn’t just study outer space, they also send missions to space to study Earth’s weather.
• Examples of “extreme weather” are tornadoes, waterspouts, dust storms, hurricanes, typhoons, monsoons, flood, drought, hail, and blizzards.
• A lightning bolt can travel 60 mph, and the air around it can get 5 times hotter than the surface of the sun.

DO THIS:

• Use the Weather Science Kit to learn about clouds, rainbows, thunder and lightning.
• Use the cloud pictures to identify different types of clouds you observe in the sky.
• Use the rain gauge to measure rainfall amounts every day. Keep track on a chart.
• Use the wind gauge to measure the strength of the wind.
• Use the thermometer to track the high and low temperatures daily.
• See the enclosed booklet for more ideas.
READ MORE ABOUT IT

Zane and the Hurricane: A Story of Katrina by Rodman Philbrick; JF PHI
The Everything Kids' Weather Book: From Tornadoes To Snowstorms, Puzzles, Games, And Facts That Make Weather For Kids Fun! by Joe Snedeker; J 551.6 SNE
Extreme Weather: Surviving Tornadoes, Sandstorms, Hailstorms, Blizzards, Hurricanes, and More! by Thomas Kostigen; J 613.69 KOS

ASK YOUR LIBRARIAN FOR MORE SUGGESTIONS!

EXTENDER EXPERIMENTS & AWESOME ACTIVITIES

Tornado In A Bottle
Fill a 16 oz. clear plastic bottle about ¾ full of water. Add 1 teaspoon of liquid soap and 1 teaspoon of vinegar to the water in the bottle. Add some glitter and small balls of tin foil to represent debris, and a drop of food coloring to make the effect more visible. Tighten the lid and shake the bottle to mix the ingredients. To form a tornado, swirl the jar in a circular motion, and you will see a vortex form.
http://www.weatherwizkids.com/experiments-tornado-jar.htm

Make A Thunderstorm
Several hours ahead, make ice cubes with water dyed with blue food coloring. When frozen, fill a clear plastic shoebox-sized container two-thirds full of lukewarm water. Let the water sit for one minute. Place a blue ice cube at one end of the plastic container, then add three drops of red food coloring to the water at the other end of the container. Observe what happens. Thunderstorms are caused by this type of convection, when a warm, unstable air mass (red water) is forced to rise by an approaching cold front (blue water). Find out more at http://www.weatherwizkids.com/experiments-make-thunderstorm.htm

QUICK TAKE
Hold a glass of water in a sunbeam, above a sheet of white paper. As sunlight passes through the water, the light refracts (bends) and forms a rainbow of colors on your sheet of paper. Change the glass height and paper angles to change the effect.