

Name: _____ Date: _____

Thunderstorms

Have you ever rubbed your feet quickly on a carpet and then shocked a friend when you touched them? The rubbing on the carpet gives you an electrical charge. The shock is electricity that jumps between you (electrically charged) and your friend (uncharged).

We can relate this to thunderstorms. Thunderstorms start when fast-rising, warm, moist air cools and forms a cloud that grows taller and taller. Air currents whirl upward and downward within the thundercloud. Strong winds pick up the water droplets and ice crystals in a cloud, hurl them around, and create an electrical charge within the cloud. When the electric charge is great enough, it zaps between clouds, or to the earth and back up to the cloud. This produces a blinding flash. These giant storms can bring heavy rains, strong winds, lightning, hail, and tornadoes. They can even produce hurricanes.

Try this simple activity.

Wave a comb over some small paper hole-punched circles without touching the paper. Observe what happens. Comb your hair about 25 times with the comb and now wave it over the paper. What do you observe? Why did this happen?

COOL!!!

Try this at Home!

COOL!!!

Get some wintergreen lifesavers and go into a dark closet or dark room. Pop the candy in your mouth, and bite down hard and quickly while your mouth is open and you are looking into a mirror. Did you see a small flash of light? Chewing breaks apart the sugar crystals which have different electrical charges. Sparks of electricity travel through the candy and can be seen as streaks of light.