

12. With ordinary field binoculars, **you can easily see Jupiter's moons.** Go to www.skyandtelescope.com/observing/ataglance or Almanac.com or Almanac4kids.com for weekly information on where and when to look for Jupiter and its moons in the night sky.

WEATHER



1. Don't wait for a sunny day to **have a weather-theme party.** Ask each guest to come prepared to tell about a true extreme weather event (one could be Hurricane Katrina). Play weather songs such as "Singing in the Rain," "Stormy Weather," "Heat Wave," "You Are My Sunshine," and "Let It Snow." Decorate with paper weather vanes. Make streamers out of newspaper weather reports and set them a-blowin' with a fan to make pretend wind. Serve sugar cookies frosted yellow like the Sun, with Cloud Punch. **To make the punch:** In a big punch bowl, mix one large can (46 ounces) of pineapple juice, 1 large can (46 ounces) of orange juice, and one 2-liter bottle of lemon-lime carbonated soda. Float scoops of vanilla ice cream on top to look like clouds.

2. Using a file box and index cards, **make a "Weather Factoid File."** If you have PowerPoint on your computer, use it to make a presentation of what you learn. Here are some facts from the National Lightning Safety Institute to get you started:

- **The total amount of rain, snow, and other moisture falling on the surface of the Earth each year equals 10 million gallons for every person on the planet.**
- **If spiders leave their webs, expect a storm. If they work when it is raining, expect a short storm.**
- **Count the number of cricket chirps in 14 seconds. Add 40. The total will equal the air temperature in Fahrenheit within one degree.**

3. **Make a poster or PowerPoint presentation** of weather map symbols and their meanings. Use real weather maps from the newspaper or the Internet as examples. End with a depiction of the weather conditions across the country for a given day.

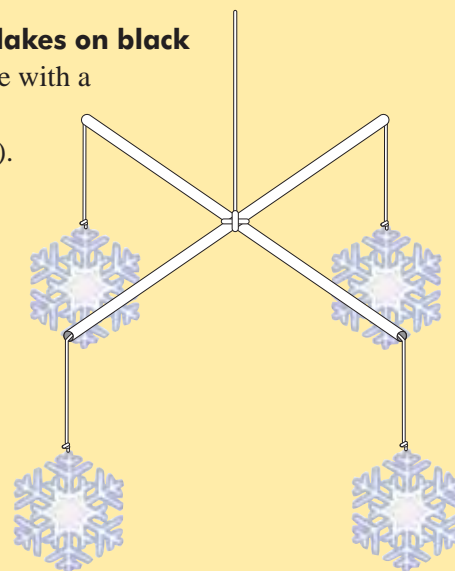


4. **Will red water make red rain?** Put some hot water in a quart jar. Color it red with food coloring. Stretch plastic wrap over the top of the jar. Put an ice cube on the plastic wrap. Watch for water droplets to form on the underside of the plastic wrap. Are they red?

5. **Take digital or film photographs** of weather changes in your community. Make a photo album to show people what kind of weather is most common where you live.

6. Outside on a cold day, you can observe snowflake shapes. **Catch the flakes on black construction paper** that you've chilled in the freezer. Examine each flake with a magnifying glass or hand lens. To help you in your observations, carry a copy of *Ken Libbrecht's Field Guide to Snowflakes* (Voyageur Press, 2006).

7. Make paper snowflakes and use them to **make a wintry mobile for your room.** Tie two soda straws together in the middle, forming an X shape. Keep a long piece of string there to use to hang your mobile. Thread strings through the straws and tie your snowflakes to them. Adjust the strings and snowflakes until everything balances.



8. You can build a tornado model using two soda bottles.

Watch the demonstration at

www.stevespanglerscience.com/experiment/00000056

to learn how.

9. Build a wind sock to help you observe the breezes. Ask an adult to cut the flat top out of a round oatmeal box top, leaving only the cardboard rim. Glue or staple lightweight ribbons around the rim. Attach strings to the rim; gather them together in a knot above the trim and hang your windsock outdoors. The wind will raise the sock and the ribbons will flutter. The stronger the wind, the more action you'll see in your wind sock.

■ You don't need specialized equipment to estimate wind speed. **Use the Beaufort Wind Force Scale** at Almanac.com/windforce. Keep a diary of your observations of wind speeds for one month.

10. You can **make music with wind that you make yourself.** Line up some empty glass bottles. Partially fill them with different amounts of water. Push your upper lip out over your lower one and blow straight down into each bottle until you hear a musical tone. What do you notice about the pitches made by the different bottles? Use your bottles to play a tune.

11. Make your own barometer. Put some cold water in a jar until it is a little less than half-full. Color the water with a few drops of food coloring. Using a ruler and a permanent marker, draw lines up the side of a soda straw at one-quarter-inch intervals. Put the straw in the jar so that the bottom of the straw is in the water but not touching the bottom. Tape the straw to the top of the jar so that it cannot slip down. Suck some water about halfway up the straw. Pinch off the top of the straw and seal it completely with a tight bulldog or binder clip, a piece of tape, or modeling clay. (If any air at all can leak in, your barometer won't work.) Observe your barometer daily. As atmospheric pressure rises, so will the water in the straw.

