

How's the Weather?

"The clouds are white and puffy."
"It's cold outside."
"I hear thunder!"

Like scientists, children make observations about the weather. And you can use your youngster's natural interest in weather to help her explore science. Try these activities and experiments.

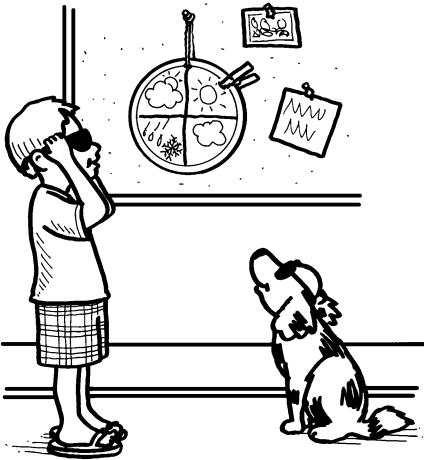


Weather tales

Read storybooks related to weather. Try *Little Cloud* by Eric Carle, and encourage your child to dip pieces of a cut-up sponge into white paint. On blue construction paper, she can create the different kinds of clouds that appear in the story. Or read *The Snowy Day* by Ezra Jack Keats (available in English and Spanish). Talk about activities that she might do in the snow, such as go sledding, make snow angels, and build a snowman.

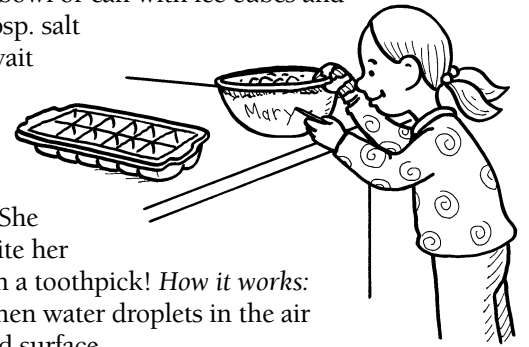
Miniature meteorologist

Appoint your youngster as family weather announcer. First, suggest that he make a weather wheel to use as he gives his reports. He should divide a paper plate into four sections, draw pictures in each one, and label them "Sunny," "Partly sunny," "Cloudy," and "Rain or snow." Each morning, help him read the forecast in the newspaper or look it up on *weather.com*. He'll learn to read weather words and recognize their symbols. Let him share the prediction with the rest of the family and clip paper clips or clothespins on the parts of his weather wheel that match.



Frost hunt

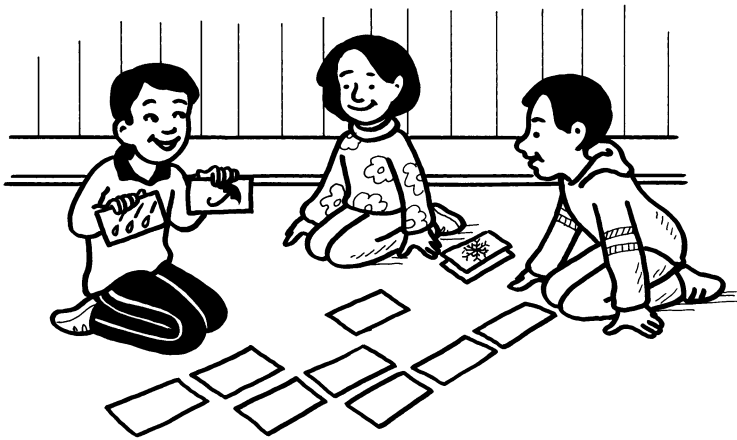
Go on a frost hunt on a cold morning. How many things can your child find that are covered with frost? *Examples:* grass, cars, bushes. Indoors, she can make her own frost by filling a metal bowl or can with ice cubes and sprinkling 1 tsp. salt on top. Now wait 10 minutes—frost will appear on the outside of the container. She could even write her name in it with a toothpick! *How it works:* Frost forms when water droplets in the air freeze on a cold surface.



Disappearing puddle

Watch evaporation in action with this simple activity. After a rainfall, ask your youngster to choose a puddle on the sidewalk and draw a circle around it with chalk. Every two hours, he can draw a new ring around his puddle. At the end of the day, he will have a series of smaller and smaller circles. *How it works:* Water *evaporates* (warms up, turns into a gas, and rises into the air). Have your child try this on a day when the sun comes out after the rain and on a day when it stays cloudy. Help him keep track of the time it takes for the puddles to evaporate. What does he find?

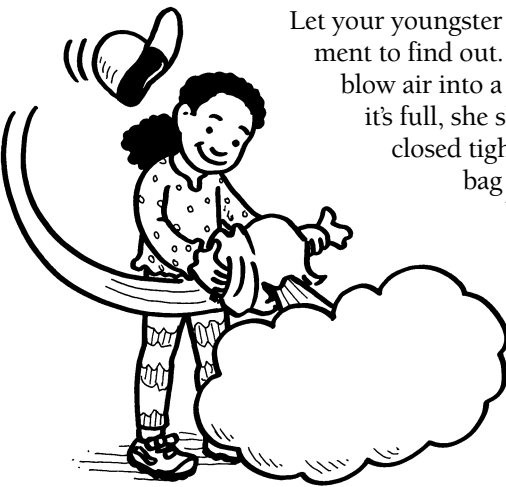
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Picture matchup

This game will teach your child about items we use in different types of weather. On separate index cards, have him draw weather pictures and items that match. For example, he could draw a raindrop on one card and an umbrella on another. Other ideas: a sun and a swimsuit, a snowflake and boots, a tree blowing in the wind and a kite. Mix the cards up, and put them face-down. To play, take turns flipping over two cards at a time. If they're related, keep them, and take another turn. If not, put them back, and the next player gets a turn.

Indoor "thunderstorm"



What makes the boom of thunder? Let your youngster try this experiment to find out. First, ask her to blow air into a paper bag. When it's full, she should hold it closed tightly and pop the bag by clapping it between her hands. Boom!

The air rushes out, making a loud sound.
How it works:
 During a thunderstorm, lightning makes the air

extremely hot, and the air *expands* (its molecules spread out). Then it quickly cools and *compresses* (its molecules move closer together), making the sound of thunder. When your child clapped the bag, she compressed the air inside, and it made a loud noise.

Backyard weather station

Forecasters use tools to collect data about the weather. Your child can, too! With these ideas, your backyard will be the perfect place to gather information.

Track the temperature. Hang up an outdoor thermometer. Ask your youngster to check the temperature and report it to you at breakfast, after school, and at dinner. When is the temperature usually lowest? When is it highest? Have her record the temperatures on a chart each day. After a few days, she may be able to step outside and predict the temperature without looking at the thermometer.

Measure rain. On the outside of an empty, clean jar (mayonnaise, jelly), help your child mark off quarter inches from bottom to top, using a



ruler and a permanent marker. Explain that four quarter inches make up one inch. When rain is forecasted, have him set his rain gauge outside and measure the rainfall by the marks on the jar.

Watch the wind blow. Your youngster will observe the wind blowing with this project. First, remove both ends from an empty, round cardboard container, such as an oatmeal canister. Let her decorate it with paint, glitter glue, or stickers. Help her cut strips of colored tissue paper and glue them to the bottom of the cylinder so they hang down and will blow when it's windy. Then, punch four holes around the top, thread yarn through, and hang the container from a porch or tree branch. Go outside on a calm day and show your child that the streamers aren't moving. Try a windy day, and she'll see the difference!

Vocabulary book

Here's a project that teaches your youngster to write and understand weather words. Cut three sheets of construction paper in half. Staple the six halves together to make a book. On the cover, help him write a title ("My Weather Book") and his name. At the top of each page, he can write a different weather word (sun, rain, snow). Next, have him cut out weather-related pictures from old magazines and glue them on the appropriate pages. *Example:* A snow shovel ad would go on the snow page.