



Photo: Christopher Elwell / shutterstock.com

Sunny, crisp cold winter days are wonderful times to explore outdoors. On a winter walk, you might notice trails of animal tracks in the snow or see signs that wildlife have been feeding. Look for tree branches chewed on by deer or fir/pine cones that have been pulled apart so squirrels can eat the seeds they contain.

Winter is also a fun time for playing and observing SNOW! Tossing snow balls, building snow forts, and creating snow-people are all favourites—but what about the wonders of snow itself? Snow is fun to measure and investigate! Why not make your own snow gauge to track how much snow you get this winter or test how much water is in a jar of snow?

## MAKE A SNOW GAUGE

### WHAT YOU'LL NEED:

- Piece of wood for making the gauge (metre stick, ruler, paint stir stick or foraged tree branch. Length will depend on how much snow your area receives)
- Measuring tape & marker
- Optional decorating materials such as paint, glue, googly eyes, black felt & ribbon
- Nature Journal for recording your snow observations

### WHAT TO DO:

1. Choose a length of wood that will be longer than the snow you expect to fall throughout the winter season in your area.
2. Have an adult help you create a point at the end of the stick (this makes it easier to press into the ground later).
3. Starting a few centimeters up from the end of the stick with the point, measure and mark the length of wood at 1 to 5 cm intervals.
4. Get crafty! Create a snow person topper for your snow gauge. Paint a face at the top of the stick. Glue on a black felt hat shape, googly eyes and a ribbon scarf!
5. Wait for the paint and glue to dry then install the snow gauge outside by pushing it into the ground. Make sure the "0" is at the level of the ground. Do not locate gauge under the eaves of your house or under a tree.
6. Every time it snows, go outside and read the number on the gauge. Keep track of how much snow falls throughout the season in your nature journal!

## HOW MUCH WATER IS IN SNOW?

### WHAT YOU'LL NEED:

- Mason jar, marker, notebook, snow!

### WHAT TO DO:

1. Place some snow into a mason jar.
2. Write down your observations of the snow (is it dry and fluffy? Icy? Wet and heavy?).
3. Make a line with the marker at the level of the snow in the jar and write "snow".
4. Bring the jar inside and wait for the snow to melt.
5. Mark the level of the water (melted snow) on the jar.
6. What do you notice?
7. Draw a picture in your notebook of the jar before and after the snow melted.

### TO THINK ABOUT AND WONDER:

If the amount of liquid water is only a fraction of the amount of snow, what made the amount of snow so much bigger? What disappeared when the snow turned into water? Last winter we discovered that some animals survive in winter because they live and tunnel under an insulating blanket of snow which keeps them warm. Based on the experiment above, can you think of why snow is a good insulator?

**The Exploration Club for Families...** NatureKids BC helps children get outdoors to play, imagine and explore in nearby nature. Join a family nature club near you or become a free-range member. Find out more at: [www.naturekidsbc.ca](http://www.naturekidsbc.ca). If you are already a member you can use this activity as part of your Action Awards Quest!

