



## SNOW INSULATION

### THE BLANKET OF SNOW

Winter means freezing temperatures, icy winds, and, if we're lucky, lots and lots of snow. Not only is snow fun to play in, but it's also a protective layer for animals and plants.

### IT'S COLD OUTSIDE, BUT TOASTY UNDER HERE...

Snow is cold, but outside air can get even colder. When snow covers the ground, it acts as insulation (like a cozy blanket or puffy mittens). In between the snowflakes are trapped air pockets. Those air pockets stay at about 32°F (usually much warmer than the outside temp) and act like a big, warm, fluffy blanket.

### SEARCH FOR SHELTER

So, how do some animals take advantage of this blanket of snow to stay warm? With enough snow on the ground, small mammals, including mice and voles, create tunnels where they're protected from the cold and can find food. Take a walk outside and look for holes or other entrances into these snow-covered homes. You're likely to find some entrances near tree trunks or large rocks.

### BUILD A WINTRY HOME

Want to experience the warmth of snow yourself? Build a shelter out of snow by either making a quinzee or an igloo in a safe place far from the road (be sure to let your parents know what you are doing).

A **quinzee** is a simple snow shelter made by hollowing out a big pile of snow. Once you have a large, solid mound, hollow out a space large enough for one or two people to fit inside. Be sure to add a hole at the top for air to circulate.

An **igloo** is a house made of snow blocks. To make each block, fill a container (a plastic bucket or box) with snow, pack it firmly, and drop it out (as you would with sand at the beach). Stack the blocks in a small ring and build up the walls in a spiral, angling them slightly inward. Don't forget to make a doorway so you can get inside!

Both help keep you warm by trapping your body heat when you're inside. Plus, the walls of the shelter block the wind from blowing away even more heat.



### TRY THIS!

Grab an outdoor thermometer and measure the temperature outside your shelter. Then bring it inside your shelter, wait a few minutes, and take the temperature again. Is it a few degrees warmer inside?

