

STEAM in the Classroom

SCIENCE-TECHNOLOGY-ENGINEERING-AGRICULTURE-ART-MATH

Preserving Snow

For this challenge/activity you will need:

- Two containers (any size; try to reuse a container from something you get from the grocery store like yogurt or canned vegetables)
- Snow
- Freezer

Did you know it can never be too cold for snow to form? Snow can form when the temperature in the air is 32° or below and there is a moisture source. The snow you see outside is made up of a bunch of frozen water crystals that get packed together to form a snowflake. It isn't always easy to see how individual snowflakes look but these snowflakes fall to the ground and accumulate to make the snow we see on the ground. Sometimes the snow is light, fluffy, and white or it can be heavy, wet, and look bluish. Different factors like air and ground temperature, air pressure, wind, moisture, and elements in the air can affect the look and texture of snow.

Let's gather some snow and see what happens when we change the temperature of it and add a little pressure! For container one, gently scoop in some snow but be sure you let it stay fluffy and don't pack it down. For container two, pack the snow in as hard as you can. Write down some observations for both containers. What does the snow look like? Is one container heavier than the other one? Place both containers in the freezer for 24 hours.

What does the snow look like in each container after being in the freezer? What does it look like if you dump it into a bowl? Is the packed snow heavier or icier than it was before? Do you think you could save a snowball until summertime? Would it feel and look the same as it does now? Share your observations on our [STEAM in the Classroom Facebook page](#)!

Information Source: <https://nsidc.org/learn/parts-cryosphere/snow/science-snow>
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