CATCHING SNOWFLAKES

Illustrated by Laurel Aiello

How does snow form? The air in the clouds must be below freezing (below $32^{\circ}F$). Water vapor in the clouds form tiny ice crystals. Water vapor is water in its gas form. These crystals stick together and form snowflakes. The snowflakes get heavy and fall from the clouds. The air they fall through has to stay close to the freezing temperature. The snowflakes will then reach the Earth's surface as snow. In this activity you will be able to observe snowflakes.

What You Need

a piece of cardboard about 12 inches square, black cloth to cover at least one side of the square, a stapler or tape

What To Do

- 1. Have an adult help you cut a piece of cardboard about 12 inches square.
- 2. Staple or tape a piece of black cloth tightly to at least one side of the cardboard. Two sides are best.
- 3. Place your snowflake "catcher" in the freezer.
- 4. A freezer pack, which is used to keep foods cold, can also be used. Wrap it in black cloth and keep it in the freezer. Be careful if you handle a freezer pack!

Using Your Snowflake Catcher

Wait for a snowfall. Dress yourself for going outside. Remove the "catcher" touching only the edges. Quickly go outside. Let some snowflakes land on your "catcher." If you can, quickly move to a place where no more snowflakes can land on the "catcher." (See the picture.) Observe the snowflakes. Use a magnifier if you have one. Do the snowflakes have shapes and patterns?

Repeat the Activity

Sometimes the snow is too wet or powdery. It might be difficult to observe the snowflake patterns. Be patient and try again during the next snowfall.

On the Internet

For snowflake photos, go to:

www.snowcrvstals.com

Click on the three different photo galleries on the left.

Find Out More

Is it true that all snowflakes have six sides?

Science Strands: SPS1, SPS2, ESS1, ESS4, PS1, PS2

