

Science Story Adventures

Snow

Learning outcomes

» Students know water can be a liquid or a solid and can be made to change back and forth from one form to the other. (Kindergarten – Physical Sciences)

» Students know that the weather changes from day to day but that trends in temperature or of rain (or snow) tend to be predictable during a season. (Grade 1 – Earth Sciences).

» Adaptations in physical structure or behavior may improve an organism's chance for survival. (Grade 3 - Life Sciences)

From: California's Science Content Standards

Books we read

Snowflake Bentley by Jacqueline Briggs Martin

Under the Snow by Melissa Stewart

The Snowflake: A Water Cycle Story by Neil Waldman

Activities we did

» We talked about different snowflake shapes and looked at photographs of snowflakes.

» We conducted some frost and ice experiments from <http://hubpages.com/hub/Easy-Snow-and-Ice-Experiments>.

» We talked about how animals are adapted to surviving in the snow.

» We acted out the water cycle.

Today's craft: Make a Snowflake



You will need:

- » 3 white, silver or blue chenille sticks
- » White, blue or clear pony beads
- » Yarn

Directions:

1. Cut two of the chenille sticks in half.
2. Take three half chenille sticks, and bend in half. Link two together and then twist the third one around the center.
3. Spread the six 'legs' out, so they form a snowflake shape.
4. Thread on beads and weave another chenille stick around all six legs.
5. Thread on more beads and bend tops of chenille sticks over to stop beads from falling off.
6. Attach a yarn loop to one of the arms to hang the snowflake.

Want to find out more?

Here is a selection of further resources to explore in the Naturalist Center, in the public library or at home. Please ask if you can't find what you're looking for.

Books

The Big Snow by Berta and Elmer Hader. Nat. Ctr. Juv. QB637.8 .H33 1991

A Caldecott Medal winner and classic tale of animals getting ready for and then getting through the winter.

Iguanas in the Snow and Other Winter Poems / Iguanas en la Nieve y Otros Poemas de Invierno by / por Francisco X. Alarcón. Nat. Ctr. Juv. PS3551 .L22 I39 2001*
Poems about winter in San Francisco and the Sierra Nevada, in English and Spanish.

Snow: When Will it Fall? By Janet Riehecky Nat. Ctr. Juv. QC929 .S7 R54 1990

Explains what has to happen in order for it to snow and how snow helps the natural world.

The Snowflake: A Water Cycle Story by Neil Waldman. Nat. Ctr. Juv. GB848 .W34 2003

Traces the path of a single snowflake throughout the year and through the water cycle.

Step into Winter: A New Season by Jane Belk Moncure. Nat. Ctr. Juv. QH81 .M745 1990

An introduction to the characteristics and events of winter, and directions for a few experiments.

The Story of Snow: The Science of Winter's Wonder by Mark Cassino QC926.32 .C37 2009

Fantastic high-magnification pictures illustrate the structure and formation of snow.

**Libro en español*

DVDs

Christmas in Yellowstone. Nat. Ctr. Media QH105.W8 C47 2007

Older children may enjoy this look at the snow covered national park, and its animal inhabitants.

Websites

Make-a-flake

Design your own virtual snowflake—and then try and make it in real life!

<http://snowflakes.barkleyus.com/index.html>

Severe Weather and Natural Disasters: Winter Storms Facts, experiments and preparation tips for Winter Storms.

http://teacher.scholastic.com/activities/wwatch/winter_storms/index.htm

SnowCrystals.com

Wonderful photos of snowflakes, as well as the science behind them.

<http://www.its.caltech.edu/~atomic/snowcrystals/>

Snug in the Snow

Describes the behavior of different kinds of animals in the snow.

<http://dnr.wi.gov/org/caer/ce/eeek/nature/snugsnow.htm>