

Science Story Adventures



Winter Solstice

Learning outcomes

- » Adaptations in physical structure or behavior may improve an organism's chance for survival. (Grade 3 - Life Sciences)
- » The position of the Sun in the sky changes during the course of the day and from season to season. (Grade 3 - Earth Sciences)

From: California's Science Content Standards

Books we read

The Shortest Day: Celebrating the Winter Solstice
by Wendy Pfeffer
Winter Lullaby by Barbara Seuling
The Longest Night by Marion Dane Bauer

Activities we did

- » We examined various specimens, such as pelts of an opossum and a skunk, a taxidermy ground squirrel, and preserved frogs and turtles. Then, we talked about how each of these animals survive cold and snowy winters.
- » We did a demonstration of how Earth's orbit of the Sun brings about the seasons and the solstices.
- » We looked at the book *The Winter Solstice* by Ellen Jackson and learned about how the winter solstice has been and continues to be celebrated around the world.

Today's craft: Snowflake Stained-Glass Window Ornament



You will need:

- » Black construction paper
- » Snowflake template (included)
- » White colored pencil
- » Scissors
- » Colored tissue paper
- » Glue sticks
- » Hole puncher
- » String or yarn

Directions:

1. Print and cut out the snowflake template.
2. Place one piece of construction paper on top of another and fold them in half. Trace the snowflake putting the template on the fold.
3. Cut out two snowflakes by cutting through both pieces of paper.
4. Place the tissue paper in between the two black snowflakes and glue it together. It is all right if some of the tissue paper is outside of the outer rim of the snowflake.
5. Trim the tissue paper so that it is only on the inside of the snowflake.
6. Punch a hole on one side of the snowflake and put a string through it so that you can hang the snowflake in a window.

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

Do Not Disturb: The Mysteries of Animal Hibernation and Sleep by Margery Facklam. Nat. Ctr. Juv. QL755 .F33 1989

A very in-depth text about hibernation in a range of species.

Iguanas in the Snow: And Other Winter Poems by Francisco X. Alarcón. Nat. Ctr. Juv. PS3551.L22 I39 2001

Poems about winter in San Francisco and the Sierras, in English and Spanish.

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.

Sun Up, Sun Down by Gail Gibbons. Nat. Ctr. Juv. QB521.5 .G5 1983

Gibbons explains the effects the Sun has on Earth and its denizens.

Under the Snow by Melissa Stewart. Nat. Ctr. Juv. QC926.37 .S76 2009

Describes how some animals live under the snow in the winter.

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

Everyday Mysteries: Why Is It Hot in the Summer and Cold in the Winter?

Answers this question and lists places to get more information.

<http://www.loc.gov/rr/scitech/mysteries/seasons.html>

How Turtles Hibernate through the Winter

An article on turtle hibernation, with links to more turtle information.

<http://www.turtlepuddle.org/kidspage/hibernation.html>

Kids LibraryPoint: Happy Hibernations

The what, who and why of hibernation, with a list of more resources.

http://kids.librarypoint.org/happy_hibernations

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

Snowflake Template

