

**Topics:** Environments, Habitats, Adaptations

#### **Materials List**

- ✓ Matte board–5 pieces
- ✓ Acrylic Paints & brushes (optional)
- ✓ Construction Paper
- ✓ Pictures of arctic animals / plants
- ✓ Scissors
- ✓ Crayons
- ✓ Glue / Tape
- ✓ Tissue paper
- ✓ Yarn / Thread

This activity can be used to teach:

Next Generation Science Standards:

- Organisms and their environment (Grade K, Earth and Space Science 3-1, Grade 3, Life Science 3-2)
- Observations of Organisms
  (Grade K, Life Science 1-1, Grade 2, Life Science 4-1)
- Climates in Different Regions (Grade 3, Earth and Space Science 2-2)
- Biosphere (Grade 5, Earth and Space Science 2-1)



# Baby, It's Cold Outside

Life in an Arctic Habitat







This diorama helps students visualize life and ecology in an arctic environment.

### To Do and Notice

- 1. Join together five pieces of matte board (preferably gray) using tape or glued paper strips to make an open front box.
- 2. Decorate the inside of box to get the arctic look. Use light blue and gray acrylic paint for top and sides or line it with blue construction paper. Use dirt and rock colored paper for the bottom.
- 3. Choose pictures of polar bears, walruses and other arctic inhabitants or use construction paper to draw your own. Cut out the shapes, color, and decorate with crayons or markers.
- 4. For mountains and glaciers use white construction paper cut out in triangles.
- 5. Decorate the diorama using thread to dangle birds (such as eagles and falcons) from the top of the box.
- 6. Light green tissue paper makes great tundra vegetation.

## The Science Behind the Activity

An environment is all the surrounding physical conditions that can affect the growth and survival of an organism. This includes temperature, humidity, rainfall, and the other organisms living in the environment. All organisms inhabiting a given environment create a community. Scientists refer to the largest scale communities as biomes and classify them into 5 categories: aquatic, desert, grassland, tundra, and forests. Arctic and Antarctic environments fall into the tundra classification.

The arctic is classified as the area of the Earth's surface lying above 66 ½ degrees North latitude. This includes parts of the Atlantic, Pacific and all of the Arctic oceans, as well as parts of North America, Europe and Russia. Despite its frigid temperatures, the arctic is home to a variety of well-adapted wildlife, including polar bears, wolves, hawks, reindeer, whales and sea otters.

#### **Taking It Further**

Older students can create dioramas that have complete food chains for a more indepth study of ecosystems.

**Web Resources** (Visit <a href="www.raft.net/raft-idea?isid=286">www.raft.net/raft-idea?isid=286</a> for more resources!) For more information on life in the arctic, visit: <a href="www.enchantedlearning.com/coloring/arcticanimals.shtml">www.enchantedlearning.com/coloring/arcticanimals.shtml</a>

www.enchantedlearning.com/coloring/arcticanimals.shtm www.arctic.noaa.gov/animals.html

To create an Antarctic environment for comparison, visit the following website for background information:

http://www.antarcticconnection.com/shopcontent.asp?type=wildlife-main