

The Scale of it All

Choose a section of the Iditarod Trail and construct a scale model of it. Your model should include at least three of the checkpoints, a change in elevation, a natural resource of some type, as well as latitude and longitudinal lines. Write a description of the area to go along with your model.



Whoosh!



Divide the class into groups and have them design a catapult. They should decide on the best materials for construction as well as the size and design. They should draw plans for the catapult along with a report stating the reasons for their choices of materials and size.

Then have the groups build their catapult. After construction, have a contest and see which catapult throws a snowball the furthest. Have them experiment with different size snowballs, different moisture content of the snow, different temperatures and wind conditions. If you happen to live in warmer climates, experiment with different types of balls such as a golf ball, a tennis ball, a softball, or a wiffle ball. Have the students write a report about the entire process and include a table that shows their findings. Also have them convert distances to metric units, and temperatures to degrees Celsius.

Map Grids

With the help of the art teacher, enlarge a topographical map of Alaska that includes latitude and longitude lines. Use the Internet or a textbook to find the latitude and longitude for three major cities in Alaska and plot them on the map. Also plot four points of interest. For example, you could plot a mountain, a glacier, a national park, or even an island. Create a key for your map that lists the city or point of interest with its latitude and longitude.



Alternative A: If your classroom has an Iditarod Inside with GPS account, have your students select a musher and plot their position throughout the race.

Alternative B: Have students plot the location of classmates who were born in other parts of the country, or family members who live away from your location.

Northern Night Lights



Research the Aurora Borealis, or Northern Lights. Write a report about the lights – how are they created, when do they appear, why do different colors appear. After you write your report, use a presentation program to create a slideshow about the lights. Find images of the lights on the Internet and include them in your slideshow.

Metric Miles?

Calculate the distance between each of the checkpoints on the Iditarod Trail in kilometers. Find the highest point in the race and change that to meters. Create a table showing the checkpoints, the distance between them in both miles and kilometers, and the name of the highest point on the trail along with its height in feet and meters.



The Peril of Math and Science



Have students complete the Math and Science research exercises. This will give them all of the formulas they will need for the Jeopardy like game. Then divide the class into 4 teams. Give each team a signaling device so you will be able to determine which team “rings in” first.

[Click here to go to the game!](#)

Build a Biome

The Arctic National Wildlife Refuge is located in the Arctic Tundra Biome, which can be found in Northern Alaska. Have the students research the Wildlife Refuge and tundra region and then build a model biome in a box of either the tundra or the refuge. They should also include a description of the biome including the type of terrain, the elevation, levels of precipitation, plants, animals, and temperatures.



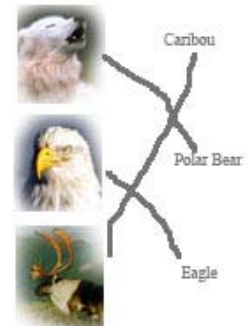
All About Me



Have your students pretend to be a plant or an animal from Alaska. Have them research their selection and then write an autobiography about themselves. They should describe their lives and challenges in the environment, what they eat, who might eat them, and what they do every day.

Who am I?

Have students research animals found in Alaska. Then create a worksheet with pictures of animals on one side of the page, and a description on the other. Then have the students match the picture with the description. Descriptions may vary in complexity depending on the age group. For the very young, you may want to list just the name of the animal.



Color Me Snowy



Discuss the different animals in Alaska, and then have students draw a picture of their favorite animal.

Math and Science Activities
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