

16. POLAR BEARS IN YUMA!

Overview: Students will use their creative thoughts to tell the story of two polar bears that were dropped off at the Yuma International Airport and how they adapted to life in the desert.

Objective: To allow the students to creative and develop a habitat at YCG to support the lives of two polar bears who were missent to Yuma and were unable to be sent somewhere else. Students will create a habitat and design the enclosure appropriate for the survival of the polar bears in a hot, arid climate. The major purpose of this activity is for students to recognize that animals are adapted to the environment in which they have lived a long time. If people move animals to different environments, the animals need to have conditions created that are conducive for the animals to survive.

Time needed: 1 to 2 hours

Group Size: 4-6

Age appropriateness: 3rd grade and up

Site: Any location, but under a shade tree would be nice.

Background: Polar bears are arctic animals associated with regions of sea ice. They spend 90% of their time on floating ice. Much of that time is spent on hunting seals for food. The remaining 10% of their time is spent on land. Polar bears are very active and do not like being kept in a cage or enclosure. In designing a zoo enclosure for a polar bear in Yuma, students should take this information into consideration: polar bears weigh 700 to 900 pounds at maturity, with a length of up to 10 feet. They can jump 10 to 12 into the air from a standing position. The enclosure should contain everything the animal needs to survive: a sleeping place, hiding place or den for solitude, pool, source of drinking water, food, and space for exercise. The enclosure should look as unlike a cage as possible. The bear's enclosure does not need to be entirely refrigerated. Polar bears only need a cool place in which to retreat. Also consider: temperature (night and day), humidity, floor covering, slope of floor (for cleaning), light intensity (day and night), length of day, water, food, diet, color, air pressure, plant life, wind (velocity and direction), and maintenance.

Materials:

Provided at the Garden

Clipboards

Provided by the classroom teacher

Paper for drawing and large pieces of cardboard to lay them on

Crayons, pencils, and/or markers

Preparation: Have several pictures of polar bears so the students can see the bears in their natural environment.

Pre Activity: A video on polar bears, stories, posters and class discussions about their native habitat and survival needs.

Procedure:

1. Review the polar bear's habitat and survival needs.
2. After a tour of the Garden, give students the opportunity to design their own zoo enclosure for a pair of polar bears that have been moved from their natural northern habitat to the desert environment of Yuma.
3. Each group of students will create a habitat somewhere in the Garden, creating all the needs for the bears to sustain life in Yuma.
4. Give each group a large piece of paper and drawing tools.
5. They may want to list features they want in their enclosure on a separate piece of paper before drawing.
6. As a summary, have each group share their enclosure ideas with the large group.
7. Discuss some of the problems these bears would have in captivity. Talk about responsibilities people have when they put an animal in captivity.

Modifications: Younger students could have older students help them or work in groups.

Extensions:

1. Create enclosures for other animals.
2. Visit any animal that is in captivity. Compare the animal's natural habitat to that provided in the captive condition.
3. Visit a zoo if possible and display pictures of enclosures. Discuss their merits and/or drawbacks.

Reference List:

Project WILD

Project Aquatic WILD

Bears by Gallimard Jeunesse and Laura Bour, Scholastic Books

The Polar Bear by Mark E. Ahlstrom

Time of Year: any time

****This activity was adapted from Project WILD, "Polar Bears in Phoenix".**