



# VOLUNTEER ACTIVITY 3

## How Much Do You Know About Polar Bears?

Activity Type: Trivia Game (Truth or Lie)

Supports Lessons Two, Three & Four

Grades 4-6

Time: 30 mins

Cost: \$, very low

### Materials

- 4 printed polar bear pictures
- 4 printed 'not a polar bear'
- Sheets of questions and Answers
- Polar Cards
- Polar Card Activity Guide for Educators
- Arctic Polar Bears DVD

### Before Your Visit:

Review Volunteer Presenter Checklist, "Talking To Students About Global Warming" Online Presentation, and the set of Polar Cards.

Download and print out pictures of polar bears and other animals.

Print out "Questions and Answers".

Prepare materials to give to teacher .

Make signs: "That's A Polar Bear" and "That's Not A Polar Bear" on small posterboards or cardstock.

### In the Classroom:

Introduce yourself:

"Good morning students, I am very excited to be here today. My name is Mr./Ms. \_\_\_\_\_ and we're going to play a game to test your knowledge about polar bears. Are you ready?"

### Instructions:

1. Set up 4 desks in front of the classroom
2. Divide the class into 4 groups; give each group an answer sign, "That's A Polar Bear" and "That's Not A Polar Bear"
3. Have each group stand behind a desk in a line and create a team name
4. Draw a scoreboard on the blackboard with each team's name
5. Ask the first student/contestants to step up to the desk
6. Give them the first question, but do not have them show the answer card until all are ready. Give them a five count to make their choice.
7. Let the students display their answers and tally up their score for each question
8. Discuss the answer by providing facts about the Arctic environment and animals
9. Repeat for remaining questions. Try to do at least 2 rounds so each student can answer at least twice.

### Wrap Up:

Play the Arctic Polar Bear DVD while you count the final score.

Discussion points for post game:

"What fact surprised you the most about polar bears?"

"What is the most memorable fact about polar bears?"

"What do you think will happen to polar bears when their habitat changes?"

"What do you think is causing the polar bear to become endangered?"

This will be your lead to explain that their teacher will be working with the students to learn more about the Arctic, polar bears, and global warming. If time allows, pass out Polar Cards and let the students review with teacher. Encourage students to collect Polar Cards and use with Polar Card Activity Guide Lessons.

### Clean up materials:

Return classroom to it's original order and be sure to take all your materials back.



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## QUESTION AND ANSWER SHEET

Directions: Ask one of the bold questions at a time to the students, have the students hold up either a polar bear or not a polar bear depending on what they think the answer is. Use the supporting information to give facts about polar bears.

### **Female polar bears reach maturity in 5 to 6 years.**

That's a polar bear - males—10 to 11 years; females—5 to 6 years.

### **Polar bears hibernate like other bears.**

Not a polar bear - Polar bears do not hibernate like other bears, but their body functions do slow down when the temperature drops. Many scientists call this "walking hibernation."

### **Polar bears' favorite food is seal.**

That's a polar bear - Polar bears are mainly meat eaters, and their favorite food is seal (which is good for them because seals have a lot of blubber). They will also eat walrus, caribou, beached whales, grass, and seaweed - just about anything they can find when seals are not available.

### **Polar bears have black skin.**

That's a polar bear.

### **Polar bear blubber does not help them float.**

That's not a polar bear - Polar bear blubber does help them float. Blubber helps insulate polar bears from the freezing air and cold water, and acts as a nutritional reserve when food can't be found. This blubber also helps the bears float in the water. It is 2 to 4 inches (5 to 10 centimeters) thick.

### **Polar bears are only found in Alaska.**

That's not a polar bear - Polar bears are found along the northern coasts and inland streams and lakes of Alaska and Canada in North America, Greenland, Denmark, Norway and Russia.

### **Polar bear mothers have the richest milk of any bear species.**

That's a polar bear - Milk from polar bear mothers is 35 percent fat, the richest milk of any bear species. This helps the cubs grow quickly, and by April they weigh more than 20 pounds (9 kilograms) and start exploring with their mother outside the den.

### **When a polar bear cub is born it is about the size of a rat.**

That's a polar bear - A cub is about the size of a rat when it is born. Usually two cubs are born to each mother between December and January. They are hairless and blind at birth, and depend on their mother to keep them warm and fed.

### **Polar bears are shorter than brown bears.**

That's not a polar bear - Polar bears are the tallest bears, standing up to 10 feet high when on their hind legs.

### **Polar bear adult males weigh between 600 - 1800 lbs.**

That's a polar bear - males—660 to 1,760 pounds (300 to 800 kilograms); females—330 to 660 pounds (150 to 300 kilograms).

### **Polar bears only live for 15 years in the wild.**

That's not a polar bear: 25 to 30 years in the wild, up to 45 years in zoos. However, global warming is effecting the life span of bears in the wild.

### **There are more polar bears today than there were 10 years ago.**

That's not a polar bear - The world's polar bear population has been decreasing. The World Conservation Union (IUCN) estimates that there are only between 20,000-25,000 polar bears in the world. (Note: If you know the population of your local community, you can compare your town's population to that of the polar bears.)



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### **Polar bears can see up to 15 feet away in water.**

That's a polar bear - Polar bears can see well underwater, spotting potential meals 15 feet (4.6 meters) away. (Note: Ask students how far they can see under water without goggles.)

### **Polar bears' paws act like "snowshoes" to help them walk on the ice and snow.**

That's a polar bear - Polar bear paws are about 12 inches or more across and 18" long. (Note: Pull out a ruler to show how big this is - or as an example, the average child hand size is about 5".)

### **Polar bears can only smell about 2 feet in front of them.**

That's not a polar bear - A polar bear's nose is so powerful it can smell a seal on the ice 20 miles (32 kilometers) away, sniff out a seal's den that has been covered with snow, and even find a seal's air hole in the ice up to one mile (1.6 kilometers) away. No wonder many people call them "noses with legs!"

### **Humans are the greatest threat to polar bears.**

That's a polar bear - Some hunters kill them just for trophies, and they are losing some of their habitat as people and industry have moved into their territories. Now global warming is affecting polar bears as warmer temperatures are causing sea ice to melt earlier each summer and freeze over later each winter, which shortens the polar bear's hunting season out on the ice.

### **Polar bear fur is white.**

That's not a polar bear - A dense, thick undercoat of fur is protected by an outer coat of long guard hairs that form a waterproof barrier to keep them dry. Even though polar bears look white, their hair is really made of clear, hollow "tubes" filled with air. These clear hairs reflect light and appear white. As bears get older, the hairs fill with dirt and blubber, which is why some older bears appear more yellow than cubs.

### **Polar bears "chuff".**

That's a polar bear - 1. Adult polar bears vocalize most when they're agitated or threatened. Sounds include hissing, growling, champing of teeth, and a soft chuffing. 2. Cubs vocalize more often and for diverse reasons. Sounds include hissing, squalling, whimpering, lip smacking, and throaty rumblings. 3. Mothers warn cubs with a chuffing or braying sound.

### **Ocean temperatures in the Arctic, where polar bears live, are 40 degrees Fahrenheit in the summer.**

That's not a polar bear - The ocean temperatures in the Arctic are about -1.5C (29F) in summer. In winter the ocean temperatures can drop to -2C (28F), at which point seawater freezes.

### **Polar bears defend and mark a specific territory like some other animals do.**

That's not a polar bear - Polar bears don't mark or defend their home range. Polar Bear ranges can vary greatly. A small home range may be 50,000 to 60,000 square km (19,305/23,166 square mi.) while a large home range may be in excess of 350,000 square km (135,135 square mi.).

### **Polar bears are the largest land carnivore.**

That's a polar bear - Polar bears are the largest land carnivore and are at the top of the Arctic food chain.

### **Polar bears do not shed their fur.**

That's not a polar bear - Polar bears completely molt (shed and replace their fur) annually, in May or June. The molt can last several weeks.

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Directions: Ask one of the bold questions at a time to the students, have the students hold up either a polar bear or not a polar bear depending on what they think the answer is. Use the supporting information to give facts about polar bears.

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### **Polar bears swim or float only on top of the water.**

That's not a polar bear - Polar bears usually swim under water at depths of only about 3 to 4.5 m (9.8-14.8 ft.). They can remain submerged for as long as two minutes.

### **Polar bears prefer to use their left paw.**

That's not a polar bear - Scientists studying the animals haven't seen a preference. Polar bears seem to use their right and left paws about the same.

### **Polar bears are usually very calm bears.**

That's not a polar bear - After failing to catch a seal, a frustrated and angry polar bear may kick the snow, slap the ground or even hurl chunks of ice. In other words they have temper tantrums.



**Yes! That's a polar bear!**



**No! That's not a polar bear!**