



CLASSROOM ACTIVITY

Create a Polar Creature

What would your ideal polar creature look like? What will it need in order to survive in the extreme conditions of Antarctica? Create your perfect imaginary Antarctic creature using your research of real organisms living in Antarctica. Focus on the questions below as you develop your creature and presentation. After you have completed the activity, respond to these questions directly in your journal.

- ▶ What are the common needs of organisms in Antarctica?
- ▶ What are the specialized needs of different organisms in Antarctica?
- ▶ How do your created organisms meet these needs?

Gather with your team and choose a captain and a note taker for today. The captain appoints group members to collect the required materials while the rest of the group reviews today's procedure. Before beginning, the captain makes sure that the group has all required materials, and that everyone knows the day's procedure.

The note taker takes notes on the group's findings for your team. Remember to record your observations and explanations in your journal for your own research notes. Include drawings to illustrate your findings.

MATERIALS

- ▶ research materials and/or research notes
- ▶ paint
- ▶ markers
- ▶ glue
- ▶ tape
- ▶ scissors
- ▶ stapler
- ▶ recycled and recyclable scrap materials such as: egg cartons, milk cartons and jugs, soda bottles, boxes, wood scraps, cardboard, cloth, string and yarn, bottle caps, packing foam, bubble wrap, construction paper, buttons

**CLASSROOM
ACTIVITY****Create a Polar Creature**

I'm making a creature that can live on the ice floes during the Antarctica winter!

I found some of this stuff in the recycling bin!



My creature is going to have special ear flaps that he can close when the katabatic winds pick up!

PROCEDURE

1. With your team, use the activity sheet to list the needs of organisms living in Antarctica. Conduct research or use research notes gathered previously. You can also review **Letter from Stephanie: Antarctic Adaptations**.
2. Begin to generate ideas for creatures your team can create, using the notes you have taken. Keep track of these ideas in your journal. Map out a timeline for completing your work and preparing a presentation of your creations.
3. Don't forget to record due dates and expectations for this project!



**CLASSROOM
 ACTIVITY**

Create a Polar Creature

**GROUP WORKSHEET 1
 ANTARCTIC TEAM**

GROUP MEMBERS _____

CAPTAIN _____ **NOTE TAKER** _____

1. What are the needs of organisms living in the extreme conditions of Antarctica? Describe the needs of Antarctic organisms for each category.

AIR	
LIGHT	
WATER	
SALINITY	
SPACE	
TEMPERATURE	

2. To create an organism, you will need to identify it as a scientist would. Define the terms below in your own words so that you can create a field guide entry for your organism. Offer two examples after each definition.

TERM	DEFINITION	EXAMPLES
GENUS		
SPECIES		
COMMON NAME		



Time to brainstorm! Bounce ideas off each other to begin creating imaginary organisms. Use the chart below to develop the beginnings of field guide entries for your organisms. Remember, in brainstorming, anything goes!

	1	2	3
Genus			
Species			
Common Name			
Range			
Habitat			
Food			
Predators			
Special Adaptations			
Narrative Description			

From the organisms you began to create above, each team member picks one to develop, expanding the descriptions in each category and creating a visual representation of the organism. Follow the guidelines below.

- ▶ Include a field guide entry with a labeled drawing, as well as any other visual aides or written text your teacher requires.
- ▶ Discuss the specific needs of your organism and explain how it satisfies those needs.
- ▶ Demonstrate how your organism survives in an environment that includes prolonged light and dark cycles, high winds, and very low temperatures.
- ▶ Explain how your organism’s appendages suit its style of locomotion (walking, flying, swimming, or a combination of locomotive styles), how its mouth/teeth/beak is/are suitable for the type of food it requires and how its senses are capable of perceiving stimuli in extreme conditions.

When each team member has created an organism, the group will prepare a presentation of the organisms each member created.