Title: Camouflage

Directions:

1) The first four pictures are crickets called katydids. Can you find the katydid in each picture?

2) Examine each picture and make observations.

3) Use the pictures to answer the questions below.

Think of your best answer to these questions:

1) Look at the pictures of the katydids. What did the katydids try to look like? How did they do it? Why?

2) What do all the pictures have in common?

3) Can you think of other people or animals that use camouflage?

People and animals have used camouflage for a very long time. What do you think will happen if they did not use camouflage?

CAMOUFLAGE

Title: Mimicry

Directions:

1) Examine each picture and make observations.

2) Use the pictures to answer the questions below.

Think of your best answer to these questions:

1) What did the metalmark moth try to look like? Why?

2) What did the owl butterfly try to look like? Why?

3) What did the moth caterpillar try to look like? Why?

4) What did the scarlet king snake try to look like? Why?

5) What did all these pictures have in common?

MIMICRY

Metalmark moth

Owl butterfly

Title: Insulation from Polar Temperatures

Directions:

1) Put one hand in the ice water in the cooler
   Keep it there for 20 seconds.
   Think about how cold the water feels.

2) Put your other hand in the blubber glove and adjust the rubber band cuff so it fits snugly.
   Put this gloved hand in the ice water in the cooler.
   Think about how your hand feels inside the glove.

3) With one hand still in the blubber glove, return your bare hand to the ice water in the cooler.
   Compare any differences you feel.

Think of your best answer to these questions:

1) What difference in temperature did you feel between your two hands?

2) How can you explain this difference?

Look at these photographs of polar bears. What other adaptations help the polar bear survive the extreme Arctic conditions?

Title: Map of Polar Bear Populations

Directions:

1) Look at the different maps of where polar bears live.

2) Look at the globe.

Using the globe and the different maps, think of your best answer to these questions:

1) Polar bears live in what countries?

2) Polar bears live near what seas and oceans?

Using the world map provided, color where polar bears live.

Title: Seasonal Changes

Directions:

In places close to the equator, the seasons remain the same all year. Farther away from the equator and closer to the Poles, the seasons change. Winter and summer seasons are very different.

1) **<u>Using the RED string</u>** taped to Virginia's location on the globe:
    a. measure the distance to the equator.
    b. measure the distance to the North Pole
2) **<u>Using the BLUE string</u>** taped to Alaska's location on the globe:
    a. measure the distance to the equator
    b. measure the distance to the North Pole.

3) Make three columns for the words: "Hibernate", "Migrate" and "Adapt" Sort the animal pictures into columns under each animal adaptation word.

Think of your best answer to these questions:

1) Look at the globe and compare Virginia and Alaska.
    a. Which state is closer to the equator?
    b. Which state is closer to the North Pole?
    c. Which state has a colder winter?
    d. Which state has a warmer summer?

2) Which of these animals live closer to the equator?

3) Which of these animals live closer to the North Pole?

4) Discuss why you grouping the pictures the way you did. Why do you think some animals migrate, while others stay and adapt to seasonal change?

Animal Adaptations Discovery Circus, Student Card **Activity #6**

Title: Seasons Around the World

Directions:

Look at the picture of the Arctic tern, a famous world traveler. Every summer, terns hatch in Alaska and migrate south to Antarctica.

1) Mark the Arctic tern's migration.
    a. Find Alaska on globe and **tape a piece of string on Alaska**.
    b. Find Antarctica. Stretch your string across the oceans and **tape it on Antarctica**.
    c. Terns spend several months in Antarctica and fly around the entire continent. Stretch string in a circle around Antarctica and **tape it down when you have finished the circle**.
    d. When winter begins in Antarctica, the Arctic tern returns to Alaska. Stretch your string back to Alaska and **tape it down**.
    e. **Cut the string** where the tern finished its migration in Alaska.
    f. **Untape the string** from the globe.
2) The string represents the total distance a tern travels every year.
3) Wrap the string around the globe at the equator. Then wrap it around the globe crossing both the North Pole and the South Pole. Can you see why we call terns world travelers?

Think of your best answer to these questions:

1) Can the string stretch around the **equator** of your globe?
2) Can the string stretch around the **North Pole and the South Pole** of your globe?
3) Why is the Arctic Tern called a "**world traveler**"?
4) The Arctic Tern hatches in Alaska during the summer, flies south to Antarctica, and then flies back to Alaska the next summer. What is the **same** about Alaska and Antarctica?
5) What would happen to Arctic Terns if they did not migrate?