

**Topic:** animal needs

## Overview

The students are able to identify the basic needs of all animals: air, food, oxygen, water and shelter. The students are able to name different biomes that are homes to animals. The students will identify ways in which animals adapt to the unique challenges of the biome it lives in. In this lesson the students will sort pictures of animals that prepare for changing seasons by hibernating or migrating.

## Grade 2

## Time Allotment

One 60-75-minute lesson

## Learning Objectives

On completion of this lesson students will be able to:

- The students will be able to list the basic needs of all animals for survival.
- The students will be able to sort pictures of animals that prepare for seasonal changes by migrating or hibernating.

This lesson addresses Va. SOLs Science 2.7.

## Media Components

- SMARTBoard
- LCD projector
- 1 computers per student
- 1 computer for the teacher
- Video streaming:
  1. [Concept in Nature: Adapting to Changes in Nature](http://www.unitedstreaming.com). United Learning, 1995  
<http://wvpt.unitedstreaming.com>

## Materials and Student Handouts

- A bar graph template – 1/ student, attached
- Pictures of animals for sorting

## Teacher Preparations

- Download, preview and cue video clip
- Copy and distribute bar graph template
- Make sorting game by printing and cutting out pictures of animals that hibernate/migrate. I used <http://www.enchantedlearning.com/Home.html> for pictures.
- Place either an M for migrate or H for hibernate on the back of each picture. This will allow the students to correct his/her sort.
- Give one baggie with pictures to each child.

## Introductory Activity

The focus of this lesson is to reinforce the concept of animals adapting to their environment, more specifically hibernation/migration.

**Focus:** How do animals adapt to their environment?

**Activity:** Using the SMARTBoard, tell the students he/she has one minute to name as many animals as he/she can.

**Follow-up:** After reading the animal names, ask the students if there are any needs that all the animals have in common. (Air, food, shelter, water and air are the correct response.) Extend the discussion by having students move animals around grouping them by characteristics which makes them same/different.

## Learning Activities

**1. Focus:** (Adapting to Changes) Tell the children he/she will watch a movie, which shows many different ways animals adapt to its biome. Ask the students to put one finger up every time he/she hears or sees a way that animals adapt. Model this as the students are viewing the movie.

**Activity:** Use the SMARTBoard to list the different ways animals adapted to its environment in this film. This list may include prior knowledge, also.

**Follow-up:** Give the children 30 seconds to name ways animals in the film adapted to its biome. You are the recorder.

**2. Focus:** (A Closer Look at Adaptation) Tell the students he/she will watch a movie which shows animals preparing for seasonal changes. Some animals migrate and some hibernate. Listen to define what hibernate and /migrate means. Be able to name 2 animals, in the video, that hibernate/migrate. This list may include prior knowledge, also.

**Activity:** Ask the children to help you define the words hibernate/migrate. Record on SMARTBoard.

**Follow-up:** List animal names under the correct adaptation (migration or hibernation). Put the animal names from the original list under the appropriate category. You may need to create the category, list.

## Culminating Activities

**Focus:** Tell the students he/she will work to sort the animal pictures in his/her baggie in two groups hibernate/migrate. Tell the students they will have 3 minutes to complete this task.

**Activity:** When they have sorted the animal pictures place his/her hands on the floor in front of him/her. As the children are working on this task circulate. Listen to conversations the students are engaged in. Note conversations you may want to share with the other children.

**Follow-up:** After three minutes share any conversation that would be appropriate and then tell the students to check his/her sort by turning the pictures over. Explain h stands for hibernate, m for migrate. Tell the students to make any corrections needed.

## Assessment

- Display the empty bar graph on the SMARTBoard. Demonstrate how to record the sort on the bar graph. Ask what the bar graph tells them. You want the students to use greater than/less than in his/her answer. Students go to a computer that is open displaying the bar graph and record his/her sort information. Collect and assess the completed graphs.

## Community Connections

- **Ivy Creek Nature Park:** This is located in Charlottesville, VA. Teacher may take fields trips here. The students have a guided tour, on a walking path through the park.
- **Rivanna Walking Trail:** Open to the public.

## Cross-Curricular Extensions

### Language Arts

- Have each student choose an animal that hibernates or migrates. They are to illustrate it and write a paragraph about it to be bound into a class book on animal adaptations.

## About the Author

Joan Miller is a technology teacher at Stone Robinson Elementary School in Albemarle County, Virginia.

This lesson was written as part of the Fall 2004 WVPT NTTI for the Virginia Enhancing Education Through Technology Ed Tech Grant awarded to the Shenandoah Valley Technology Consortium (SVTC).

