Activity: Habitat Hike

Grade Level: Grade 5

Major Emphasis: Animal Adaptations
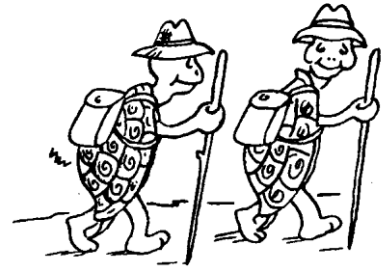
Major Curriculum Area: Science

Related Curriculum Areas:

Refer to Outdoor Education Curriculum Matrix 3-5:
    Art
    Language Arts
    Science

Program Indicator:
The students will recognize that organisms and groups of organisms that are best suited to their environment survive.

Student Outcomes: The student will:
1. identify environmental conditions of forest, marsh, and meadow.
2. identify adaptive structures of a given set of animals by completing a chart.

Readiness (DL2):
1. Develop the following vocabulary:

biome	adaptation	habitat
precipitation	temperature	salinity
turbidity	camouflage	

2. Using some of the vocabulary, teach students how to write an acrostic poem.
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Materials:

Animal Adaptation Activity Chart
Poster of Three Habitats
Animals Mounts

Suggested List of Animal Mounts and Specimens:

Forest	Marsh	Meadow
Deer	Muskrat	Groundhog
Fox	Raccoon	Rabbit
Mink	Turtle	
Opossum	Otter	
Black Snake	Salamander	
Squirrel		

scooping   tearing   cutting

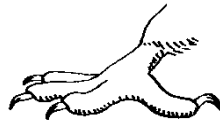swimming   tearing   grasping
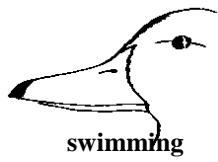
**Fig. 1: Sample Adaptive Features
(beaks, feet, teeth, paws)**

Procedures:

Activity A: Animal Adaptation (DL2)

Set-Up: Mounted animals will be set on the tables in the lower lab. Prior to children arriving, animals will need to be hidden in their designated habitat. Attached (see supplement B) is a list of animals and their adaptations. This sheet may be used as a guide.

- When children arrive, have them take a seat at the picnic tables located at the lab overhang. Review lesson outcomes by using the outcome poster. Begin the lesson by discussing habitats. Have the children name different characteristics of each of the three habitats (*forest, meadow, and marsh*).

- Introduce the idea of adaptations, explain what the term adaptation means (*a feature of an organism that allows it to better survive and multiply in its environment).* Ask the children for examples of different adaptations.

Hike:

-Give each student an Animal Adaptation Worksheet (see supplement A).

-Explain to the students that they are going to hike through three different habitats: marsh, meadow, and forest. During the hike they should keep an eye out for animals! When they spot an animal they should fill in the "animal" column

-After filling in the "animal" column on their sheet, the students should then try and fill out the "habitat" and "adaptive features" column.

-Continue the hike through all three habitats and have students fill out sheets for any animals found.

-Return to lab overhang and discuss the different animals that were found on the hike and the adaptations the children recorded.

-Close lesson with the Chesapeake Steward Discussion Question found on the back of the Outcome Poster.

Animal Adaptation

Animal	Habitat (Circle one)	Adaptive Features
	Forest Salt Water River Fresh Water Stream Meadow Marsh	Camouflage: Movement: Eating: Other:
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Animal Adaptation-Mammals

Mammal	Feature	Purpose
Black Snake (reptile)	teeth	Does not use; squeezes or constricts prey with body, mouth expands to swallow mice and frogs whole.
	body	Sleek for fast movement, when alarmed they can rear front part of body upward.
	skin	Smooth to ease movement, black for heat absorption (cold-blooded animals).
	eyes	"Caps" are see-through eye lids to protect eyes from drying out without blocking vision.
Deer	teeth	No upper incisors, chew on vegetation.
	feet	Hoofed, runs quickly, and stomps down snow in winter.
	tail	Raises or "flags" when alarmed.
	antlers	On males for defense and to stake territory.
Fox	fur/bushy tail	Warmth.
	upright ears	Good hearing.
	long legs/padded paws	Dog family, active. Run to catch prey (small mammals, birds, insects).
	long, canine teeth	Meat eaters.
Groundhog Woodchuck	chunky body/short legs	Tunneling
	teeth	Plant eaters; males use teeth when fighting.
	claws	Digging tunnels
Mink	long, slim body feet/toes	Swimming and tunneling. Toes spread apart for swimming, walking in marsh. Sharp claws for tearing meat.
	teeth	Sharp, eat fish, other mammals, birds, etc.

Animal Adaptation-Mammals

Mammal	Feature	Purpose
Muskrat	teeth	Incisors for gnawing wood and vegetation, can close mouth behind front teeth to chew while swimming.
	feet	Partially webbed toes for swimming, long toes.
	tail	Long, used as rudder while swimming.
	fur	Warm and oily to repel water; scent gland secretes musk.
Opossum	tail	Hairless, prehensile. Helps in climbing.
	feet	Sharp claws for climbing.
	teeth	More teeth than any other N. American land mammal. Complex plant/animal diet.
	coat	Camouflaged at dawn, dusk. Active mostly at night.
Otter	teeth	Sharp and strong for eating fish and animals.
	feet	Webbed toes for swimming, treading water. Sharp claws for defense and feeding.
	tail	Long, strong, used as rudder when swimming.
	ears and nose	Valved to keep out water.
	body shape	Sleek for fast swimming.
Raccoon	dark colored coat	Camouflaged at night.
	toes/claws	Toes spread for climbing, walking in mud. Claws hooked for climbing, grasping food (berries, nuts, eggs, fish, etc.
	teeth	Suitable for chewing plant and animal matter.
Squirrel	coat color	Camouflaged in trees.
	teeth	Two big front teeth for gnawing nuts. Cheek pouch for nut storage. Also eats fruits and mushrooms.
	feet	Sharp claws for climbing, grasping tree trunks.
	tail	Used for balance, warmth when sleeping.