

Natural History along the Natchez Trace Parkway



On-Site Lesson: Scavenger Hunt (code 2SH)

➤ **Grade Level:**

Second

➤ **Subject Area:**

Science, Math

➤ **Setting:**

Call 662-680-4027 or 1-800-305-7471 for trail recommendation

➤ **Duration:**

20-30 minutes on trail, 20-30 minutes in the class

➤ **Skills:**

Observation, charting skills

➤ **Vocabulary:**

Food, water, shelter, space

Summary: The students will walk a trail and keep tally marks of the different habitats they see along the trail. They will also create graphs with information collected.



Materials Needed: For each student: tally sheet (printed on cardstock; two sheets per paper to be cut in half), pencil, plain paper, ruler, crayons/markers, and poster board

Instructional Information

Tennessee Grade Level Expectations:

Science:

Inquiry

GLE 0207.T/E.1 Recognize that both natural materials and human-made tools have specific characteristics that determine their uses.

Cells:

GLE 0207.1.1 Recognize that plants and animals are made up of smaller parts and use food, water, and air to survive.

Interdependence:

GLE 0207.2.1 Investigate the habitats of different kinds of local plants and animals.

GLE 0207.2.2 Investigate living things found in different places.

GLE 0207.2.3 Identify basic ways that plants and animals depend on each other.

Flow of Matter and Energy:

GLE 0207.3.1 Recognize that animals eat plants or other animals for food.

Heredity:

GLE 0207.5.1 Investigate the relationship between an animal's characteristics and the features of the environment where it lives.

Math

Mathematical Processes

GLE 0206.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning.

GLE 0206.1.4 Move flexibly between concrete and abstract representations of mathematical ideas in order to solve problems, model mathematical ideas, and communicate solution strategies.

GLE 0206.1.5 Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.

GLE 0206.1.8 Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.

Data, Probability and Statistics

GLE 0206.5.1 Use and understand various representations to depict and analyze data measurements.

GLE 0206.5.2 Determine whether an event is likely or unlikely.

Learning Objectives: The students will 1) learn the different elements of habitat and learn how to spot these elements in nature, 2) tally the number of instances of habitat elements, 3) make bar graphs that show the relations between each element.

Teacher Set: The students will walk a National Scenic Trail and tally the different habitat elements are along the trail. The information the students gather will be used to create a bar graph once they return to the classroom.

Teacher Overview: Habitat requirements are different for plants and animals. Both need food, water, shelter, and space to survive but animals are able to roam and search for food, water, shelter, and space while plants are not. Plants manufacture their own food using sunlight and water and minerals from the ground. Plants are only able to travel long distances when they are seeds by way of a variety of adaptations. They may attach to an animal or float through the air. The seeds do not “choose” where to grow and can only grow if they land in a suitable space. For example, an acorn planted by a squirrel in a flowerpot of daisies would not have enough space to live out its life. As for the shelter, some plants need to be shaded to survive and some do not. Animals take a much more active role in finding a habitat. They are usually able to move to a new habitat if an element of theirs becomes inadequate. Anything that protects the animal from weather, sun, protects the young or is refuge from predators is considered the animal’s shelter. Space can range from the underside of a leaf to an ocean. Depending on the species, food can be plant, animal, insect or a combination of those.

Student Instruction: The students will walk a section of the National Scenic Trail along Natchez Trace Parkway. The students will put tally marks under the appropriate habitat element as they come across the object on the trail. Explain to the students that the SPACE column is divided into specific sections as space is hard to quantify. Once the students return to the classroom, they will make bar graphs with the data collected to find out which element is more plentiful on the trail.

Student Task: As they walk the trail, the students should pay close attention to everything around them. They will look for the four elements of habitat: food, water, shelter, and space. Whenever the students see one of the elements along the trail, they are to put a tally mark under the appropriate element on the tally sheet.

Teacher Closure: The teacher will return to the classroom and allow the students discuss with a partner, the results of the tally marks from the trail. The teacher will assign the students to make a bar graph with data collected for homework. Option: the class may make a collective bar graph. The graphs should be on at least one-fourth piece of poster board. Option: graph may be on one sheet of paper.

Student Assessment: The teacher will assess the students on participation on the hike and on the bar graphs. The students should turn the graphs in on the assigned date. The graphs should be neat, colorful, and accurate. The teacher will grade accuracy by making sure the students turn the tally sheets in with the bar graph.

Suggestions for re-teaching: The teacher will also assign the students to look for the elements of habitat in their back yard. The teacher may also assign extra credit for the students who write three or four sentences about the elements that are found in their back yard.

Extension: The teacher should put the students into groups of four. As a group, the students will work together and make a habitat for a plant or animal. The assignment may be drawn on a poster board.

FOOD	WATER	SHELTER	SPACE
			<p>A piece of wood space</p> <p>A rock space</p> <p>Water space</p> <p>Forest space</p> <p>Grass space</p>

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