



Student performs water test

### Special Program!

#### Living With Fire!

(Grades 5 –12) 90 minutes

GPS: S7L3c, S7L4 c  
S8P2 SB4a, b, c, d, e SB5d

In this four part activity, students will learn the basics behind fire and what it needs to exist. They will also discuss the benefits and drawbacks of fire, and its importance to the Southern Ecosystem. Students will discuss prescribed burning, collect weather data, and observe how foresters use fire to accomplish land management goals.



2nd Week in October is  
Fire Prevention Week

## Elementary School Programs

All of our Programs incorporate the Benchmarks for Science Literacy and Characteristics of Science for the Georgia Performance Standards. Each program falls into one of three sciences: Earth Science, Life Science, and Physical Science. It is recommended to choose two 30 min activities or only one activity that is longer. Every student will also enjoy two resting periods as they walk along our Boardwalk through a Tupelo Swamp and along our Talking Tree Trail.

### Earth Science

**From Mud Pies to Bricks** (Grades K-3) 45 minutes  
GPS: SKE2, SKL1, S2P1, S3E1, S3L2, S5E1, S5P2

In this investigation, students will compare soil from various sites and classify them as sand, silt or clay. Students will employ higher order thinking skills as they try to find just the right “mud pie” recipe.

**Just Passing Through** (Grades 3-5) 60 minutes  
GPS: S3E1, S3L2, S4E3S5E1

From desert to rainforest, the amount of water that a soil can hold is one of its most important characteristics. The type of organisms living in any particular ecosystem is directly tied to the water holding qualities of its soil. By using the Scientific Method, students will compare and contrast the water holding potential of various types of soil.

**Pet Rock** (Grades 3-5) 60 minutes  
GPS: S3E1, S3E2, S5L1

From the beginning of time, children and adults have been fascinated with rocks. In this activity, students will have the opportunity to use the scratch test, vinegar test, and Moh’s Scale of Hardness to figure out what their “Pet Rock” is composed of.

**Soil Profiles** (Grades 3–5) 90 minutes  
GPS: S3E1

What is soil? How is it formed? And Why is it so important? Students will find the answers to these and other questions as they take an “in-depth” look at soil profiles. Students will learn how to characterize soil’s texture, consistency, composition, and moisture hold capabilities. Students will also look at soil pits to identify soil horizons.

### Physical Science

**Field, Forest, and Stream** (Grades 3-5) 90 minutes  
GPS: S4E4

Teams of “scientists” will gather data to find out what an ecosystem is. Simple physical tests in three different environments will be conducted to determine how non-living elements influence the living elements in an ecosystem.

**Stepping’ Out** (Grades 3-5) 30 minutes

Foresters often need to measure an area quickly and accurately. Using steps to measure a distance is a relatively accurate method that can be done without using measuring tapes. This activity provides students with an opportunity to use the length of their step to figure out the area of land.

**Water, Water Everywhere** (Grades 3-5) 90 minutes  
GPS: S3L1, S4E2, S4L1, S5P2, S5L1, S5L2

Protecting our natural resources, especially water, is extremely important to the survival of all living things including humans. Polluted water can not be used for drinking, cooking, or bathing in. In this activity, students will conduct chemical and physical tests to assess the water quality of Spirit Creek.

**Which Way?** (Grades 3-5) 60 minutes  
GPS: S3P2

The ability to navigate through the woods is an essential tool for anyone who enjoys being outside. Knowing how to use a compass and measure distance without a tape measure allows the outdoorsmen to find not only a specific area, but how to get out of the woods.

*Elementary School Programs Continued***Life Science - Plant**

**Every Tree For Itself** (Grades 1-5) 30 minutes  
GPS: S1L1, S2E3, S2L1, S3L1, S4L2

What do trees need to grow? What happens to a tree that can't get enough of the things it needs in order to grow? In this game, students will gain an intuitive understanding of the concept of "competition" for resources without even realizing it!

**Flowers** (Grades K-2) 45 minutes  
GPS: SKL1, SKL2, S1L1, S2L2

Flowers are not only beautiful, but they play an important part in the survival of plants. In this activity, scientists will observe a flower, and identify the outer parts. Students will then participate in an exciting race as they become bees flying to complete the pollination cycle.

**Get in Touch with Trees** (Grades 1-2) 30 minutes  
GPS: SKL1, SKL2, S1L1, S2L1

Many people depend on their sense of sight to identify the parts of the tree. In this activity, students will use their sense of touch to learn the different parts of the tree and its environment.

**Have Seeds, Will Travel** (Grades K-5) 1 hour  
GPS: SKL1, SKL2, S2L1, S2L1, S3L2, S4L2, S5L1

"Popcorn! Peanuts! Get them while they're fresh!" Not only do seeds provide us with food, they are an important step in the "circle of life." This yearly progressing activity will have students compare and contrast types of seeds. A

scavenger hunt for seeds will have students hypothesizing how a seed can end up so far away from its parent plant.

**Leaf Safari** (Grades K-5) 60 minutes  
GPS: SKE1, S1L1, S2L1, S4E3, S4L2, S5L1, S5L3, S5L4

Students will be delighted as they actively participate on a "leaf safari" through the forest to collect leaf specimens. Back in the "laboratory," scientists will observe their collection up close and learn how Scientists use certain leaf characteristics to identify a plant. This activity is best paired up with "Name that Plant" activity for a 90 minute session.

**Name that Plant** (Grades 3-5) 30 minutes  
GPS: S4L2, S5L1, S5L2, S5L3

Botanists identify leaves by certain characteristics. Students will be the detectives as they figure out which leaf is from which tree, by using a dichotomous key to help solve the mystery. This activity can be paired up with the "Leaf Safari" activity for a 90 minute session.

**The Growing Tree** (Grades 3-5) 60 minutes  
GPS: S3L1, S3L2, S3P1, S4E3, S5P2

What would happen if there were no more green plants on Earth? In this important lesson, students will embark on a journey to become a tree as they learn about photosynthesis, the layers of a tree (xylem, phloem, cambium) and why we all need trees! At the end of the day, all students will gather to create a functioning tree.



On the trail of the Peppermint Beetle

**Life Science - Animal**

**Birds and Worms** (Grades 2-5) 45 minutes  
GPS: S3L1, S3L2, S4L1, S4L2

"Blending in with the crowd" is an important element in the survival of many animal species. The concept of camouflage is artfully demonstrated in this activity as student "birds" search out their prey. Which ones will be the easiest to find? Students will have a great time testing their predictions.

**The Fallen Log** (Grades 3-5) 60 minutes  
GPS: S3E1, S3L1, S4L1, S5L4

What happens to trees after they die? As students examine a decaying log, they will see first hand the "circle of life" and how matter/energy cycle through an ecosystem.

**The Peppermint Beetle** (Grades K-2) 30 minutes  
GPS: S1L1

Just how important is an animal's sense of smell? In this activity, students will sniff out the trail of the "Peppermint Beetle" and the patterns it leaves behind.

**Trees as Habitats** (Grades K-2) 30 minutes  
GPS: SKL2, S1L1, S2L1

Have you hugged your tree today? Trees not only supply food, shelter, and goods for human beings, but they also give a variety of animals the same thing. As students get "up close and personal" with a tree, they will observe how plants and animals depend on one another.

**What's For Dinner?** (Grades 3 -5) 30 minutes  
GPS: S3L2, S3L2, S4L2, S5L1

How can you tell what treat a bird likes to eat? It's easy! Just take a peak at its beak. In this activity, students will use a set of criteria to classify birds as herbivores, carnivores, or omnivores.

**Who Am I?** (Grades K-3) 60 minutes  
GPS: SKL2, S1L1, S2L1, S3L1, S4L2, S5L1, S5L2

Are you my mommy? Students will have fun as they try to match adult aquatic animals to their young. Be careful, some of the metamorphoses stages can be tricky!! Students will be able to look closely at the life cycle of aquatic micro invertebrates, as they examine water samples. This activity includes a wagon ride to Spirit Creek. Extra chaperones needed. Introduction to Metamorphosis is required.