

First Grade Canal Sciences Program Outline

Standards:

GA: SKCS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. a. Raise questions about the world around you and be willing to seek answers to some of the questions by making careful observations (5 senses) and trying things out. SKCS2. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations. a. Use whole numbers for counting, identifying, and describing things and experiences. b. Make quantitative estimates of nonstandard measurements (blocks, counters) and check by measuring. SKCS3. Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities. SIL1. Students will investigate the characteristics and basic needs of plants and animals. a. Identify the basic needs of a plant; 1. Air 2. Water 3. Light 4. Nutrients. b. Identify the basic needs of an animal; 1. Air 2. Water 3. Food 4. Shelter c. Identify the parts of a plant—root, stem, leaf, and flower. d. Compare and describe various animals—appearance, motion, growth, basic needs.

SC: 1-2.1 Recall the basic needs of plants (including air, water, nutrients, space, and light) for energy and growth. 1-2.6 Identify characteristics of plants (including types of stems, roots, leaves, flowers, and seeds) that help them survive in their own distinct environments.

Essential Question(s):

1. What do plants and animals need to survive?
2. What do animals look like, eat, live in, and need to stay alive?
3. What are the physical features of a plant and how is this important for them to stay alive?

Objectives:

Students will be able to explain the basic needs of plants and animals.
SWBAT develop an understanding of plants as living things and their physical features.
SWBAT determine the differences among various animals and describe them including habitat and habits.

Plan for Field Trip:

1. Students will alternate between activities being conducted within the Interpretive Center, Cotton Room (new classroom), and/or courtyard, boat or walking tour and the Cotton Room. There will be a boat option at extra cost that can be included in the field trip
2. In the IC, students will participate in the Canal Critters Scavenger Hunt where they will search for animals native to the Augusta Canal National Heritage Area using clues. They will learn the differences in appearance of the animals, their habitats, and practice verbal and cooperative learning skills. They will also develop conclusions through kinesthetic learning.
3. In the Cotton Room, students will participate in activities using our Discovery Learning stations such as leaf rubbing, animal matching games, establish differences and similarities using graphic organizers (Venn diagram), role playing as plants and animals to distinguish between the differences of each, and investigate a real frog with guidance. These activities will enhance verbal and kinesthetic learning as well as discovery and hands-on instruction.
4. Students may participate in the Eco-Active boat ride option. Each activity will concentrate on the environment and the importance of taking care of it. They will be able to make real world connections by relating events to the Augusta Canal.
5. Students will answer questions throughout the learning experience to facilitate understanding and reinforce knowledge.

Timeline: 9:45 am-1:30 pm

Canal Critters Scavenger Hunt: 45 minutes
Discovery Learning Stations (Cotton Room): 30 minutes
Boat Ride (optional): 45 minutes
Discovery Walk: 30 min.
Additional time included for lunch, travel time, restroom, etc.

Materials:

- Copies of Leaf Rubbing Lab, Augusta Canal Animal Match, Venn diagram, and Canal Critters Scavenger Hunt & pictures of animals to hide.
- Rulers, crayons, tracing paper, magnifiers, hand sanitizer and other science equipment (as needed).
- Sidewalk chalk

Assessment:

Students will show what they learned by taking 5-10 minutes at the end of the field trip to use sidewalk chalk to draw an animal or plant they learned about during the trip and sign their name. Ongoing assessment will take place throughout the course of the field trip with questions and activities, as well as worksheet results.