

Green Spring Garden 2 Hour School Field Trips Descriptions:

Preschool-K: Green and Growing Garden 10am—11:30am

September, October, April, May, June

Description:

Discover the world of the garden. Learn about plants, explore seasonal changes and investigate living and non-living things in the soil. Use your senses to explore our gardens. Dig in the dirt and plant some seeds to take home, too. (SOL: Science K.4, K.6, K.7, K.9)

Stations:

Soil Station

What is in soil? Students will dig in the dirt for a close look at the living and non-living components of soil.

Sensory Garden Exploration Walk

How can we use our five senses in the garden? We will smell and taste plants, see a variety of colors and shapes, feel fuzzy leaves and stems, and listen to the songs of birds and insects.

Plants & Seeds Station

How do plants grow? Students will learn how plants grow from seeds. They will then plant a seed to take back to the classroom for further exploration.

Grade 1: Fantastic Flora and Fauna

September, October, April, May, June

Description:

Learn about flowering plants and edible plant parts then play a fun game! Touch turtle shells and deer antlers as we look at animal characteristics in our interactive animal station. Explore trees and their seasonal changes in our woodland trail hike. (SOL: Science 1.4, 1.5, 1.7, 1.8)

Stations:

Flora Station

Students learn how plants develop from a tiny seed into the plants and flowers we know. We discuss each part of the plant, what plant parts we eat, and what makes something a fruit. Students and chaperones will end the station by playing a plant-focused version of Bingo.

Fauna Station

Why do some animals have antlers and some animals have shells? Students will explore a variety of physical characteristics of animals at our touch tables. Students will learn what animals need to survive and thrive, and also play an interactive animal game.

Forest Walk Station

A woodland hike through the Virginia Native Plant Garden introduces students to tree identification, starting with the differences between deciduous and

evergreen trees and examining the different parts of a tree. While in the forest, students will witness first hand how trees change throughout the seasons.

Grades 2 & 3: Metamorphosis & More

September, October, April, May, June

Description:

Explore a diverse pond ecosystem and learn the life cycle of the frog. Follow butterfly caterpillars on their journey through metamorphosis and migration and discover insect survival adaptations. Examine the life cycle of plants from seed to flower then dissect a flower in our plant lab. (SOL: Science 2.4, 2.5, 2.7, 2.8, 3.4, 3.8)

Stations:

Pond Ecosystem Station

From egg to tadpole to frog, students will learn the stages of the frog life cycle. Students will take a hike to the ponds to observe the unique qualities of a water habitat home to a diversity of animals and plants.

Butterfly Station

Follow the monarch butterfly from egg to caterpillar to butterfly. Students will follow the lifecycles of butterflies and moths, consider their differences, and learn their fascinating adaptations for survival. Students will also get the chance to examine butterfly and moth specimens.

Plant Lab Station

How did that flower grow? Students will follow a seed as it is planted in the earth, sprouts roots and leaves, makes its own food, and begins the cycle again. Students will dissect real flowers and use magnifiers to examine the reproductive parts.

Grades 2 & 3: Soil Secrets

November, December, January, February, March

Description:

Explore the secrets of soil, from erosion to weathering, bedrock to topsoil. Get the scoop on clay, silt, sand and humus in our soil lab. Tour the park to see how water and weather shape the land. Journey through the water cycle and discover the connections between soil and water using our Enviro-scape watershed model. (SOL Science 2.7, 2.8, 3.7, 3.9, 3.10)

Stations:

Soil Lab

Students learn how the components of soil - gravel, sand, silt, and clay - lay the foundation for life on Earth. Get up close and personal with soil and discover the secrets that lie within.

Watershed Walk

A tour of the park reveals many geologic features and processes: sedimentary deposits, underlying bedrock, and watershed and drainage patterns. As students walk our historic grounds, they will identify evidence of human impact such as stream erosion and see restoration efforts to correct it.

Water Cycle Station

Students experience the water cycle through interactive games and activities. Using our Enviro-scape watershed model, students witness the effects of erosion and pollution in a watershed. They also consider the limits of the planet's water resources, identify their own watershed, and discuss ways to protect it.

Grade 3: Predator and Prey

September, October, November, December

Description:

Producer or consumer, carnivore or herbivore. Which are you? Discover how animals and plants adapt when survival is the name of the game. Explore the food web, search for signs of wildlife and discover one of the smallest predators in the Ladybug Lab! (SOL: Science 3.4, 3.5, 3.6, 3.8)

Stations:

Food Web Station

Everyone wants to eat lunch, but no one wants to become lunch! Students consider a variety of living creatures, their habitats, their food sources, and their adaptations for survival. Students will explore the logistics of food webs and all living organisms involved.

Ladybug Lab

Through careful examination of this beloved beneficial insect, students gain understanding of the predator and prey relationship and its role in balancing the ecosystem. They'll witness its fascinating life cycle and examine its prey—aphids and their galls—under microscopes.

Wildlife Walk

Wildlife observation allows students to experience animals in a holistic way. Students will learn where to look for signs of animals, and how to identify their habitats and food sources.

Grade 4: Peanuts, Popcorn, & Pipe Tobacco

September, October, November

Description:

Visit Green Spring Gardens, the site of a former colonial tobacco plantation, to discover the four most important colonial cash crops — peanuts, tobacco, cotton and corn. Tour our gardens and visit our Historic House to learn the fascinating botany and origins of these plants. Discover how their cultivation changed the course of history here in Virginia and throughout the world. (SOL: Science 4.4, 4.8; VS 1e, VS 2b, VS 2c, VS 3a, VS 4a)

Stations:

Corn: A Native American Discovery

Students learn how the cultivation of this simple grass changed the culture of native people and created a great ancient civilization. Using hands-on examples of corn plants and corn products, students explore its economic importance and uses, both past and present.

Tobacco: The Virginia Colony's Cash Crop

At the Historic House (1784), students see tobacco and learn how it changed the course of American history: from its ceremonial use by native tribes to saving the Jamestown colony from economic failure. Students learn how river commerce and slavery developed to support this important export.

Peanuts: A Multi-Purpose Plant

Students examine the peanut plant and learn how it produces edible seed pods underground. Student's follow the peanut's travels from South America, to Africa, and finally North America—through the Virginia Colony's slave trade—where this humble plant finally achieves popularity through botanist George Washington Carver.

Grade 4 & 5: Virginia Ecosystems: Plants, Animals, Water

September, October, November, December, April, May, June

Description:

Explore Virginia's rich flora and fauna and the human impact on these ecosystems. Take a close-up look at Virginia water in our water lab. Discover plant adaptations as we walk through our native plant trail. Learn about the food web and the adaptations for survival that Virginia animals have in each region of our state. (SOL: Science 3.8, 3.10, 4.4, 4.5, 5.1, 5.5, 5.7)

Stations:

Virginia Animal Station

Discover animals from each physiographic region of Virginia and how they adapt to survive. Learn about animal food webs and try your hand at our adaptation game. Recognize the challenges that Virginia's ecosystems face today.

Virginia Plant Walk

Plants form the base of our food chain. Experience Virginia's ecosystems first hand as you walk through our deciduous forest and stream. Get a first-hand look at plant adaptations for trees and plants in our region.

Virginia Water Lab

Help test the water quality of our stream and ponds. Students will discuss how Virginia's changing landscape has impacted the watershed. We will evaluate the impact human development has played here and discuss ways to become better stewards in our communities.

Grade 5: Geo Trek

December, January, February

Description:

Journey to the core of Earth, from rocks, quakes, and volcanoes to plate tectonics. Explore how rocks form through the rock cycle. Discover ways to identify rocks and minerals using a dichotomous key in our rock lab, and tour the park to see how nature and humans alter our land. (SOL: Science 5.1, 5.7)

Stations:

Rock Lab

What kind of rock is this? Each student will have the opportunity to use a dichotomous (classification) key and go through a series of scientific tests (such as the scratch or crumble test) in order to identify mystery rocks or minerals. This lab includes a brief explanation of different classification keys and their importance as scientific tools.

Rock Cycle Station

How are rocks made? Students dig into Earth's geological history with demonstrations of the rock cycle, weathering, erosion, and plate tectonics. Gain a clear understanding of how geologic forces help create igneous, sedimentary, and metamorphic rocks. Students learn how geology can cause major geological events such as tsunamis, earthquakes, and volcanos.

Green Spring Geo Trek

A tour of the park reveals many geologic features and processes: active and historical sedimentary deposits; metamorphic bedrock; current erosion and erosion control. Students walk our historic grounds to see how the geology they learn in the classroom affects the history and development of the land around them.