

Curriculum Connections for Discovery Field Trips Based on Alabama Course of Study

The Secret Life of Trees Curriculum Connections

The Secret Life of Trees

- Observe, compare, and describe the properties of trees and parts of trees.
- Compare changes in parts of trees through the seasons.
- Acquire the vocabulary associated with the properties and structures of trees.
- Use oral language to describe observations.
- Observe animals that depend on trees for food and shelter.

ACOSS, Kindergarten, Science:

2. Identify the Sun as Earth's source of light and heat.
6. Compare size, shape, structure, and basic needs of living things.
7. Classify objects using the five senses.
9. Identify the seasons of the year.

ACOSS, First Grade, Science:

1. Select appropriate tools and technological resources needed to gather, analyze, and interpret data.
2. Identify basic properties of objects. (Examples: size, shape, color, texture)
4. Describe survival traits of living things, including color, shape, size, texture, and covering. (Examples: plants-green leaves on evergreen trees) (Examples: Describing a variety of habitats and natural homes of animals)

ACOSS, First Grade, Social Studies:

5. Label human-made and natural resources in Alabama. (Example: natural- trees)

Alabama Woodlands
Curriculum Connections

Alabama Woodlands

- Discover 3 ways animals depend on plants as well as 3 ways woodland plants depend on animals.
- Observe ways that plants and animals in a forest community are interdependent.

ACOSS, First Grade, Science

1. Select appropriate tools and technological resources needed to gather, analyze, and interpret data.
2. Identify basic properties of objects. (Examples: size, shape, color, texture)
4. Describe survival traits of living things, including color, shape, size, texture, and covering. (Examples: Describing a variety of habitats and natural homes of animals)

ACOSS, Second Grade, Science

6. Identify characteristics of animals, including behavior, size, and body covering.

ACOSS, Third Grade, Science

7. (Describing the role of plants in a food chain) (Identifying how bees pollinate flowers)
10. Determine habitat conditions that support plant growth and survival.

ACOSS, Third Grade, Social Studies

3. Identify components of various ecosystems.

ACOSS, Fourth Grade, Science

5. Describe the interdependence of plants and animals.

ACOSS, Fifth Grade, Science

9. Describe the relationship of populations within a habitat to various communities and ecosystems.
(Describing the relationship between food chains and food webs) (Describing symbiotic relationships)

George Washington Carver
Curriculum Connections

Dr. George Washington Carver

- Examine the life and unique contributions of Dr. George Washington Carver.
- Discover the importance of nitrogen to green plants.
- Identify, not consume, wild edible plants on the grounds of BBG.
- Identify and harvest peanuts, sweet potatoes and cotton in The Gardens to take back to class.

ACOSS, First Grade, Science

2. Identify basic properties of objects. (Examples: size, shape, color, texture)

ACOSS, First Grade, Social Studies

5. Label human-made and natural resources in Alabama. (Example: natural- cotton)

ACOSS, Second Grade, Science

5. Identify the relationship of structure to function in plants, including roots, stems, leaves, and flowers.

ACOSS, Second Grade, Social Studies

2. Identify past and present contributions of a variety of individuals who have overcome difficulties or obstacles to achieve goals.

6. Identify human-made and natural resources in the world.

ACOSS, Third Grade, Science

7. Describe the life cycle of plants, including seed, seed germination, growth, and reproduction. (Classifying plants according to their features) (Identifying helpful effects of plants – helpful- provide food)

ACOSS, Third Grade, Social Studies

3. Identify components of various ecosystems (Identifying ways in which humans alter the physical environment (Example: planting of nitrogen-fixing crops such as legumes to restore nitrogen to the soil)

ACOSS, Fourth Grade, Social Studies

10. Describe significant social and educational changes in Alabama during the late nineteenth and early twentieth centuries. (Identifying Alabamians who made contributions in the fields of science, education, the arts, the military, politics, and business during the late nineteenth and early twentieth centuries) Example- Science: George Washington Carver

ACOSS, Sixth Grade, Social Studies

6. Identify cultural and economic developments in the society of the United States from 1877 through the 1930s. (Discussing contributions of inventors from 1877 to World War I) Example: George Washington Carver

Garden Gates Curriculum Connections

Garden Gates

- Identify basic parts of a plant and the function of each: roots, stems, leaves, flowers.
- Identify basic parts of a flower and the function of each: petal, stamen (anther, filament, pollen), and pistil (stigma, style, ovary).
- Propagate plants using three different methods of propagation: seeds, cuttings, and division, and take plants back to class.
- Describe the benefit of plants in our daily lives (food, shelter, medicine, clothing, oxygen producer).

ACOSS, First Grade, Science

1. Select appropriate tools and technological resources needed to gather, analyze, and interpret data.
2. Identify basic properties of objects. (Examples: size, shape, color, texture)
4. Describe survival traits of living things, including color, shape, size, texture, and covering. (Classifying plants and animals according to physical traits)

ACOSS, Second Grade, Science

5. Identify the relationship of structure to function in plants, including roots, stems, leaves, and flowers.

ACOSS, Third Grade, Science

3. Describe ways energy from the sun is used. (Examples: plant growth, light, heat)
7. Describe the life cycle of plants, including seed, seed germination, growth, and reproduction. (Identifying plant and animal cells) (Describing how plants occupy space and use light, nutrients, water, and air) (Classifying plants according to their features: Examples: evergreen or deciduous, flowering or non-flowering) (Identifying helpful effects of plants: helpful-provide food) (Identifying how bees pollinate flowers) (Identifying photosynthesis as the method used by plants to produce food)

ACOSS, Fifth Grade, Science

7. Identify common parts of plant and animal cells, including the nucleus, cytoplasm, and cell membrane.

Native American Curriculum Connections

Native American

- Discover and identify varieties of plants used by Native Americans for food, medicine, ceremonies, travel, shelters, dyes, and musical instruments.
- Observe different farming methods used by Native Americans in a 'Three Sisters' Garden.
- Describe how the Native Americans used Earth's natural resources.
- Connect the importance of legends to the Native American culture.

ACOSS, First Grade, Science

1. Select appropriate tools and technological resources needed to gather, analyze, and interpret data.
2. Identify basic properties of objects. (Examples: size, shape, color, texture)
4. Describe survival traits of living things, including color, shape, size, texture, and covering. (Classifying plants and animals according to physical traits)
9. Identify ways to conserve Earth's resources.

ACOSS, First Grade, Social Studies

1. Identify past and present modes of air, land, and water transportation.
2. Describe how primary sources serve as historical records of families and communities.
5. Label human-made and natural resources in Alabama. (Example: natural- trees)

ACOSS, Second Grade, Science

5. Identify the relationship of structure to function in plants, including roots, stems, leaves, and flowers.

ACOSS, Second Grade, Social Studies

1. Compare features of modern-day living to those of the past.
6. Identify human-made and natural resources in the world.

ACOSS, Third Grade, Science

7. Describe the life cycle of plants, including seed, seed germination, growth, and reproduction. (Describing how plants occupy space and use light, nutrients, water, and air) (Classifying plants according to their features: Examples: evergreen or deciduous, flowering or non-flowering) (Identifying helpful effects of plants: helpful-provide food)
13. Describe ways to sustain natural resources, including recycling, reusing, conserving, and protecting the environment.

ACOSS, Fourth Grade, Social Studies

2. Describe cultures, governments, and economies of prehistoric and historic Native Americans in Alabama. (Describing types of prehistoric life in Alabama) (Examples: plants, animals, people)

ACOSS, Fifth Grade, Social Studies

3. Compare major Native American cultures in respect to geographic region, natural resources, government, economy, and religion. (Locating Native American groups by geographic region)

Tropical Rain Forest Curriculum Connections

Tropical Rain Forest

- Explore various plants in a tropical rain forest that give us chocolate, coffee, lemons, bananas, pineapple, and cinnamon.
- Describe six different plant adaptations in a tropical rain forest and locate each in the Botanical Gardens Conservatory.
- Associate plant products with their sources.
- Describe the benefit of plants in our daily lives (food, medicine, oxygen producer).

ACOSS, First Grade, Science

2. Identify basic properties of objects. (Examples: size, shape, color, texture)
4. Describe survival traits of living things, including color, shape, size, texture, and covering. (Classifying plants and animals according to physical traits)
9. Identify ways to conserve Earth's resources.

ACOSS, Second Grade, Science

5. Identify the relationship of structure to function in plants, including roots, stems, leaves, and flowers.

ACOSS, Second Grade, Social Studies

7. Describe ways people throughout the world are affected by their geographic environments. (Comparing physical features of regions throughout the world) (Example: discussing differences in a desert environment, a tropical rainforest, and a polar region) (Identifying positive and negative ways people affect the environment)(Example: positive-reforestation cleared land)

ACOSS, Third Grade, Science

7. Describe the life cycle of plants, including seed, seed germination, growth, and reproduction. (Describing how plants occupy space and use light, nutrients, water, and air) (Classifying plants according to their features) (Examples: evergreen or deciduous, flowering or non-flowering) (Identifying helpful effects of plants) (Example: helpful-provide food)
10. Determine habitat conditions that support plant growth and survival.
13. Describe ways to sustain natural resources, including recycling, reusing, conserving, and protecting the environment.

ACOSS, Third Grade, Social Studies

2. Describe physical characteristics, including landforms, bodies of water, soil, and vegetation of various places on Earth.
3. Identify components of various ecosystems.

ACOSS, Fifth Grade, Science

9. Describe the relationship of populations within a habitat to various communities and ecosystems.

ACOSS, Sixth Grade, Science

2. Describe factors that cause changes to Earth's surface over time. (Comparing constructive and destructive natural processes and their effects on land formations)
7. Describe Earth's biomes.