

Life Science- Habitats of Georgia and Pollution Study Guide

Vocabulary-

Environment- Everything that surrounds a living thing

Ecosystem-All the living and the nonliving things that interact in a place

Habitat-The place where a plant or an animal lives

Trait- A characteristic, or feature, of a plant or animal

Survive- Stay alive

Adaptation- A trait that helps a living thing survive

Hibernate-To spend the winter in a kind of deep sleep

Migrate-To travel from one place to another and back again

Drought-A long period with very little rain

Terrarium- A container, usually glass or plastic, in which plants are grown and sometimes smaller land animals

Pollution- Harmful materials in the environment

Recycle- To breakdown a product and use its materials again

Non-Living- Things that are not alive (water, sun, air, rocks, mud, soil)

Reproduce- To produce more of a living thing

S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.

a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.

Habitat	Characteristics	Plants	Animals
Mountain-a high, raised part of Earth	Freshwater lakes, caves, rivers, and streams; cold temperatures in the winter, mild summers,	Eastern hemlocks, azaleas, mountain laurels	Rainbow trout, black bears, bats,
Piedmont-the "foothills" of the mountains, the region of Georgia that is between the mountains and the coastal plains	Rolling hills, river valleys, foothills of the mountains, streams,	Oak and hickory trees, elms, maples	Spotted Salamander, red squirrels, deer, catfish, bass, foxes
Coastal Plains,	Flat plains, hot summers, mild winters, sandy soil	Live oak trees, saw palmetto, and longleaf pine trees	Gopher tortoise, eastern diamondback rattlesnakes, quail

Coastal Wetlands- (Swamps, Marshes)-a place where the soil is often wet and spongy	Land that is wet all or most of the year, soil is wet and spongy, animals and plants that survive here would need to be able to survive rising and falling water levels, changing of salt levels in water, hot sun, erosion	Salt water marsh grass, waterlillies, pitcher plant, bladderwort, venus fly traps, cypresses	Alligators, leopard frog, sandhill cranes, bladderwort, venus fly traps
Coast	Beach, sand dunes, dry, sandy soil, fewest types of plants	Sea oats and beach grass	Ghost crabs, clams, star fish
Atlantic Ocean	Salt water		Bottlenose dolphins, whales, shrimp,

b. Identify features of green plants that allow them to live and thrive in different regions of Georgia.

Plants	Features that allow them to live and thrive in different regions of Georgia Examples: physical adaptations-long roots, thorns, thick stems, sticky seeds, colors, scents, seeds reproduce
Pitcher plant	This plant is shaped like a rolled up leaf forming a tube called a pitfall trap. Inside are little hairs, or tentacles, that point toward the bottom of the inside of the tube. This is so that the insects that get into the tube cannot make their way out. They live in swamps or bogs.
Sweetshurb	Draws water from Georgia's moist, rich soil through its roots
Salt water grass	This grass grows best in soil that gets flooded with salt water from the tide every day.

c. Identify features of animals that allow them to live and thrive in different regions of Georgia.

Animals	Features that allow them to live and thrive in different regions of Georgia Examples: behaviors-hibernate, reproduce, and migrate physical adaptations-sharp claws, colors (camouflage), long legs, long necks, shells, mimicry
Salamanders	They survive in the wet forest floors of the piedmont by eating worms, insects, and snails. They hunt at night and live under logs during the day.
Beaver	A strong, wide tail helps them swim through water
Coyote	This animal is adapted for high-speed running to catch fast-running prey.
Clam	It can bury itself in the sand to help them find shelter.
Chipmunk	It spends the winter months hibernating to use less energy. Its heartbeat rate slows and it lives off of its body fat.
White-Tail Deer	They have long, thin legs that help them run from danger quickly.
Warbler	This bird migrates during winter months from Canada to the United States and Mexico to survive.

d. Explain what will happen to an organism if the habitat is changed.

How are animals affected when a forest is cut down? Animals are harmed because they lose their shelter.

What would happen if all of the plants were removed from a terrarium? The insects would not have enough food and would die.

There are many ponds throughout Georgia. They often have plants living in them. If a cold spell kills the plants in the pond, what might happen to the other organisms in the pond? The organisms might die.

S3L2. Students will recognize the effects of pollution and humans on the environment.

- a. Explain the effects of pollution (such as littering) to the habitats of plants and animals.

Littering- Trash thrown on the ground that can be harmful to plants and animals

Water pollution- Pollution in the air and on the land can get into water when there is rain. Rain washes pollutants from the air and land into the water.

The polluted water can make humans and animals sick. Chemicals that protect crops from insects can get into streams and harm fish and other organisms.

Air Pollution- Harmful materials in the air. Smoke, mostly from trucks, cars, and factories, is one cause of air pollution.

b. Identify ways to protect the environment.

- Natural Resources- A material that is found in nature and that is used by living things
Example: air, rocks, minerals, oil, salt, water, wood
- Conservation of resources
Examples: Reuse paper or wrapping paper, make a swing out of an old tire, ride a bike to the store rather than drive a car
- Renewable Resources- A resource that can be replaced quickly
Examples: the sun, trees, water, air
- Nonrenewable Resources- A resource that, when it is used up, will not exist again during a human lifetime
Examples: natural gas, soil, coal, oil
- Recycling of materials
Symbol for recycling:

