

South Carolina Aquarium

6th – 8th Grade Scavenger Hunt

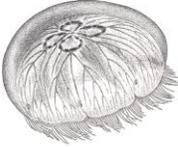
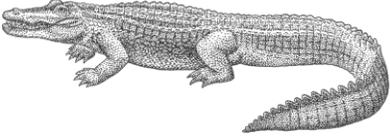
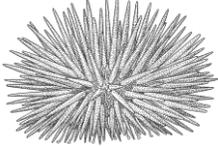
Name Answer Key

The South Carolina Aquarium is designed to show you the habitats of South Carolina from the Mountains to the Sea. Head up the escalator to start your journey through our state! This information is helpful:

- Answers for **page 1** are found in no certain order.
- Answers for **pages 2-4** can be found in order by starting in the mountains and walking to the sea.

All Galleries

Taxonomy is the classification of organisms. This is one way scientists can learn about and protect the natural world. As you walk around, look for the following animals. For each, figure out the phylum and the Aquarium exhibit each animal can be found. Look below this table for phylum help.

	Phylum	Aquarium exhibit
 Moon jelly	<i>Phylum Cnidaria</i>	<i>Moon Jelly Exhibit</i>
 American Alligator	<i>Phylum Chordata</i>	<i>Blackwater Swamp Exhibit</i> <i>Rice Fields Exhibit</i>
 Octopus	<i>Phylum Mollusca (not shell)</i>	<i>Camouflage Exhibit</i>
 Sea Urchin	<i>Phylum Echinodermata</i>	<i>Touch Tank Exhibit</i>

Phylum Chordata – animals with a vertebrae

Phylum Porifera – have pores, filter feeders

Phylum Cnidaria – tentacles, stinging cells

Phylum Mollusca – soft muscular foot, hard shell

Phylum Echinodermata – spiny or bumpy skin, water vascular system

Phylum Arthropoda – jointed appendages, eyes, exoskeleton

The Mountains

Mountain Forest exhibit:

Circle the word in each pair that best describes a mountain stream.

- Fast-moving or Slow-moving
- Hot or Cold
- Oxygen-rich or Oxygen-poor

Thinking question: How do the stream characteristics that you circled influence what animals can be found in the mountains?

The animals must be adapted to live in fast currents, cold temperatures and oxygen rich water.

Piedmont

South Carolina can be broken down into many watersheds. Use the watershed map near the log to answer these questions.

1. What is a watershed?

An area of land that collects rain water into streams and rivers that eventually drain to the ocean.

2. The South Carolina Aquarium is located in what watershed? *Santee Watershed*

3. Your school is located in what watershed? *Answers vary.*

Reservoir exhibit:

Name 1 pro and 1 con of damming a river.

Pro: *Flood control, fishing, boating
Recreation, irrigation*

Con: *Disturbs river flow and animal migration,
habitat destruction, changes landscape*

Shifting Shorelines map:

How does the rotating map help explain how marine fossils can be found in the Coastal Plain and terrestrial fossils can be found 20 miles off the coast?

The map shows how over history the shoreline has moved because of climate change. Land once covered by water will leave behind aquatic animal fossils where as land cover by water that was once not covered by water would leave behind land animal fossils.

Coastal Plain

Brownwater Swamp and Blackwater Swamp exhibits:

What makes a Brownwater Swamp brown?	What makes a Blackwater Swamp black?
<i>Red clay sediment from the Piedmont being carried by rain water into the Coastal Plain swamps during the rainy season.</i>	<i>Tannins from tree leaves stain the water a darker color. The tannic acid from the leaves leech into the water as leaves fall in the swamps.</i>

List 2 reasons why swamps are vital ecosystems in South Carolina.

1. *Great habitat for animals and plants
Filters water to help get rid of pollutants
Helps control flooding*
2. *Answers can be many. These are a few.*

Carolina Bay exhibit:

Describe a Carolina Bay habitat.

Shallow depressions, ringed with sand

Why are carnivorous plants found in Carolina Bays and no other habitat in South Carolina?

Carnivorous plants live in areas where the nutrient level in the soil is low. These plants get nutrients by digesting insects.

Saltmarsh

Where does a saltmarsh habitat get its nutrients (circle your answer)?

Land

Sea

Land and sea

Name 2 functions of a saltmarsh.

- Sponge to absorb water and prevent flooding
Filters pollutants from water and land*
- Shields the land from wave action and storms*

Thinking question: What would happen to South Carolina’s coast if our saltmarshes were destroyed?

The coastline would not be protected during hurricanes and storms, causing habitat destruction.

Use the given terms and match them to each description (each letter may be used more than once).

- | | | | |
|---|--|----------|--|
| A | Population – a group of organisms that can breed with one another (all the same species in an area) | <u>A</u> | All the red drum |
| B | Community – all the organisms (living things) that inhabit a particular area | <u>D</u> | Sporobolus grass is a producer |
| C | Ecosystem – all the living and non-living things in a particular area | <u>C</u> | All the plants, animals, pluff mud and water |
| D | Niche – the role an organism plays in an ecosystem | <u>D</u> | Oysters clean the water as they filter feed |
| | | <u>D</u> | Brown pelican is a consumer |
| | | <u>B</u> | All of the blue crabs and fiddler crabs |
| | | <u>A</u> | All of the great blue herons |
| | | <u>B</u> | All the plants and animals in the saltmarsh |
| | | <u>D</u> | Diamondback terrapin in an omnivore |

Coast

Aquatic Invaders Exhibit

Lionfish are invaders. Even though they are beautiful, they should not be in the waters of South Carolina.

Explain why they are such a problem.

Lionfish has no natural predators in South Carolina. They compete for space and food and without predators their populations grow out of control.

What can be done to help the problem?

Many restaurants are serving them on their menu. Many divers are capturing them while diving to rid them from our area. People are asked to not release pets into the wild.

Balanced Ocean Exhibit

Why should you “Ask before You Order?”

To support local seafood and to know where you seafood is coming from and how it’s being caught. This makes for an informed consumer and may help with the overfishing problem.

Ocean

Great Ocean Tank

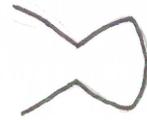
Fish have many fins. The caudal, or tail, fin is used to help them have the power to swim. The shape of the tail fin determines if they are a fast (forked tail) or slow (round tail) swimmer. List 2 fast fish and 2 slow fish.

Forked - fast



1. *Jacks*
Sharks
2. *Tomtate*
Blue runner
Permit
Pompano

Round - slow



1. *Porcupine puffer*
Graysby grouper
2. *Vermillion snapper*
Black sea bass
Angelfish
Tripletail

Zucker Family Sea Turtle Recovery

Sea turtles can be injured in many different ways. Sometimes they are harmed by humans and sometimes by natural causes. Pick one turtle in recovery and fill out the following information:

Name of your sea turtle:

Species of your sea turtle:

Answers will vary depending on turtle picked. Go to

<http://scaquarium.org/sea-turtle-care-center/> in order to check answers.

Why is your sea turtle in recovery?

Was the issue caused by humans or natural causes? Explain.

What can you do to help this sea turtle?

Aquarium Wrap-up

Now that you have travelled through the state of South Carolina, list 2 things you can do to protect South Carolina habitats and the animals that live there.

1. *Recycle*

Don't litter

Pick up trash

2. *Use canvas bags instead of plastic*

Use reusable bottles for drinks

Reduce single use plastics (forks, straws,...)

Join a conservation organization

This just names a few...