



## **<u>USEFUL THINGS TO TRY:</u>** Practice with your teacher or at home with a parent.

1. *Fill It In* Use a grid like the one below to test yourself after you have studied the features, creatures, and ecology of various ocean locations. One row is completed as an example. There are many correct answers!

Location or Body of Water	Geological Feature	Characteristic Marine Mammal or Fish	Characteristic Invertebrate
	Mid-Ocean Ridge		
Georgia Coast	Barrier Islands and Marshes	North Atlantic Right Whale	Fiddler Crab
Warm, shallow estuaries and rivers		West Indian Manatee	
			Sea Urchin

 Ocean Depth Contours Use a physical map of the world to draw a depth contour as you "walk" between these pairs of cities. (You will be walking underwater, so please bring plenty of air!) Label the major features of interest.

Boston, Massachusetts	$\rightarrow$	La Rochelle, France
Freetown, Sierra Leone	$\rightarrow$	Port of Spain, Trinidad and Tobago
Tokyo, Japan	$\rightarrow$	Jakarta, Indonesia

A map suitable for the last of these is included with this packet. It was clipped from a full world map that you can obtain from <u>www.GEBCO.net</u>, the website of the General Bathymetric Chart of the Oceans, a not-for-profit scientific organization committed to the study of the ocean floor. The goal is for students to identify major types of features rather than specific geographical names.



3. *Flash Cards* Make your own flash cards to review terms and names of creatures or plants native to the Georgia shore. This Quizlet website provides a nice example, although we noticed it had some spelling errors.

https://quizlet.com/217487770/oceanography-flash-cards/

- 4. A Market Visit Where's That Fish From? Fish are an important and healthy protein source for people around the world. An excellent place to see the bounty of the oceans right here in our county is Your DeKalb Farmers Market, 3000 E Ponce de Leon Ave, Decatur, GA 30030. On weekends, the fish market always has many different varieties for sale. Go for a visit with your parents or a friend's family, and try to answer the questions below by using the signs placed by each fish:
  - Can you find 3 different *ocean caught* fish? List each one's name and ocean it came from.
  - Can you find any *farm-raised* fish? List the name and body of water (or state) it came from.
  - Are there any *crustaceans* on sale today? Where are they from?
  - Can you find any of these at YDFM? What aisle? Seaweed, sea salt, anchovies, shark

## **<u>USEFUL WORDS TO KNOW:</u>** Here are some representative words you should know.

Coast	River	Continental Shelf	Saline	Vertebrate	Algae
Beach	Sea	Abyssal Plane	Freshwater	Invertebrate	Coral
Dunes	Ocean	Mid-ocean Ridge	Marine	Cartilaginous	Mammal
Tidal	Estuary	Coral Reef	Aquatic	Crustacean	Bony Fish

## **USEFUL WEBSITES and TYPICAL QUESTIONS:** We verified these in January of 2020.

To help teachers and parents identify the general level of difficulty, we suggest having students study these Georgia Department of Natural Resources web sites and then try the questions below.

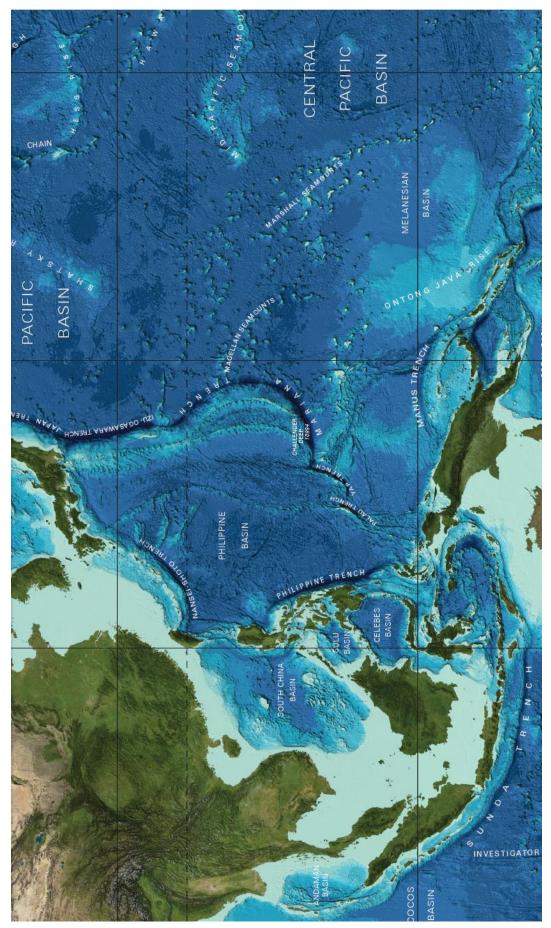
- https://georgiawildlife.com/conservation/rightwhales
- https://georgiawildlife.com/conservation/manatee
- https://georgiawildlife.com/conservation/seaturtles

Sample questions:

- 1. What is the state marine mammal of Georgia? (Right whale)
- 2. Why do right whales come to coastal Georgia? (calving baby whales born here)
- 3. Is the right whale a toothed whale or baleen whale? How does it eat? (It is a baleen whale. It pulls water through comb-like filters to capture small creatures like krill.)
- 4. What do manatees eat? (marsh grass, other aquatic plants)
- 5. What is the major human-caused danger to manatees? (collision with fast boats)
- 6. Why do only female loggerhead turtles come onto beaches? (to lay eggs)
- 7. How many eggs does a loggerhead turtle lay in one nest? (100-120. Wrong answers would be selections like 2 eggs or 1000 eggs.)
- 8. Predators attack some sea turtle nests. Name three of those predators. (fire ants, raccoons, ghost crabs, feral hogs, humans)

We found a nice list of websites provided by another teacher that we checked, modified, and attached to this Tip Sheet. Please look for the Study Sites on a separate page below.

For use with Practice Exercise #2 above (Tokyo to Jakarta). Identify features such as: Continental shelf, bay, sea, abyssal plain, volcanic island, trench, and so on.



Study Sites: Deep Blue Sea



All sites verified 01-27-2020.

Ocean Geography and Animals National Geographic - The Oceans Neo k12 NOOA - National Ocean Service NASA Climate Kids Monterey Bay Aquarium - Animal Guide Enchanted Learning • Intertidal Zone

<u>Coral Reefs</u>
<u>Woods Hole Oceanographic Institute</u>
<u>OCEANA - Marine Life Catalog</u>

Whales <u>NOAA - Whale Species</u> <u>GA DNR - Right Whale Conservation</u> <u>New GA Encyclopedia - Right Whales</u>

Sharks <u>Kids Zone - Sharks</u> <u>OSEARCH.org - SHARK Map!</u> Georgia DNR - Sharks of the GA Coast

Sea Birds
Photographs by Phillip Colla
Photographs by Melissa Mayntz

Coral Reefs <u>NOAA - Coral Reefs</u> <u>NCEAS - The Coral Reef Biome</u> <u>National Geographic - Corals</u> <u>Enchanted Learning - Coral Reefs</u> <u>Science Kids NZ - Great Barrier Reef</u> Quizzes <u>Shark Quiz - FunTrivia</u> <u>Shark Quiz - Nat'l Geo Kids</u> <u>Marine Biology Quiz - McGraw-Hill</u> <u>Birds of Antarctica Quiz - FunTrivia</u> <u>Many Quizzes - FunTrivia</u> <u>Whale Quiz - CetaceanWatching.com</u> Ocean Issues Quiz - Nat'l Geo