

Girl Scout Council of the Florida Panhandle Oceanography Try-it



Modeled after the Girl Scouts of Nassau County
Oceanography Try-it

Oceanography is the science that studies the oceans. It includes the study of the geology or sea floor, biology or living things, chemistry, and physics or motion of the ocean. Ocean water covers over 70% of our planet. Water is crucial for our survival and even controls our weather. Learn more about this interesting field by doing this Try-it.

To earn this Try-it, complete FOUR of the following nine activities:

1. Identify and label a map showing the oceans of the world. Map attached.
2. Make a poster or discuss the different things that oceanographers study.
3. Discuss different local marine habitats; identify animals and/or plant life you would most likely see there. What marine life is found only along the Gulf Coast?
4. Define endangered species. Identify at least one local example that is dependent on the marine environment. Discuss ways we could make a difference.
5. Explore ocean circulation with an experiment using water of different densities. Observe how these mix and describe what you see. (Littlefield reference) i.e., salt vs. fresh water.
6. Find out why the Ocean water is salty at www.palomar.edu/oceanography/salty_ocean.htm
7. Discuss how the ocean affects our weather, especially along the Gulf Coast. Talk about hurricanes, Global Warming and Climate Change.
8. Access and explore the website <http://www.womenoceanographers.org> Discuss the different jobs these women have. OR interview local career women who work with our Gulf Coast marine life.
9. Do one of the following and share your findings with your troop:
 - a) Visit the Gulfarium in Fort Walton Beach or Gulf World in Panama City.
 - 1) Name 4 marine habitats
 - 2) What animals live there
 - 3) What did you like the most about the center?
 - b) Explore the beach or Gulf Islands National Seashore and speak with a Park Ranger. Make a poster or diagram about the animal and plant life of the seashore.

c) Visit Sea World in Orlando or one regional Aquarium, such as New Orleans Aquarium, Chattanooga Aquarium or Atlanta Aquarium. Identify 3 different examples of marine life and describe 2 things about the environment they inhabit.

Oceanography Resources

Heilegman, Deborah. *The Mysterious Ocean Highway*, Raintree Steck-Vaughn Publishers 2000. (p. 30-31 shows Amy Bower, a women oceanographer at work)

Lambert, David. *The Kingfisher Young People's Book of Oceans*, Kingfisher, 1997.

Littlefield, Cindy A. *Awesome Ocean Science*, Williamson Publishing Company, 2003. (This reference has directions for many experiments that can be used with your troop.)

Pike, Katy and Maureen O'Keefe. *Oceans*, Chelsea Clubhouse, 2003. (particularly good for younger girls)

Scholastic Atlas of Oceans, Scholastic Inc. 2004.

"Women in Oceanography", *Oceanography*, vol. 18, No.1, March 2005.

Internet Resources

www.enchantedlearning.com/geography Oceans of the World

www.womenoceanographers.org Women oceanographers

www.gulfarium.com Florida's Gulfarium in Fort Walton Beach

www.gulfworldmarinepark.com Gulf World in Panama City, FL

www.nps.gov FL & MS Gulf Islands National Seashore Check out Animals and For Kids

www.georgiaaquarium.org World's largest aquarium in Atlanta, GA

www.tnaqua.org Tennessee Aquarium in Chattanooga, TN

www.auduboninstitute.org Audubon Aquarium of the Americas in
New Orleans, LA

www.seaworld.com Sea World in Orlando

<http://funschool.kaboose.com/globe-rider/under-the-sea/>
Under the Sea - Fun Activities for children

<http://topex-www.jpl.nasa.gov/education/fun-activities.html>
Ocean Surface Topography from Space, Education – Stuff for Kids