

# Marine Life

## Introduction

This Badge was designed to help Juniors discover the importance of the ocean and the animals living in and around the water. By closely examining some of the details of the coast, the girls will learn about the delicate balance of the oceanic environment. You must complete 5 out of 7 activities. The starred (\*) items are required.

\* 1. Observe the waves crashing on the beach. These waves are formed by the wind on the open ocean. Not all waves are formed by the wind. Tsunamis are caused by the sudden vertical movement of the earth along faults. Read stories of tsunami that have occurred, what kind of damage did these waves cause? Tsunami are improperly called "tidal waves", they are in no way related to the tides. Find the high tide mark and the low tide mark on the sand. How many times a day is there a high tide and a low tide? What causes these tidal patterns?

2. There are many kinds of seaweed that live in the ocean. Look closely at some seaweed that has washed up on the beach. Seaweed is very important living and growing in the ocean and it is also commercially important to humans. Seaweed is often used as food, in cosmetics, toothpastes and other household items. What items around your own home can you find that contains seaweed or the ingredients algin or carrageenan?

3. The tropical reefs are brimming with a variety of life. Visit an aquarium, a pet store or look in books to see these beautifully colorful animals. Look at the differences between these warm water fish and the fish that live in colder water.

4. Visit the tide pools and closely observe all the animals living in this area. Notice that there are many animals living together in a relatively small area. Watch how these animals interact with each other. Do most of the animals get along or are they constantly competing?

5. You can find many marine birds at the coast. Observe the different species of birds at the beach. How do these birds look different? Why do you think they look this way? How do these birds eat? Watch to see if these birds are scavengers, if they dive into the water for fish, if they stick their long skinny bills into the sand or if they have other feeding techniques.

\* 6. There are many marine mammals that live in the ocean and along the coast. What are the characteristics of a mammal? What marine mammals can you see on a visit to the coast? Whales, the largest animals on Earth, can be seen at certain times of the year during their migration along the coast. Contact a few places that offer whale watching trips. Compare their prices and find out the best time of the year to go whale watching.

7. 71% of the Earth is covered by water, so it is very important that we understand and care for the ocean. In what ways does pollution affect the organisms living in the ocean? How does the polluted ocean affect humans? What are some ways that you can help stop the pollution of our delicate ocean?

