

ACTIVITIES: EXPLORE THE OCEANS

1. Explore myths and legends of the sea (e.g., mermaids, the Bermuda Triangle, giant squids). Then form teams and play the "Fact or Myth" game: a member of one team makes a statement (e.g., the blue whale grows to 100 feet long), and the other team must guess whether the statement is a fact or a myth. This exercise can also be done as a "Quiz Show" or relay.
2. Investigate sea salt. What is its composition? How is it different from normal table salt? Look at sea salt and table salt under a microscope? Try to determine how the sea became salty, and why the oceans are not becoming noticeably saltier.
3. Construct a bulletin board illustrating the kelp forest food web. Include as many plants and animals as possible. You might even build a model kelp forest in the classroom, using green crepe suspended from the ceiling as kelp (a fan can simulate waves and currents), and papier-mache animals (e.g., sea otters, sea urchins, killer whales, crabs, and rockfish).
4. Investigate the similarities between terrestrial (land) and marine (sea) ecosystems. Compare and contrast the following: kelp forest vs. hardwood forest, tide pool vs. fresh-water pond, intermediate depths in open ocean vs. desert, salt marsh vs. fresh marsh.
5. Study the lives of various types of fishermen (e.g., Chesapeake Bay watermen, Louisiana shrimpers, New England lobstermen) as revealed in literature and art. How have the life styles of these people changed in the past 100 years? Act out a day in the life of one of these fishermen.
6. Find out how ocean explorers used the stars, a sextant, a compass, and a clock to navigate. Demonstrate these methods. Contrast these methods (dead reckoning and astronomical observations) with modern navigational methods (e.g., radar, sonar).
7. Explore ocean careers in the 15th century, the 18th century, and today. How have these professions changed? What new ocean careers will develop in the next fifty years (e.g., in aquaculture, in seabed mining, in exploration)
8. Use a globe to plot major ocean currents and the paths of ocean animals that migrate (e.g., terns, sea turtles, whales). How do ocean currents and wind patterns affect animal migratory patterns? How did these factors affect explorers such as Columbus and Magellan?
9. Investigate ocean pollution. What are the major sources of marine pollution? What positive steps have been taken to limit ocean pollution? How do various types of pollution affect marine wildlife?