

# Oceanography/Marine Science Unit

## Book, Video, Internet Resource

### Suggestions



*The number following the author's name is how many copies are in the JMRL Library system. Have fun!*

#### *Easy Reading Books:*

1. Bob and Shirley, A talke of two lobsters by Harriet Ziefert (4)  
An adventure tale based on a true story. Bob and Shirley are two huge old Maine lobsters who get caught in a net and shipped off to market. What happens to them? Read this title to find out! Beautiful pictures with simple text.
2. Fish Faces by Norbert Wu (6)  
A colorful look at many different faces of fish! Fierce ones, sad ones, friendly ones, even mad ones! Fun.
3. Atlantic by G. Brian Karas (6)  
A very colorful, poetic book on the wonder of the Atlantic Ocean. Fun!
4. Rays by Martha E.H. Rustad (2)  
Beautiful photographs of rays with simple text.
5. An Octopus is Amazing by Patricia Lauber (3)  
Did you know that an octopus can change color in a flash? Usually it matches its surroundings. It can give off a cloud of ink-black liquid if it is being attacked. Very colorful and interesting. Highly recommend.
6. What's it Like to Be a Fish? by Wendy Pfeffer (10)  
Interesting text and beautiful pictures explain the life of a fish.
7. Come to the Ocean's Edge by Laurence Pringle (8)  
This title was a favorite in our home. Beautiful painted pictures, written in such a way that you feel like you are standing on the beach looking at the ocean. You can almost hear it and feel the spray. At the end, there is a page with brief information about the pictures on each page. Very Cool!
8. Exploring the Deep, Dark Sea by Gail Gibbons (7)  
The author takes us below the water's surface to reveal the fascinating and incredible life-forms that lurk in the deep dark sea. Highly recommend.
9. Across the Big, Blue Sea by Jakki Wood (8)  
Simple text and colorful illustrations show more than 60 ocean creatures.
10. Starfish by Edith Thacher Hurd (10)  
Simple text and pictures describe the variety of starfish on the beach, the manner that the starfish eats and grows as well as its life cycle. Very interesting!
11. Sea Urchins by Jason Cooper (3)  
This title is from the discovery library of animals without bones. Imagine running on 500 legs or having 5,000 babies! These amazing boneless animals don't have skeletons like we do! Great photos and text. Highly recommend!
12. Sea Stars by Jason Cooper (3)  
Another great title from the discovery library of animals without backbones.
13. Hammerhead Sharks by John Prevost (3)  
Whale Sharks by John Prevost (3)  
Great White Sharks by John Prevost (3)  
Tiger Sharks by John Prevost (3)  
This set of shark books are full of great photos and information. Meet one of the most misunderstood and feared creatures of the sea- the shark! Learn how to identify them and where they are found. Great set!
14. Clinging Sea Horses by Judith Jango-Cohen (10)  
Gorgeous pictures of sea horses! Why do sea horses cling? Where do they live? How do they swim? What do they eat? Why do some have a pouch? Highly recommend.

15. SeaHorses by Twig C. George (6)  
Another tile with gorgeous pictures of different kinds of sea horses! Did you know that seahorses wrap their tale around sea grass or coral so that they don't get swept away by the current? Did you know if you were a seahorse that you could roll your eyes in two different directions and not get dizzy?  
(\*p.6 contains an evolutionary statement. The word 'magic' occurs a few times. We know that seahorses are such cool and interesting creatures because God made them that way!)
16. Thresher Sharks by Sarah Palmer (7)  
This is a title from the shark discovery library. Great pictures and easy-to-understand text. Fun!
17. My Visit to the Aquarium by Aliki Brandenberg (10)  
Following a child through their visit at an aquarium is very interesting and fun! Beautiful pictures.
18. Think of an Eel by Karen Wallace (1)  
Where do eels live? What do they look like? What do they eat? Beautiful, colorful drawings. Fun!
19. The Birth of a Whale by John Archambault (3)  
Simple text and pictures explain the entry of a new whale into the world and getting its crucial first breath.
20. Baby Whales Drink Milk by Barbara Juster Esbensen (7)  
A let's read-and-find-out science book, stage 1 for early readers. Did you know that whales are mammals and that their babies drink milk? They breathe air through their lungs. The baby whale, or calf is 14 feet long at birth, about the length of a canoe! Read to find out more.
21. The Wonderful World of Seals and Whales by Sandra Lee Crow (4)  
This title is for young explorers by the National Geographic Society. Easy text and information on seals and whales. Great pictures!

*step-up readers followed by more in-depth reading:*

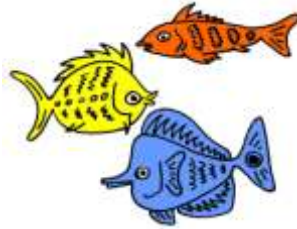
1. Humphrey The Lost Whale by Wendy Tokuda and Richard Hall (10)  
An incredibly interesting tale about Humphrey the lost whale! Based on a true story. While migrating, Humphrey made a wrong turn. He ended up wandering under the Golden Gate Bridge and into the San Francisco Bay! He then heads up a shallow, fresh water river. The story tells how he is saved and helped to find his way back to the ocean. A wonderful story! Highly recommend.
2. Sea Critters by Silvia A. Earle (10)  
A National Geographic society book. You won't want to miss this one! Totally awesome photographs of sea creatures with very interesting text to go along. In this title, you will learn about animals from sponges to sea lilies, each shown in its own scientific category. With simple, clear text, underwater photography, and watercolor artwork, you'll get a peek at the amazing variety of life under the sea.
3. Do Whales Have Belly Buttons? by Melvin and Gilda Berger (10)  
A scholastic question and answer series book. One of my favorites. Written in a question and answer style. Great reading and pictures.
4. Dolphins! by Sharon Bokoske and Margaret Davidson (7)  
An interesting step-into-reading book. Did you know that dolphins are known for saving lives? They are truly a miraculous creature!
5. Animals of the Oceans by Stephen Savage (3)  
This author takes you on a journey through the watery depths of the world's oceans. Which mammal was the largest that ever lived? Why does the marine iguana swallow stones? Read this title to find the answers and much more.
6. Ocean Wonders by Eunice and Faith Holsaert (1)  
This is an older title (copyright 1965) which has simple drawings and great information. A student reading well could easily read this on their own. (\*\*parental caution: one evolutionary statement on the development of the coelacanth).
7. Ocean Going Giants by Ross R. Olney (1)  
This is an excellent book about all types of ships. Huge passenger ships with swimming pools and tennis courts, shops and movie theaters, carry 100's of people around the world. Also included are fighting and working ships. Black and white photos and interesting text. A great title for learning about the different ships that are out on the ocean!
8. The Deep-Sea Floor by Sneed B. Collard III (5)  
Mr. Collard takes us on a journey from the past when people believed that the ocean was bottomless, to the present, when scientists use submersibles and remote-controlled vehicles to research the ocean's secrets.
9. Sea Horse by Rebecca Steffoff (8)  
Did you know that seahorses are ticklish? How do these unusual, slow-moving fish hide from their enemies? Excellent information on these interesting horses of the sea.
10. Octopus by Rebecca Steffoff (8)  
Do you know what an octopus really looks like? Sometimes they are long and thin; other times they puff up like a balloon. They are gentle and even shy creatures! Beautiful photos and interesting text.

11. Fish Tales by Nat Segaloff & Paul Erickson (2)  
They shock—they trick—they attack, hide, and shine headlights from beneath their eyes! They are fish—and there are more than 25,000 different varieties! Would you believe that some fish won't go anywhere without a bodyguard? (\*parental caution: skip p4,5 to avoid how evolutionists believe fish evolved) Very colorful drawings and interesting text! Highly recommend from p6-32 !
12. Jellyfish and Other Stingers by Joseph K. Brennan (6)(this title is in the World Book's Animals of the World set). Jellyfish are not fish—although they do spend their entire lives in water. If you are thinking of the jelly you eat with peanut butter, the answer is no! That jelly is fruit, but jellyfish are made of another kind of jelly. Jellyfish jelly is an amazing blend of salt, protein and lots of water. Read on to find out more!
13. Killer Whales, and Other Toothed Whales by Julie A. Fenton (6)(this title is also in the World Books Animals of the World set) Topics covered include what is a toothed whale? How does clicking help killer whales hunt? Are toothed whales in danger? Read on to find out the answers.
14. Animals of Sea and Shore (a new true book) (2)by Illa Podendorf  
Beautiful photos and information on a large variety of sea animals. Great!
15. Whales by Seymour Simon (10)  
The whale is the world's gentle giant. Its body is larger than a trailer truck, and it can leap out of the water with amazing agility and skim through the oceans at dizzying speeds! Great detail and pictures throughout.
16. Narwhals by Sarah Palmer (4)  
Humpback Whales by Sarah Palmer (3)  
Killer Whales by Sarah Palmer (3)  
These three titles are in the 'Whale Discovery Library series'. Excellent information and pictures in each.
17. Dolphins by Sarah Palmer (10)  
This title is from the Sea Mammal Discovery Library. Great pictures and information.
18. Killer Whale by Caroline Arnold (9)  
Interesting and informative text describes the killer whale's daily life and habits, both in captivity and in the wild. Baby Shamu, one of the few killer whales born in captivity is introduced to the reader.
19. Chessie, the Travelin' Man by Randy Houk (6)  
A delightful tale about Chessie, a manatee, based on a true story. Written in poetic style, this title tells of Chessie's adventures and how he gets as far north as the Chesapeake bay and forgets to go south for the winter! Fun.
20. Sam the Sea Cow by Francine Jacobs (6)  
Sam is called a sea cow because that is what he looks like! Another name for Sam is manatee. Follow Sam from birth to age three as he goes through the adventures of his life. Great information on the sea cow.
21. The Land Beneath the Sea by Julian May (2)  
A very informative book about what lies below the ocean. There is a vast complicated terrain under the ocean that was hardly suspected at the beginning of the century! Interesting reading with simple drawings.

*more in depth reading:*

1. How to be an Ocean Scientist in Your Own Home by Seymour Simon (2)  
This is a great resource that contains explanations and experiments about oceans. I will be using some of the experiments during class. What's in seawater? Why are icebergs dangerous? How do heavy metal ships float? The author helps you explore the mysteries of the ocean in 24 easy-to-understand experiments that you can do.
2. What's in the Deep? by Alese and Morton Peckter (10)  
This title will introduce the reader to the marvels of the ocean. The story is told through the eyes of some children who go on an ocean adventure. Fun!
3. What is a Fish? by Robert Snedden (2)  
What makes a fish a fish? How can creatures as different as the great white shark and the tiny minnow both belong to the same class of animals? Beautiful photos and drawings.
4. Focus on Oceans by Angela and Derek Lucas (5)  
Land does not really end where the sea begins. This book shows us just what lies beneath the oceans. Geologically, the ocean floor is very similar to the land that we see: however, the life found there is quite different.\*\* As I was skimming this title, I saw just one evolutionary mention of dates on p8.
5. Project Whale by Jill Bailey (1)  
What problems face the world's endangered species? This title describes why whales are threatened and outlines the efforts being made to ensure their survival. The story is told from the point of view of three people who in very different ways can control what happens to the whales.
6. Marine Biology by Ellen Doris (2)  
Did you know that the blue blood of the horseshoe crab is used to test the purity of medicines? Using their blood doesn't even hurt the crab, and it is later released! Also covered are shells, hermit crabs, tides, whales, and much more. Great photography!

7. The Kingfisher Young People's Book of the Oceans by David Lambert (6)  
This is a very informative title with information included on all angles of the ocean topic. Excellent information and pictures. Chapters include ocean surface, ocean life, where the sea meets the land and much more. (\*I saw one evolutionary statement in the book description, so it may occur in other places).
8. Janice VanCleave's Oceans For Every Kid by Janice VanCleave (8)  
Great information and experiments on oceans. I will use this resource for some of our class experiments.
9. National Audobon Society's First Field Guide-Shells by Brian Cassie (10)  
This title provides everything children would want to know about shells-their amazing variety, how mollusks make and use them, and where to find them-plus an identification guide. This would be an excellent resource to take to the beach with you! Colorful. Great information!
10. Nature's Children, Salmon by Elma Schemenauer (1)  
More in depth look at salmon. Did you know that salmon can live in both fresh and salt water?
11. Our Oceans, Experiments and Activities in Marine Science by Paul Fleisher (2)  
Information and experiments fill this book. Topics covered are seawater chemistry, the physics of seawater, the ocean floor, waves and tides, undersea resources. Some cool experiments are included which I plan to use during our classtime. This is more in depth reading and will be used as a resource.



**Video suggestions:**

1. Ocean, an ewewitness movie (4)  
Excellent production! I liked this video because it focused on the ocean more than ocean life. There is some history included of various explorers who discovered the different oceans. Each ocean is shown on a global picture. How interesting that man used to believe that the ocean contained a top layer of saltwater and the remaining water under the top layer was fresh water! It was neat to see how the earth is changing thousands of feet below the surface of the ocean. Molten rock and volcanoes are forming under the ocean. The part of the video that does include ocean life is beautifully filmed.  
(\*parental caution: There were a few statements made concerning age of the earth, how it was formed, etc, that were evolutionary in nature. They were small enough segments that you could explain them to your child. Toward the end of the video, there is a short black and white movie clip of a large octopus monster wrapping its legs around a diver. Use your discretion with this movie clip, in case you think it would scare your younger children.) With this said, it is still one that I would highly recommend.
2. Fish, an ewewitness movie (*this is not a suggestion!*)  
I am putting this title in here because there are copies in the JMRL library. I cannot recommend it due to the evolutionary theme throughout its entirety.
3. Growing Up Wild, Spouts Ahoh! by Time Life (1)  
Wonderfully filmed video on various marine mammals. Included are killer whales, humpback whales, dolphins, and many others. (30 min. long) Excellent!
4. Ecosystems for Children, marine ecosystems by Schlessinger Media (4)  
Marine ecosystems include coral reefs, estuaries, salt marshes and oceans and shorelines. Students will learn about the fish, plants, mammals, and insects that depend on each other for survival in this aquatic biome. (Please note that there is one evolutionary statement about how the earth and continents were formed). Excellent video, 23 minutes long. This video was also on the suggested list for the ecology unit.
5. The Magic School Bus Gets Eaten (by Scholastic) (3)  
A typical animated magic school bus adventure. This adventure takes place in the ocean and has some good educational content. The bus travels through the ocean food chain, getting eaten along the way. Two of the students are trying to find a connection between pond scum and a tuna fish sandwich. Interesting and fun.
6. The Right Whale from the Macarthur foundation, produced by the National Geographic Society (1)  
Very excellent filming of the right whale off the coast of Argentina. Filming covers whale anatomy and behavior. (\*There is one evolutionary statement of how the fin came from an animal on land with legs. This is the only objectionable statement and could be easily explained to your child. Also, there is one small filming section of whales mating. All that is visible is the large whales!) Excellent video, highly recommend. 23 minutes long.

7. **Amazing Animals, Animal Senses** (DK production) (1)  
A 30 minute video on animal senses. This title could be included in a study of mammals as well as marine science. There is a good section on various marine animals, so I am including it in this unit. Did you know that seals rely on the sense of touch? Do you know how fish and other creatures adapt to living in water at the bottom of a cave in the dark? How does an electric eel use electric currents to navigate and to eat? There is a good section on blue whales, which includes how they find krill to eat. Also included is how dolphins hear and make 'sound maps'. Very well done and done in a fun way that will interest even the youngest students but contains challenging information for older students as well!
8. **Real Animals, A day with Whales** by Kid Vision (1)  
This video is geared for the younger students, grade 2 and younger. Have you ever heard a whale sing? Did you know that killer whales are really the biggest type of dolphin? Thirty minutes long. Some good footage of whales and dolphins, but also some footage of children singing whale songs and exploring the marine world through song. Younger children will enjoy this one!
9. **Growing up Wild, Fish Fiesta** by Time Life Video (1)  
This is an excellent 30 minute video on various types of fish. Extremely well done for the elementary age student! Very interesting and awesome filming. Highly recommend!! Some things that it covers are the migration of salmon, night vision of fish, hiding, bathing. You won't want to miss this one!
10. **Amazing Animals, Animal Disguises** (DK production) (1)  
A 30 minute video on various animal disguises. Many marine animals are shown including the octopus, angler fish, neon tetras, leaf fish, decorator crab, anemone, and cichlid. The decorator crab was especially interesting. It pulls up the anemone by 'tickling' it, then plants it on its back for protection. Predators then stay away from the decorator crab to avoid the poisonous sting of the anemone. Very interesting title.



*Mr. Walrus---My! What a cute nose you have!*

**website suggestions:** <http://www.epa.gov/owow/estuaries/kids/games/whointro.htm>

Try out the game on this website to learn about animals that live in an estuary.

1. <http://www.epa.gov/owow/estuaries/kids/games/mystery/mystery1.htm>  
Try out this mystery game to determine what is causing a problem for the wildlife. You can click on 'common challenges' to learn more before trying to answer the questions.
2. [www.brainpop.com](http://www.brainpop.com)  
If you have paid access to brainpop or want to try their two-week free trial, try invertebrates, underwater world, tides, and ocean floor, and ocean currents.
3. <http://www.fi.edu/fellows/fellow8/dec98/games/wfind.html>  
This is a word search to find different ocean animals.
4. <http://www.fi.edu/fellows/fellow8/dec98/quiz.html>  
Fish for ocean facts! A fun interactive question and answer game about ocean creatures.
5. <http://www.fi.edu/fellows/fellow8/dec98/whale.html>  
A whale of a quiz! Another fun interactive question and answer game. This one is about whales.
6. [http://www.palomar.edu/oceanography/salty\\_ocean.htm](http://www.palomar.edu/oceanography/salty_ocean.htm)  
This is a page on why the ocean is salty. Includes experiment idea.
7. <http://pao.cnmoc.navy.mil/Educate/Neptune/quest/wavetide/wavetide.htm>  
Very interesting information on waves! Great pictures to go with these.
8. <http://www.amonline.net.au/fishes/students/flash/memory.htm>  
Try this site for a fun fish memory game. When you find a match, an information page is shown.
9. <http://www.yoto98.noaa.gov/books/puffy/pageb.html>  
Ocean life word search game. Fun!
10. <http://www.seaworld.org/animal-info/sound-library/index.htm>  
Nathaniel loved this one! Click on different animals to hear what sounds they make. Very fun!
11. <http://www.whalesounds.com/> A website recommended by a mom of one of my students.  
Contains whale sounds to listen to. (Thanks Carol!)