Oceans of Possibilities

Oceans take up more than 70 percent of Earth and more than 80 percent of this underwater expanse is unmapped, unobserved, and unexplored! There are oceans of possibilities! There is more life in our magnificent oceans than anywhere else on our planet. Scientists estimate that 91 percent of ocean species have yet to be discovered and classified.

Coral reefs are home to over 25 percent of marine species and support a large portion of Earth’s biodiversity. Closely related to jelly fish, corals are tiny, soft-bodied animals that live inside a stony skeleton. Coral reefs are like cozy nurseries that keep babies of many fish species safe as they grow. Located along coastlines in Florida, Texas, Louisiana, and Hawaii, they are helpful in protecting our beautiful shorelines from coastal storms. They are also popular places to visit. A healthy coral reef is a jaw-dropping sight with its vivid colors, many shapes, variety of fish zipping around, and graceful anemones.

Sadly, many of the coral reefs across the globe are dying off. This amazing life-giving habitat can use our help, and Scouts in the Sea Base conservation program are working to make a difference. Since 1980, about 90 percent of coral reefs in the Florida Keys have died from warming temperatures, ocean acidification, and diseases. Using a newly developed “micro-fragmentation” method—cutting healthy coral into pieces about a square centimeter in size and gluing them onto ceramic plugs in a controlled environment—the group has been able to greatly accelerate growing new coral by using this system. Sadly, many of the coral reefs across the globe are dying off. This amazing life-giving habitat

What would it be like to stand next to the world’s largest whale? Find out by measuring and drawing a life-size whale!

**Supplies**
- Tape measure
- Bucket of sidewalk chalk
- Picture of a Blue Whale
- A large blackbox or concrete space (empty school parking lot, local playground, etc.) at least 100 feet long

**Directions**
1. Use your tape measure and chalk to draw a line 100 feet long.
2. Next, use blue chalk to draw your Blue Whale, stretching from one end of your 100 ft. line to the other end. Let your picture be your guide.

Learn more at: https://downunderorg.org/wonder/how-big-is-the-biggest-whale

**Teens Activity: DIY Plastic Bag Jump Rope**

**Tools to Make a Jump Rope out of Plastic Bags**
- Duct tape
- Painter’s tape
- Plastic bags
- Scissors

**Directions**
1. Cut plastic bags into long rectangular strips about an inch thick.
2. Tie the ends of the strips together until you have 12 long strips that are a little longer that you’d like your jump rope to be.
3. Braid three strips together. Repeat until you have three braided strips. Then braid those strips together.
4. Use the duct tape to wrap around each end of the rope to create handles.
5. Enjoy your jump rope!

Learn more at: childhoodlist.blogspot.com/2012/03/10-diy-plastic-bag-jump-rope.html
J-Fiction PAUL
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Norwegian grandmother’s with memories of his ocean adventures tale combines Paulsen’s
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Northwind
(1979) go to
PPLD has many resources around this theme that would be useful for kids of many ages. To access these online educational resources
ppld.overdrive.com/library/magazines/media/8795254
Geographic on most devices with internet access.

Materials devoted to the topic, including book articles, news articles, pictures, and more!
That would be appropriate for middle-schoolers. Load the database and type “Oceans” in the search box to discover a wealth of
Gale in Context: Elementary -- Ocean Resources
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Zoology
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Walrus Song
by Janet Lawler
Pairing enchanting artwork with spare text, this lovely volume invites younger readers to learn about where a walrus lives, how he hunts, and some of the noises he makes. A first-rate example of picture book science, the illustrations will draw kids to the book again and again, while the appended information will satisfy those who want to know more about walruses.
Ages 3 - 6
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Ty’s Travels: Beach Day!
by Kelly Starling Lyons
Ty is having a beach day...in the backyard sandbox! Colorado kids can have a beach day just like Ty, with a little imagination. Check out the other Ty’s Travels easy readers for your learning-to-read child.
Ages 4 - 6: Imagination; Leap-to-Read Titles J-Reader LYON

Other Cool Resources: Oceans of Possibilities

Scripps Institute/Birch Aquarium
aquarium.ucsd.edu/teachers/online-learning
For a virtual visit to the undersea world, try the Live Keep Cam from the Birch Aquarium! Identify the fish you see to win a game of keel forest bingo, or complete an animal etymology to help decode animal behaviors. When you’re done watching, explore the science of the ocean by creating DIY ocean gyres, or building your own ocean barometer. Still need more? Don’t forget to check out the Birch Aquarium YouTube channel for more live streams and fun animal videos.

NOAA Education
oceanservice.noaa.gov/kids/
The National Oceanic and Atmospheric Administration has ocean resources for kids of all ages! Pick from a wealth of hands-on learning activities, like science experiments, matching games, puzzles, and more. You can also tune into one of the many video and podcast series available in the “NOAA Education At Home Resources” (under Education/For Kids). Don’t forget to check out the “Every Kid Outdoors” section to find out how four different families can access public lands and waters for free.

On the Water: Stories from Maritime America
americanhistory.si.edu/on-the-water
Learn about sailing the seven seas with the National Museum of American History. Explore “Living in the Atlantic World” to find out how Atlantic trade shaped our world, or discover famous shipwrecks in “Maritime Nation.” Did any of your ancestors cross the ocean? Check out “Ocean Crossings” to learn about the ships they may have traveled in and view artifacts and photos from similar journeys. Visit “Learning Resources” for lessons, activities, and literary tie-ins!

Marine Biology: The Living Oceans
amnh.org/explore/oceangoingmarine-biology
Are you an aspiring marine biologist? Learn about the ocean and the creatures inside it with the American Museum of Natural History’s guide to marine biology. Find stories and videos from ichthyologists (scientists who study fish) and other ocean scientists. Then, test your knowledge by matching marine animals to their baby pictures, or learn about life on the ocean floor by plotting a submersible 4,500 meters below sea level.

Deerfield Beach Naturescape Cameras
deerfield-beach.com/1474Live-Naturescape-Cameras
Practice observing ocean creatures in their natural habitat with this underwater ocean camera from Deerfield Beach, Florida. Check out the fish guide to see if you can spot all 10 common species, or tune in more often for a glimpse at rare and interesting creatures like diving birds, turtles, or even the famed marine anchor (species: Homo sapiens).

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This resource focuses on the idea of “possibilities”! In addition to offering free live tutoring and practice in nearly every subject, HelpNow provides career inventories incorporating content and methods—one Color! Color! Color! Color! Parachute?/series, the eParachute section helps users discover college majors and careers to match their skills and interests.

Gale in Context: Elementary – Ocean Resources
Covering a wide array of subjects, Gale in Context: Elementary is a wonderful database for elementary and middle school students because it allows you to sort by content level; there are easy-to-read articles for those just learning to read and articles that would be appropriate for middle-schoolers. Load the database and type “Oceans” in the search box to discover a wealth of materials devoted to the topic, including book articles, news articles, pictures, and more!

Northwind
by Gary Paulsen
This exciting survival tale combines Paulsen’s ocean adventures with memories of his Norwegian grandmother’s stories of the sea. When a outbreak of cholera decimates his fishing village, Leif, a 12-year-old orphan, flees north in village, Leif, a 12-year-old orphan, flees north in the village, Leif, a 12-year-old orphan, flees north in an outbreak of cholera stories of the sea. When
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