

Ocean Discovery Programs

Grades 1st-6th



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The Truth About Sharks

Sharks are magnificent, but misunderstood creatures that are unfortunately being pushed to the brink of extinction due to overfishing and poor international management. This program highlights the beauty and importance of these animals by showing the incredible rich diversity of shark species and their unique adaptations.

Students will rotate through hands-on stations in small groups that involve shark tooth and jaw morphology, shark identification, and shark sensory systems. The session culminates in a discussion about the critical need for conservation of many shark species and what students, no matter where they live, can do to help.



The Story of the Sea Turtle

Sea turtles are one of the most ancient creatures on Earth, yet we are still learning more and more about them every day. This program covers the life history, ecology, behavior, and unique adaptations of these extraordinary marine animals.

Hands-on activities will highlight nesting behavior, sea turtle predators, how hatchlings make it to the ocean, and how they are able to return to the same nesting beaches as adults.

Students will have sea turtle models to study and even get a chance to experience what it is like for a sea turtle biologist studying these animals in the wild. The session ends in a discussion on current sea turtle conservation measures and how students can help protect marine life.



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The World of Whales

Whales are found in every ocean region and are the largest mammals on the planet, yet we still have much to learn about these magnificent creatures. This program highlights the rich diversity of whale species and their unique adaptations that allow them to grow to mind-boggling dimensions, dive deep underwater, survive in cold-water habitats, and even sing elaborate songs to each other!



Through hands-on activities, students will learn about whale feeding and communication strategies, and how scientists study these incredible animals in the wild. The session closes with a discussion on whale conservation efforts and how students can help be a part of making a healthier ocean.

Arctic Adaptations: The Life of the Polar Bear

The only bear species to be considered marine mammals, polar bears make their true home on the sea ice. This program covers the remarkable adaptations that allow polar bears to survive in the extreme and unforgiving Arctic environment.

Through some *icy* activities, students will get to experience how these adaptations, from special fur to unique feet to layers of fat, have enabled these sea bears to become the largest land dwelling carnivore in the world! The presentation ends with a discussion on what a warming ocean means for these animals and how our actions can make a difference in the lives of our polar bears!



Corals Up Close

Corals are the building blocks of reef environments, and provide homes and food for many different fish, invertebrates, and humans. In fact, while coral reefs make up less than 1% of the marine environment, about 25% of all marine species live within them. These valuable ecosystems, unfortunately, are threatened by global warming, ocean acidification, marine debris, and more. This program covers coral diversity, and the importance of corals and the reef habitats they build.



Students will learn about coral anatomy by building their own edible models, sort through *3 million year old* coral fossils, and even test their skills in a feeding game! This program ends with a discussion on the issues facing coral today and the ways that we can help to protect these incredible animals.

Ocean Exploration



The ocean covers more than 70% of the Earth's surface, yet less than 5% of it has been explored. Over hundreds of years, in a quest for discovering the underwater world, humankind has developed self-contained underwater breathing apparatuses (SCUBA), manned submersibles, and even underwater remotely operated vehicles (ROV). This program covers the various methods of ocean exploration and the importance of investigating our marine ecosystems.



Students will learn about the science behind SCUBA diving, discover how underwater ROVs have furthered our knowledge of some unique, deep-sea creatures, and even experience their own virtual 360° SCUBA dive! The session culminates in a discussion on how exploration continues to increase our knowledge of the marine environment every day, helps to protect our ocean, and how students can be a part of the next discovery!