



Coral Reefs and Beyond K-2 Pre-Visit Material

Thank you for scheduling an educational experience at the Putnam Museum. In this thirty minute program, an Education Specialist will lead your hands-on program in which your students will explore sea life and ocean creatures. We look forward to seeing you and thank you for your interest in the Putnam Museum's education programs.

Program Title: Coral Reefs and Beyond

Target Audience: Grades K-2

Focus: Marine life

Focus Questions: What lives in or near the sea?

The program highlights:

- Oceans and types of ocean creatures
- How ocean creatures have adapted to live in the ocean
- Observation of a living hermit crab
- Discussion on coral reefs

Catalog Description: Discover the secret life of animals under the sea! Why do sea stars and sea urchins have tube feet? Find out with the Putnam! Hands-on activities and the exploration of light and pressure –not to mention how we can all do our part to protect the ocean –waits!

Key Words:

Adaptations- traits that change over time to help an animal species survive

Habitats- natural environment where an animal lives

Predator- an animal who eats another animal

Prey- an animals who gets eaten by its predator

Sea star- a star shaped sea animal that can regenerate arms and feed from his underside

Sea urchin- a small circular animal that moves slowly and feeds on algae

Shark- a long-bodied marine fish with a cartilaginous skeleton, a prominent dorsal fin, and tooth-like scales

Crab- a sea animal that is a crustacean that has a short broad flat shell and a front pair of legs with small claws

Seashell- the shell of a marine animal

For More Information:

National Oceanic and Atmospheric Administration's coral reef and other ecological systems:

<http://coralreef.noaa.gov/>

NASA's introduction to phytoplankton, global patterns, and images of Earth's phytoplankton:

<http://earthobservatory.nasa.gov/Features/Phytoplankton/>

Further Activities for your Classroom:

Make a Model Coral Reef the Edible Way

Materials: different kinds of cereal, licorice, carrots, marshmallows, graham crackers, icing

Directions: Have students look at images of coral reef. Then gather in small groups and have students construct their model reefs. Be sure to guide them in discussions of the principals of natural communities. Remember that the reef is a shelter for animals of all kinds. While fish gather around the tops of the coral reef, animals such as anemones, lobsters, crabs, octopuses and giant clams may hide and take shelter underneath overhangs and in nooks and crannies. Have students solve the problems of "Who belongs where doing what?" Have them report on their conclusions as to how coral-reef communities are organized.



Sea Star Art

Materials: cardstock, scissors, glue, crayon, birdseed or oatmeal, Cheerios

Directions:



- 1) Teach students how to make a five sided star. Have them draw the star on cardstock.
- 2) Students should cut out the star.
- 3) Have students write their name on one side, this will be the top of their sea star creation.
- 4) Have teachers or assistants punch a hole in the top of the star and tie on a string.
- 5) Put glue on the name side of the star, not covering the student's name.
- 6) Add birdseed or oatmeal for texture.
- 7) Glue Cheerios onto the back side of the star. These are the suckers on their tube feet.
- 8) Set on table to dry.