



## A, B, Sea Pre-Visit

Thank you for scheduling an educational experience at the Putnam Museum. In this 35 minute program, the Putnam Museum's Education Specialist will lead this 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.

Sincerely,  
Kara Fedje,  
Education Specialist

**Project Title:** A, B, Sea

**Focus:** Marine Life

**Target Audience:** Grades: 1-2

**Focus Question:** What lives in or near the Sea?

### Learning Objectives:

1. Students will identify at least three animals that have adapted to live in the ocean.
2. Students will learn how to properly collect ocean shells.
3. Students will see a living crab.
4. Students will learn how marine life is connected through the food web game.

**Background Information:** Geared towards younger students, this class is an introduction to the wonders of ocean life. Students will explore shells, animal adaptations and our crab lab. The program complements the Ocean Experience discovery area that features ocean habitats and two 125 gallon aquariums with live creatures.

### Key Words:

adaptations-traits that change over time to help an animal species survive  
habitats-natural environment where an animal lives  
predator-animal who eats another animal  
prey-animals who gets eaten by its predator  
sea urchin-a small circular animal that moves slowly and feeds on algae  
starfish-a star shaped sea animal that can regenerate arms and feed from his underside

### Standards and Curriculum:

Iowa Core: Life Science K-2

Illinois Learning Standards: Early Elementary: 12.A.1A, 12.A.1B

### For More Information:

Fossil information including bivalves, crinoids, and trilobites:

<http://www.kgs.ku.edu/Extension/KSfossils.html>

Illinois State Museum's natural history information:

<http://www.museum.state.il.us/>

NASA's introduction to phytoplankton, global patterns, and images of Earth's phytoplankton:  
<http://earthobservatory.nasa.gov/Features/Phytoplankton/>

National Oceanic and Atmospheric Administration's coral reef and other ecological systems:  
<http://coralreef.noaa.gov/>

### 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.



#### Starfish 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) Have students flip the star over and write their name on the blank side.
- 3) Students should cut out the star.
- 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.
- 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.