

Details



Completion Time: About 1 period

Permission: N/A

Puffin Patrol

Overview

Students will become familiar with the anatomy/physiology, habitat and lifestyle of puffins. On the 2009 Healy Icebreaker expedition the wildlife survey team was primarily interested in bird diversity and population in the Bering Sea. Puffins were spotted during the cruise, especially feeding in and around Dutch Harbor, Alaska.

Objectives

- Students will learn about the unique nature of puffin anatomy.
- Students will be familiar with the diet of this Arctic bird.
- Students will use tools to imitate food-gathering behavior of the puffin.
- Students apply what they have learned to recreate the body of the puffin in a science-art project.
- Students will be able to explain how this little bird is well suited to the Arctic environment.

Lesson Preparation

- Print and laminate pictures of puffins and puffin food choices.
- Cut out felt pieces of puffin body.
- Fill diving buckets with water and "fish".
- Cut out puffin bodies and parts for art project.

Procedure

Vocabulary: puffin, crustacean, mollusk, herring, benthic, pelagic

1. Introduce and define vocabulary.
2. What's a puffin? Look at pictures of puffins. What kinds of birds are these? Does anybody know anything about these special birds? Who can tell me anything that makes a puffin recognizable? Puffins are unique and recognizable because of several features: brightly colored beaks, counter-shading, orange-red legs.

Materials

- 4-5 picture cards of puffins
- Felt body parts of one puffin
- Younger kids: 5-10 pictures of organisms that puffins eat
- Older kids: Small cards (one per child or pair) with a picture of an organism that a puffin would eat
- Shallow buckets: One per 4-5 kids
- Assorted tongs and tweezers
- Swedish fish candy
- Construction paper
- Tissue paper or quilt batting
- Stapler
- Glue: One per child or pair
- Internet access to download Shared reading "Puffin Patrol" article. See Resources section for address

3. What are the parts of a puffin? Let's put a puffin together! Construct a felt puffin one body-part at a time on a felt board. Discuss structure and function of each body part.
4. What do puffins eat? Puffins are diving birds that search for small fish, shellfish and crustaceans to eat. Examine a chart with pictures of various components of the puffin diet- name the animals. Modification for older students: Each child gets a picture of something a puffin would eat. Add it to the correct spot on a chart of the water table. Is this a benthic or pelagic animal? How did you decide?
5. Can we fish like puffins? Dive like puffins! Puffins can fit up to thirty small fish in their mouth at one time! How many can you pick up? Use Swedish Fish and tweezers/tongs to "dive" for fish in buckets of water.
6. Make a puffin with construction paper and quilt batting or tissue paper. Include construction paper beaks, stripes, eye, wing, yellow marking and red legs.
7. Shared reading "Puffin Patrol" article in Time for Kids about children in Heimaey, Iceland who rescue puffin chicks. http://findarticles.com/p/articles/mi_m0EPG/is_n9_v30/ai_18568239/

Possible snack: Puffins cereal

Extension

N/A

Resources

Shared Reading "Puffin Patrol" article in Time for Kids about children in Heimaey, Iceland who rescue puffin chicks. http://findarticles.com/p/articles/mi_m0EPG/is_n9_v30/ai_18568239/

Assessment

Students are able to recreate the anatomy of the puffin and explain the form and function of each.

Credits

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National Science Education Standards (NSES):

Content Standards: K-4

Content Standard A: Science as Inquiry

- a. Abilities necessary to do scientific inquiry
- b. Understandings about scientific inquiry

Content Standard C: Life Science

- a. Characteristics of organisms
- c. Organisms and environments