

ANATOMY AND PHYSIOLOGY

13. Cetacean Creations

Level: K-3, 4-7

Objective: Students will design and construct a whale out of household items and relate structure and behaviour of whales to their survival in the world's oceans.

Background:

There's a new group of whales in the world, Family Inventidae! This wondrous new whale family has been reported living in oceans all over the world. They are a variety of shapes, sizes and colours. In fact, the shape and size of their body, head, fins, flippers and flukes are all up to the imagination of the designer. But, before the students begin, there are a few things to keep in mind:

- 1) All of the materials they use must be found around the house and school. Have the students make sure they are allowed to use all the materials they have.
- 2) Students must be able to explain how all the materials they chose help the whale survive in a specific environment. For example, a Pin-nosed Bottle Whale has a mouth made of a clothes pin so it can pinch its prey from the water. It's sleek, bottle body gives it a streamlined shape, and it's transparent colour helps to camouflage it from ocean predators. This whale also has spoon shaped flippers to help it swim.
- 3) In order to be classified as a whale, these creatures must have a torpedo-shaped body, breathe air and have a horizontal tail.

Whales occupy a variety of habitats around the world: the Atlantic, Pacific and Indian oceans, in temperate and tropical climates, as well as the Arctic Ocean and Antarctic Sea. Whales can inhabit nearshore or offshore environments. Most whales span a variety of habitats depending on the time of year.

Materials: anything that can be found around the house (e.g. paper bags, bottles, screws, strainers, nuts, bolts, aluminum foil, utensils and cardboard).

Procedure:

- 1) Students choose a specific habitat, then design and construct, using household items, an imaginary whale that can survive in that particular environment.
- 2) Students name the whale and give an oral presentation to explain why the whale looks the way it does. Encourage the students to be creative and discuss all aspects of a whale's life. This includes how it eats, where it eats, where it lives, behavioural displays and other field marks; students can even invent and perform the songs of their whale.