

How Big is Big?

(Post visit)

Grade Level: 6th-8th

Purpose: To show students how drastically marine mammals can vary in size and how marine mammals include the largest animal on the planet. This activity will give students the ability to visualize marine mammal lengths.

Materials:

- Measuring tapes
- Informational sheets with the lengths of various marine mammals
- Chalk
- Large open area
- Weight of a parent or teacher
- Pictures of the listed animals

Teacher Background Information:

Marine mammals span the globe and come in all shapes and sizes. These much loved animals are always fun for students to learn about but teaching about their sizes can be very difficult especially when dealing with numbers such as 100 feet. Therefore, the easiest way to help students to understand is to add a visual component. For length, chalk and measuring tapes will allow the animals to be drawn while the weight of an adult will give the students an idea of how much these animals can weigh. The following table provides information on some marine mammals but only a sample of what is available.

Marine Mammal	Length	Weight
Harbor Seal	5 feet	~200 pounds
Manatee	14 feet	~1500 pounds
Atlantic Walrus	9 feet	~1800 pounds
Bottlenose Dolphin	6-12 feet	Up to 1400 pounds
Blue Whale	80-100 feet	~110 tons
Pilot Whale	16-20 feet	~2-3 tons
Orca	23-32 feet	~4(female)-8(male) tons
Humpback Whale	45 feet	~25-40 tons
California Sea Lion	5-7.5 feet	~200(female)-600(male) pounds
Sperm Whale	~40 feet	~13(female)-35(male) tons
Harbor Porpoise	5 feet	~130 pounds
Sea Otter	4 feet	~60-90 pounds

Source of lengths and weight: American Cetacean Society Fact Sheets, International Marine Mammal Association, and The Marine Mammal Center

Procedure:

- 1) Have students describe what a mammal is and have them list as many marine mammals as possible. Depending on their list try to include any they might have forgotten.
- 2) Break students into teams and give each team a measuring tape, chalk, a section of the open area and a small and large marine mammal.

- 3) Have students draw the approximate shape of the animal and have them use the measuring tape to make the animal the correct length.
- 4) After each team has done both of their animals give them a break to look at the other teams drawings.
- 5) Return to the classroom and have each team figure out how many adults it would take to reach the weight of their animals (i.e. 250 pound adult and a 1000 pound animal means it would take 4 adults to equal one animal).

Discussion Questions:

- 1) Would the blue whale be able to support its weight on land? Why or why not?
- 2) What type of food do the largest whales eat? What do the smaller marine mammals eat? Why?