

GIANTS OF THE OCEAN

1. Weights and measures

Objective: To appreciate the different sizes of whales.

Level: K-3, 4-7

Background: Of the 78 species of cetaceans (whales, dolphins and porpoises), 23 live in or swim through British Columbia waters. The Blue Whale is the largest, growing to about 30 metres long, but several other species exceed 15 metres.

Many people confuse dolphins and porpoises, but they are two distinct families of marine mammals. Dolphins are larger, ranging in length from 2.4 to 3.7 metres, while porpoises range from 1.4 to 2.5 metres long. Dolphins are usually beaked and have a larger, moveable dorsal fin. Dolphins have sharp, pointed, conical teeth, and porpoises have small, spade-shaped teeth. Killer Whales (Orcas) are the largest members of the dolphin family.

Species	Max. Length	Max. Weight
Harbour Porpoise	2 metres	45 kg
Pacific White-Sided Dolphin	2.25 metres	135 kg
Killer Whale (Orca)	9 metres	7 tonnes
Minke Whale	10.5 metres	9 tonnes
Grey Whale	15 metres	32 tonnes
Sperm Whale	18.5 metres	45 tonnes
Humpback Whale	19 metres	48 tonnes
Blue Whale	30 metres	135 tonnes

Level: K-3

Materials: rope (approx. 30 m long), flagging tape.

Procedure:

- 1) Cut lengths of rope to equal the lengths of different whales.
- 2) As a class, students hold different lengths of rope, which are marked every metre with flagging tape. Have each student hold a mark.
- 3) Count the number of students it takes to equal the length of one whale. Count each student as one metre, two metres, etc.

Level: 4-7

Materials: metre stick or measuring tape, bathroom weight scale, calculators.

Procedure:

- 1) Have students measure each other's height and calculate the average height of students in the class, then determine how many students it takes to equal the maximum length of a species of whale.
- 2) Have students weigh themselves and calculate the average weight of students in the class, then find out how many of them it takes to equal the maximum weight of the same species of whale.



Harbour Porpoise - 2 metres



Pacific White-sided Dolphin - 2.25 metres



Killer Whale - 9 metres



Minke Whale - 10.5 metres



Grey Whale - 15 metres



Sperm Whale - 18.5 metres



Humpback Whale - 19 metres



Blue Whale - 30 metres

Drawings by Al Denbigh

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