

Lesson 2: Krill sieve!

Background – Baleen whales, like blue whales, do not have teeth. Instead they have big bristles called baleen (which are made from keratin, the same material as our hair and finger nails) which hang down from their top jaw and are used to filter feed krill (small shrimp like creatures) and small fish. Baleen whales open their mouths and lunge towards bait balls of krill, expanding their mouths in doing so. After taking a large mouthful of krill and water, they squeeze all the water out of their mouths, back out into the ocean, but the baleen traps the food, just like a sieve. Once the whale has filtered all of the water out of its mouth, the whale then uses its huge tongue to scrape the krill from the inside of the baleen, and then the whale is able to swallow all of the food, without swallowing all of the salty sea water.

Aim – To teach students about the feeding methods that baleen whales use to catch krill.

Equipment - A large bowl, 2 litre milk carton, scissors, marker pen, sieve and dry rice

Preparation for activity – Cut the milk carton into the shape of a whale (make sure this is done by an adult/teacher first) and use the pen to draw a face onto the whale.

Delivering the activity in class - Fill the large bowl with water and put a handful of rice into the water. During this activity the rice will represent the krill. Pour the contents of the bowl carefully into the whale's mouth (milk carton). As can be seen, the whale now has a mouthful of 'food' and water. In order to filter out the water, pour the contents of the whale's mouth through a sieve and into the bowl. The sieve will retain the rice/krill, just like the whale's baleen would, for the whale to swallow.

This activity mimics how baleen whales take huge mouthfuls of food and water, push out all of the water (retaining the food within the baleen sieve), then use their large tongue to scrape out all of the food from the baleen to swallow.

