

So You Want to Be a Whale Biologist

Below are descriptions of seven major ways in which whales feed. These techniques vary by species and also by available food supply. Read each strategy listed below and match the strategy with the picture on the following pages. Then write the name of the whale beside the picture.

A. Suckers - Gray whales are *suckers* and **feed on the bottom** in shallow water. A gray whale pushes its tongue forward, causing water to jet out of its mouth and stir up the bottom sediments. Then as the whale draws its tongue in, this “slurry” of sediments and prey is sucked into its mouth. Often muddy water has been observed streaming out of a gray whale’s mouth as it filters its prey. Gray whales feed on the bottom because their food (amphipods—pronounced “am-fi-pod”—bug-like creatures) can be abundant (10,000/ square meter).

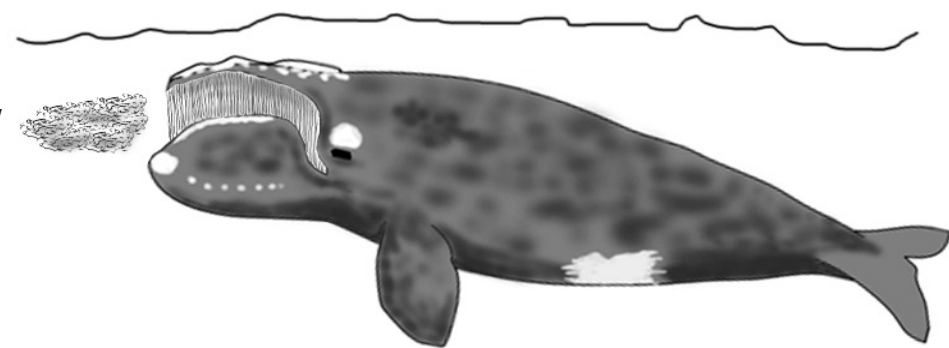
B. Lunge Feeders - The blue and fin whales are fast moving and capable of herding a school of baitfish or krill into a tight mass and **rushing at them suddenly**. Their throats have a number of grooves or ventral pleats. The pleats expand outward and permit the whales to take in up to 15,000 gallons of water at one time (enough to fill the size of a large living room). To discharge the water from their mouths, whales contract their muscular pleats and push their tongues up.

C. Skim Feeders - When right whales are feeding they keep their mouths open continuously and **feed close to the surface** on patches of thick soupy plankton. One of their primary foods are copepods (pronounced “cope-a-pod”—quarter inch long crustaceans) which are considered to be the most numerous animals found on Earth. Right whales have extremely long baleen (up to 12 feet) which allow them to filter 20 cubic yards (the size of approximately two dump truck beds) of water per minute.

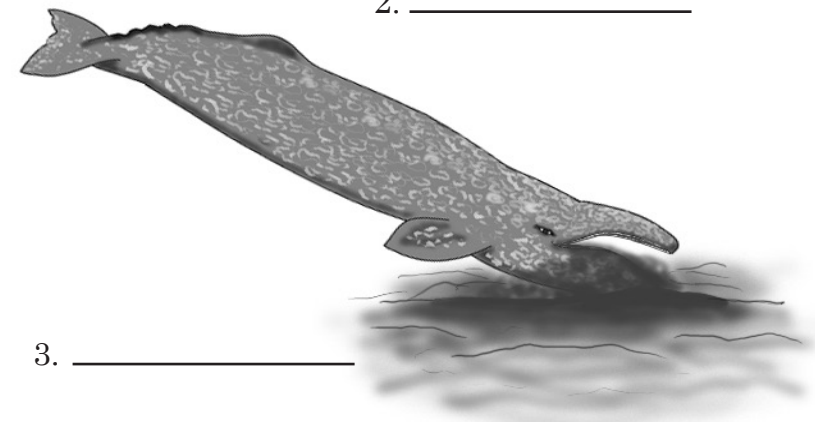
D. Bubble Cloud Feeders - A humpback whale will **swim beneath a school of fish and release a huge cloud of bubbles**. To the fish caught in the cloud, it is like being in a blizzard. They



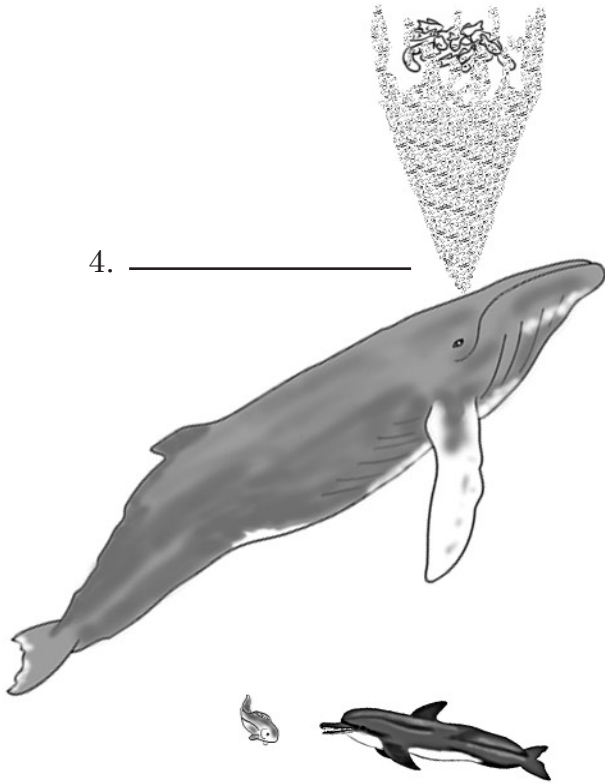
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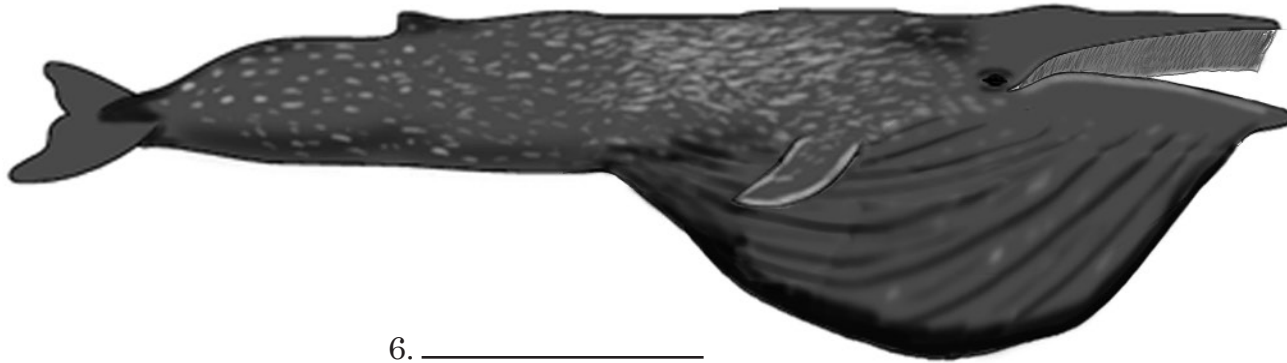
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become disoriented, bunch together, and swim closer to the surface, making them easy prey for an open-mouthed humpback.

E. Deep Divers - Sperm whales are capable of diving to great depths (more than a mile) and can **stay beneath the surface for more than an hour**. They regularly dive to such depths to feed upon squid, grasping and crushing them with large cone-shaped teeth. How do they corral them at such great depths? One theory is that sperm whales have such intense *echolocation* pulses that their prey is stunned. The stomach of one sperm whale was found to have 28,000 small squid in it.

F. Wolves of the Sea - Orcas (killer whales) **hunt in packs** in search of whales, dolphins, seals, and large schooling fish (salmon and tuna).

G. Grabbers - Dolphins have needlelike teeth that help them **pierce and hold** small fish.

7. _____

