# For Creative Minds

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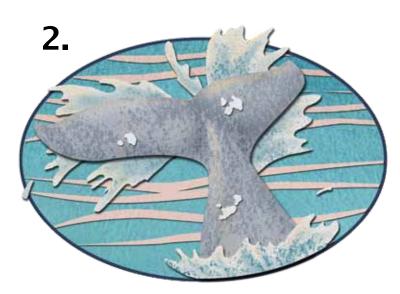
## Whale Surfacing

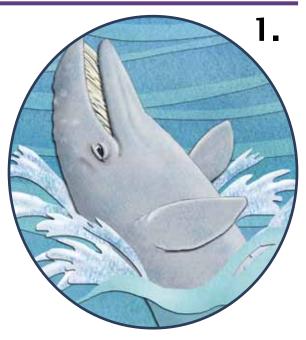
Whale surfacing behavior describes the different ways that whales come to the surface. The most important reason to come to the surface is to give the whale a chance to breathe. The way whales surface can help them see what is around them, communicate with other whales, or scare nearby fish. Can you match the descriptions of different surfacing behaviors to the pictures of Little Gray? Answers are below.

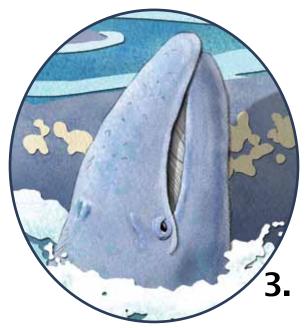
**Breaching** is when a whale jumps up so high that at least 40% of its body is out of the water.

**Spyhopping** is when the whale holds its head up so its eyes are near or above the surface of the water. Some whales spyhop for several minutes at a time.

**Lobtailing** is when the whale lifts its tail up out of the water and smacks it down on the surface.







Answers: 1. Breaching, 2. Lobtailing, 3. Spyhopping

#### **Gray Whale Fun Facts**



When calves are born, they are around 15 feet (4.5 meters) long. A newborn whale drinks between 50 to 80 gallons (190 to 300 liters) of milk each day. There are currently 20,000 to 22,000 eastern gray whales. These gray whales live along the coast of North America in the Pacific Ocean. A small group of fewer than 130 gray whales live in the western Pacific and migrate along the coast of Korea. Eastern gray whales have recovered from near extinction and are not at risk of becoming endangered. Western gray whales are critically endangered.

Whales are mammals and breathe air. Gray whales have two blowholes on top of their head. These blowholes are like nostrils and are how the whales inhale and exhale. When they are migrating south, gray whales don't sleep; they swim day and night! When gray whales sleep, they stay at the surface with their blowholes above the water.

Adult gray whales can hold their breath for up to 30 minutes. When they are resting at the surface, gray whales breathe two to three times each minute. Gray whales can be very friendly and curious! In their winter lagoons, some gray whales approach and rub up against boats, and even allow people to touch them.



The gray-white patches on gray whales' skin are scars caused by lice and barnacles that attach to the whales. When whales are in the warmer waters of Baja, the barnacles slough off, leaving scars.



An adult gray whale's flukes (tail) measure 10 to 12 feet (3 to 3.6 meters) across.

### **Migration Map**

Gray whales swim 10,000-13,000 miles (16,000-21,000 kilometers) each year on their round-trip migration. Calves are born in the winter in warm southern waters. Most calves are born in the waters of Baja California, a peninsula in Mexico. Some gray whale calves are born in the Southern California Bight. In the spring, the gray whales leave their winter calving grounds. They swim north along the coast, all the way to the Bering Sea and the Chukchi Sea, between Alaska and Russia. In these cool, northern waters, the whales find plenty of krill, amphipods and other small organisms to eat all summer long! Come autumn, the gray whales swim south down the coast to southern California and Mexico.



#### A year in the life of a gray whale:

Match the stage of the gray whales' migration to the season. Answers are below:

- 1. Whales feed on krill and amphipods in their arctic feeding grounds.
- 2. Calves are born off the coast of southern California and Baja California, in Mexico.
- 3. Gray whales migrate south to their calving grounds in southern California and Mexico.
- 4. Gray whales migrate north to their feeding grounds in the Bering and Chukchi seas.

A. Winter

B. Spring

C. Summer

D. Autumn

#### Whale Food



Gray whales are a kind of **baleen whale**. Baleen whales don't have teeth. Instead, they have baleen made of keratin, the same thing human hair and fingernails are made from. Baleen is a filter that traps the whale's prey. Gray whales eat small crustaceans and mollusks that live on and above the sea floor. One of gray whales' favorite foods is small, shrimplike creatures called amphipods. They also like mysid shrimp, polychaete worms and krill.

Gray whales eat by turning to one side and sucking up a mouthful of water, mud, and prey off the sea floor. They press their tongues up against the roof of their mouth to push water and mud out through the baleen while keeping the food trapped inside. Adult gray whales can eat 2,600 pounds (1,200 kilograms) of food in a day!

During the feeding months in the spring, summer, and fall, gray whales build up a thick layer of fat, called **blubber**, all over their bodies. This layer of blubber can grow up to 10 inches (25 centimeters) thick and whales can live off the fat stored in their blubber if there is no food to eat. Gray whales eat very little during their migration south in late fall and while in the winter calving grounds, so they need a thick layer of blubber to last until they return north to the primary feeding grounds in spring.

