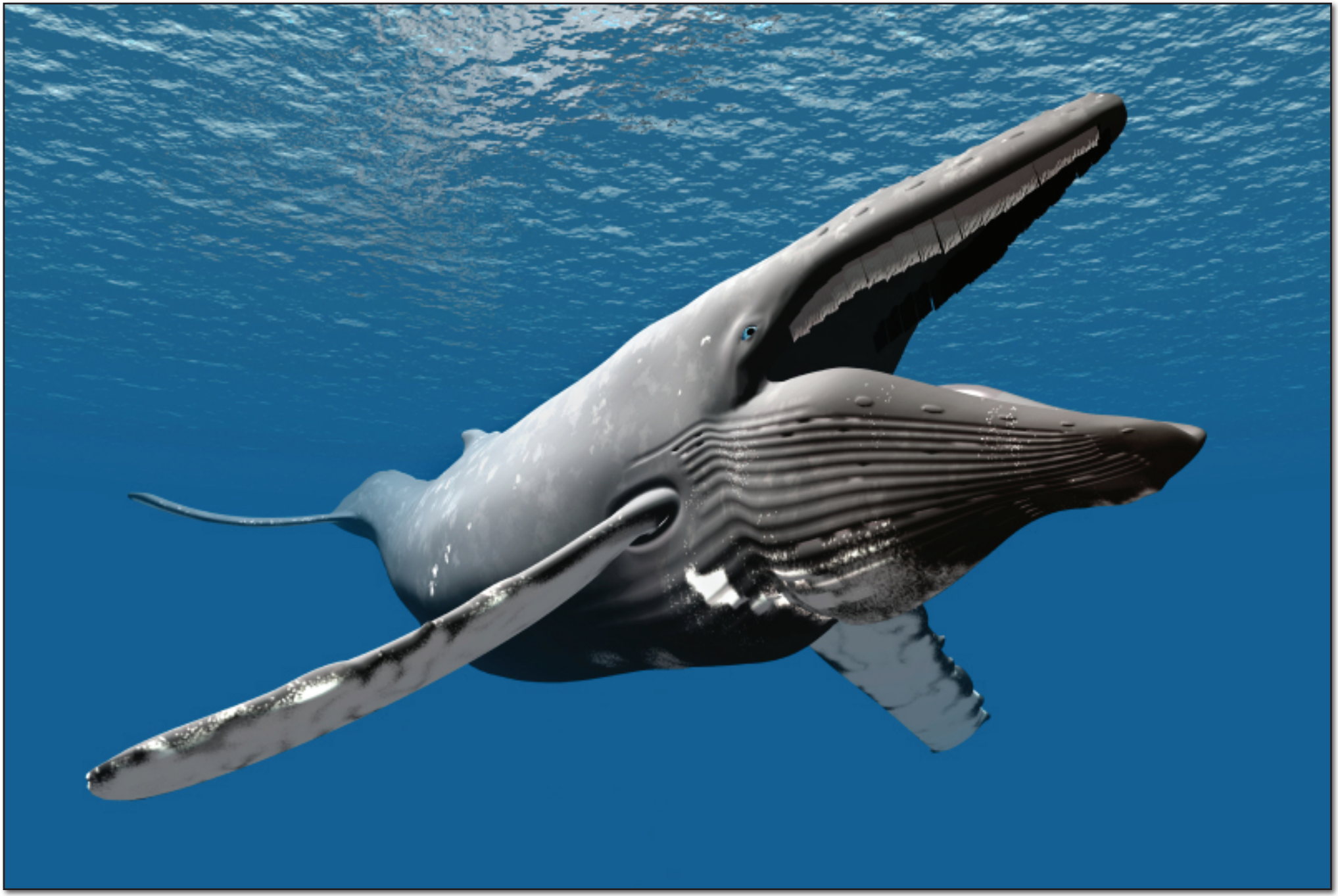
Features and Behavior of Whales

Discussion Questions:

1) What special features do whales have?
2) What behaviors do whales display?
3) How do these help them survive in the ocean?

Studyladder

This humpback whale opens its mouth to feed on krill and small schooling fish. The ventral pleats around its throat expand enabling it to gulp large quantities of water. The water is expelled through the baleen on its mouth leaving the krill and fish behind to be consumed.



Studyladder

Nostrils and Breathing

A whale's nostrils are located on the top of its head in what is called a 'blowhole'. Whales are able to close these blowholes when they dive down under the water. Baleen whales have two blowholes and toothed whales have one blowhole.

When they resurface, they open the blowhole and exhale warm air from their lungs before taking a new breath. A cloud of condensing vapour will often be seen when a whale is near the surface.

Whales can hold their breath for extended periods of time. Most whales will resurface to take a breath roughly every 15 minutes. A sperm whale can wait for 80-90 minutes between breaths.

Studyladder

Flippers and Flukes

The two horizontal lobes of a whale's tail are called flukes. Whales move their flukes in an up and down motion in order to swim, unlike fish which move their tails from side to side.

Whales also have fins that they use to steer themselves though the water. They help them change direction. Some whales and dolphins have dorsal fins on their backs that act like rudders, helping them steer.

Any time a whale comes to the surface of the water it is exciting for humans to watch. They display unusual behavior that humans don't fully understand. They can make spectacular leaps out of the water. They slap their tails and fins on the surface of the water and can sometimes be seen 'sailing' through the water with their tail in the air, letting the wind push them along! It looks like they are playing and having a lot of fun!

When whales come to the surface of the water it is called 'breaching'.

When they beat their tails on the surface it is called 'lobtailing' and when they beat their fins it is called 'slapping'

Whales are very intelligent creatures. They have excellent vision and are curious about their surroundings. A whale will pop its head out of the water to take a look around. This behaviour is called 'spyhopping'.

Whales are social animals. They communicate by 'singing' to eachother. Their whale songs can be heard underwater for great distances. Female whales can be seen travelling with their calves on their way back from their breeding grounds.

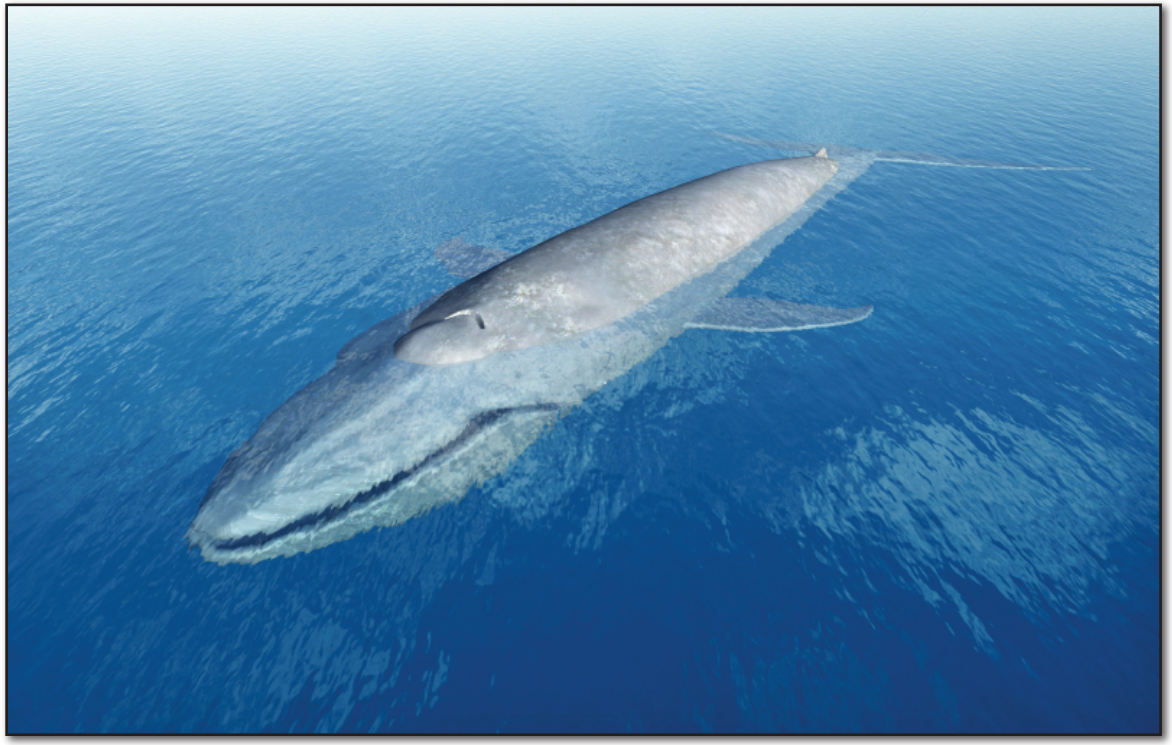
Echolocation

Toothed whales use echolocation to help them navigate and locate prey. They send out high frequency sounds which bounce off objects in the water around them. The returning sounds are received by the whale, giving them information about the size and location of the object.

Baleen whales emit low sounds (songs) to communicate with other members of the pod. They do not use echolocation.

Sleeping

Like all animals, whales need to rest. So how do whales sleep without drowning?

Whales are able to shut down their body and one side of their brain into a sleep-like state. The other side of their brain remains awake to ensure that their breathing continues unimpaired. After a short nap they can switch sides and rest the other part of their brain.

When many whales in a pod rest at the surface of the water it is referred to as 'logging' because they look like lots of logs floating in the water.