

SCIENTIFIC NAME OF SPERM WHALE: "Physeter macrocephalus"

Meet the sperm whale.

BIG FACT

The blue whale is the largest animal on Earth.

COLORFUL FACT

Whales have red blood.

RUNNER-UP FACT

The sperm whale can grow to be 60 feet long and weigh 50 tons.

It is one of the world's largest whales. All of the biggest whales are baleen whales, which means they have no teeth. The sperm whale is unusual. It is a big whale that has teeth, but only on its bottom jaw.

This whale looks like a big head with a tail. Its scientific name means "blower with a big head." It is the largest of all toothed whales. The sperm whale has the largest head of any animal that has ever lived on Earth.

DID YOU KNOW?

The sperm whale has a blowhole at the front of its head.

LONG FACT

Its head can be 20 feet long.

SCIENTIFIC NAME OF GIANT SQUID: "Architeuthis dux"

Meet the giant squid.

FACT

Squid, octopuses, nautiluses, and cuttlefish are cephalopods.

BONUS FACT

On restaurant menus, squid is often listed by its Italian name, "calamari."

A giant squid is a mollusk. A squid belongs to a group of mollusks called cephalopods. *Cephalopod* means "head foot." A squid looks like a head attached to legs. It has eight legs and two extra feeder arms. The legs have suction cups. The feeder arms have hooks and suction cups on the ends that act like hands.

The giant squid has fins for steering. It propels itself by sucking water into its head and squeezing the water out. A squid works the same way as a jet engine.

GIANT FACT

The largest squid are the giant squid and the colossal squid.

DID YOU KNOW?

A giant squid brain is the size and shape of a small donut.

A giant squid can be 60 feet long and weigh 450 pounds. Most giant squid that have washed up on beaches are 20 to 30 feet long. That's a lot of calamari!

EYES



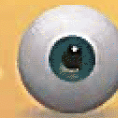
The eye of a sperm whale is only about two inches wide.

FUN FACT

A sperm whale can dive down half a mile. There is hardly any light at that depth.

EYES

Here is a human eyeball.



Here is a giant squid eyeball in comparison. The giant squid eyeball is the largest eyeball in the world. It is as big as a basketball. Its giant eyeballs allow the squid to see at great depths.



TEETH

The sperm whale has long teeth. The teeth are shaped like sidewalk chalk. Notice that it has no teeth on its upper jaw. When a sperm whale closes its mouth, its bottom teeth fit into the indentations in its upper jaw.

FUN FACT

A sperm whale has 20 to 25 teeth on each side of its lower jaw.

BONUS FACT

You can tell how old a sperm whale is by the layers in its teeth.

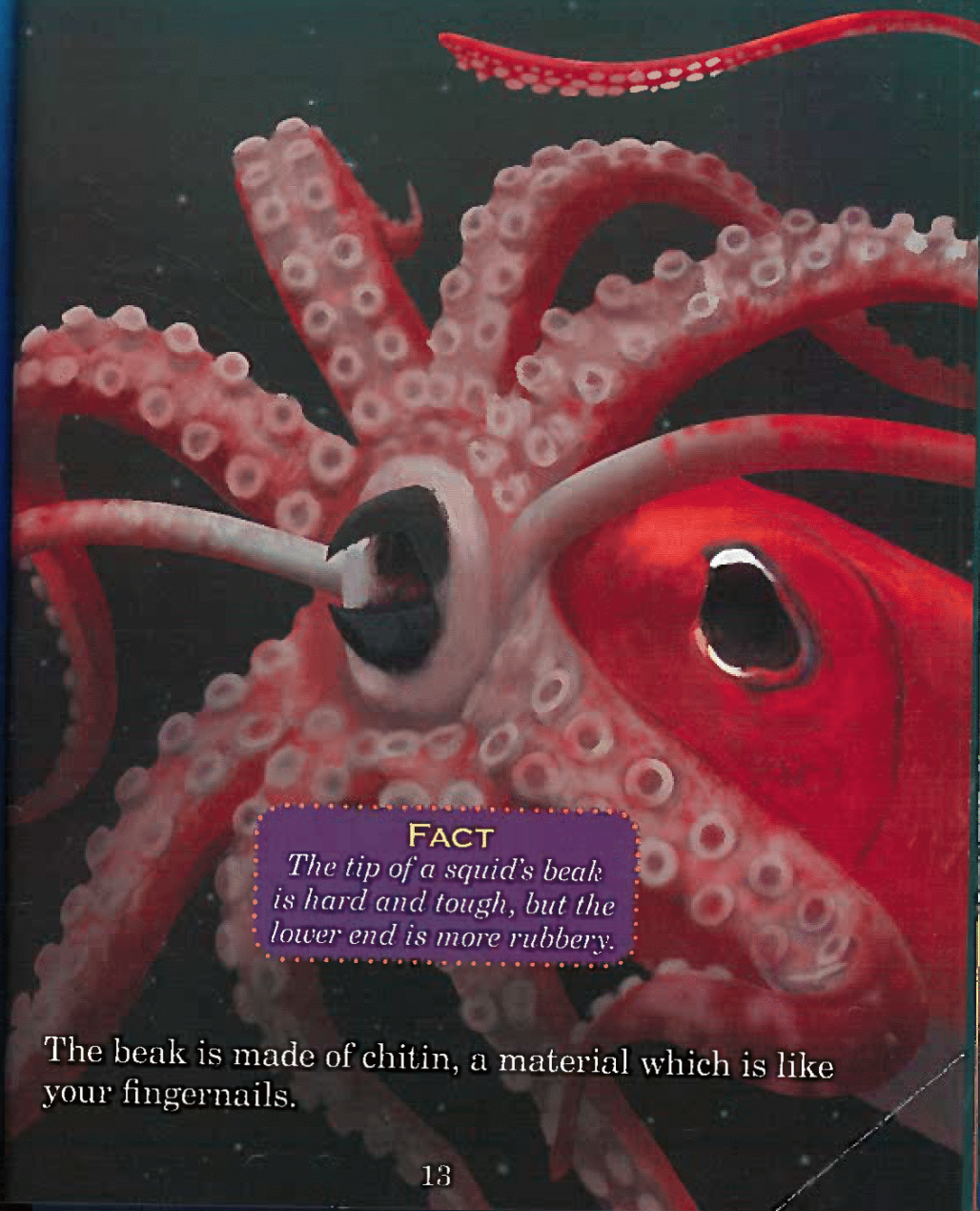


DID YOU KNOW?

Whalers used to carve beautiful designs on whale teeth and whale bone. This type of art is called scrimshaw.

BEAK

Between its eight legs and its two feeder arms is the squid's mouth. It does not have teeth. Squid have a beak. It looks like a parrot's beak.



FACT

The tip of a squid's beak is hard and tough, but the lower end is more rubbery.

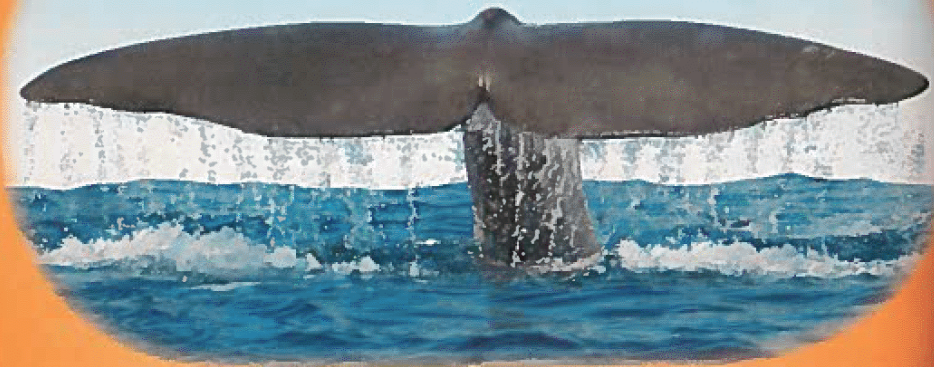
The beak is made of chitin, a material which is like your fingernails.

TAILS

The tail of a sperm whale can be 16 feet across. Whales have horizontal tails.

DID YOU KNOW?

The winglike tail is also called a fluke.



TRY THIS

Use a measuring tape to mark 16 feet across your classroom. Wow! That is a wide fluke!

Other fluke shapes:



blue whale



sei whale



humpback whale



right whale

FINNS

The body of a giant squid is called the mantle or torso. At one end are fins. The giant squid can use its fins to steer. It can also reverse the motion of its fins to swim backward.

FACT

People have seen giant squid jump completely out of the water.



FUN FACT

Squid have three hearts.



BONUS FACT

The squid can also steer itself with its legs.

DINNER

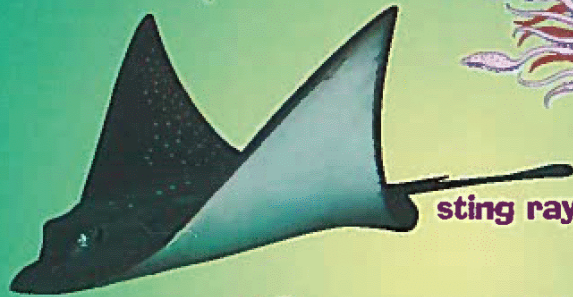
Sperm whales eat giant squid, squid, sting rays, octopuses, and fish.



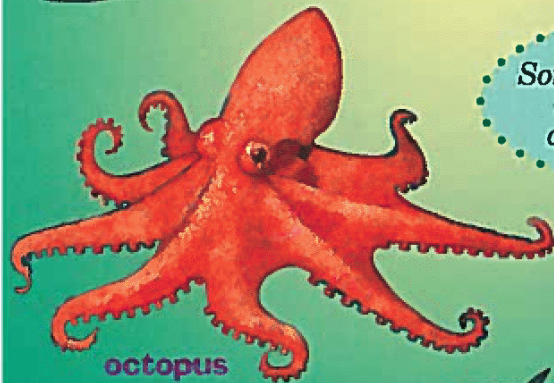
giant squid



squid

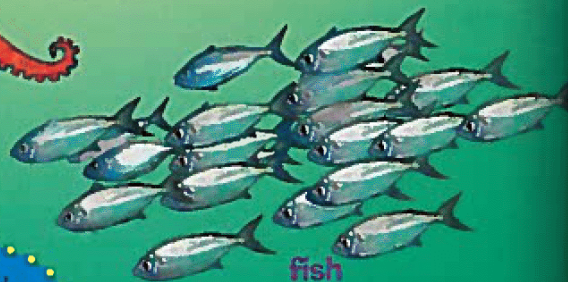


sting ray



octopus

FACT
Some scientists think that whales make such loud underwater clicking sounds that they can shock their food.



fish

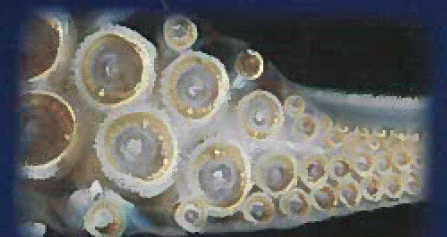
FACT
Some squid are called sea arrows.

SUPPER

Giant squid eat fish, shrimps, and other squid. They grab food with their long feeder arms. The feeder arms have sharp spines on the ends. They pull the food into their beaks.



FACT
Squid arms and legs are also called tentacles.



close-up of a feeder arm

COLORFUL FACT
Giant squid have blue blood.

SPEED

A sperm whale can swim 25 miles per hour.



DID YOU KNOW?

A Dall's porpoise can swim faster than 50 miles per hour.

FUN FACT

The fastest fish is the sailfish. It can swim 90 miles per hour.

DEPTH

A sperm whale can dive half a mile deep.

AMAZING FACT

Sperm whales can hold their breath for up to two hours. They usually submerge for about 45 minutes.

sperm whale

Empire State Building

ocean floor

SPEED

A giant squid can swim 20 miles per hour.



ocean floor

underwater canyon

DEPTH?

It is not known how far a giant squid can dive. It can dive deeper than a whale. A giant squid is more agile than a whale. It can change direction suddenly and can swim backward.

FACT

Squid do not need to come up for air.

ECHOLOCATION

In deep water, the whale relies on echolocation to find its way around. It finds its food by bouncing sound signals off its prey. The whale is lucky compared to a squid. A giant squid cannot hear.



DEFINITION

Bouncing sound back from its prey is called echolocation. The whale uses this to learn where its food is.

SOUND FACT

Sonar is the location of objects through sound waves. Bats, whales, shrews, and some birds have sonar. Submarines have sonar, too!

There are many things we don't know about the sperm whale. We don't know why they do not have teeth in their top jaw. We do not know how many get killed by giant squid.

INK

We don't know how long a giant squid lives. Some scientists think it is only three years.

SECRET WEAPON

Squid blow black ink at their attackers. This is called billowing.



DINNER FACT

Some famous chefs use squid ink to make black pasta. It is called squid-ink pasta.

We don't know how deep they can dive. We don't know how many there are. We don't know where they live, but it appears they prefer deep, colder water. We don't know why no one has been able to catch one alive.

DID YOU KNOW?

There are no known freshwater squid.