

# Angler Fish



The various names for this fish - anglerfish (*Lophius piscatorius*), monkfish, goosefish - are lined to the fact that it has a very unusual looking fish, as indeed do all 24 members of this family of fishes.

At first glance, it appears to be all head - and a head almost as wide as the whole fish is long - with the flat body narrows sharply towards the tail.

The skin is dark, rough and knobby and has no scales which is unusual for a fish. Despite how ugly it is, anglerfish are edible and considered nice to eat, although the tail is usually the only part of the fish displayed!

Other interesting features of this fish include an enormous, crescent-shaped mouth on the upper half of the body, and the three long spines on its head between the eyes; the front spine is modified to act as a lure, attracting smaller fish (prey) closer to the anglerfish's mouth so it can grab them.

Habitat - deep sea

## Olive Ridley Turtle



The olive ridley turtle is the smallest of the marine turtles. The top of this turtle's shell is olive coloured and almost heart-shaped, whilst the underneath of the shell is a greenish white.

Olive ridleys are known for their remarkable mass nestings, when many thousands of females arrive on the same beach. Males and females migrate (move at particular times of the year) from the feeding grounds to the nesting beaches. The nesting usually happens at night and when there is a high tide. The females climb up the beach and lay clutches of eggs - containing between 110 to 120 eggs. These astonishing mass nestings can involve up to 150,000 females. This overcrowding means that turtles are often crawling over each other to move up the beach and may even unearth other nests whilst digging their own.

After around 50 to 60 days, the hatchlings (baby turtles) break out of their shells and make a dash to the sea. Predators such as jackals and crabs will feed on turtle eggs, birds attack hatchlings on the beach and fish wait in the shallows. Therefore it is tough being a baby turtle but the fact there are so many hatching together increases their chances of survival.

Adult olive ridleys are carnivorous (meat-eating) and feed on lots of different organisms including fish and molluscs (shell fish); sometimes diving up to 150 metres in search of food.

## Sea Urchin



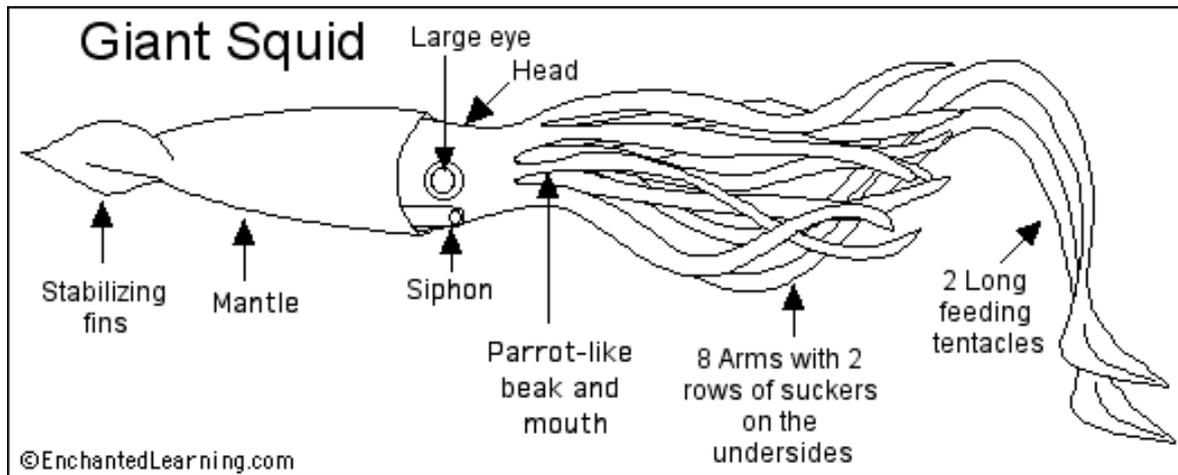
The edible or common sea urchin (*Echinus esculentus*) has a large, rounded 'shell', which is actually an external skeleton, correctly called a 'test'. This shell is built out of plates that are made of calcium.

It is usually pinkish-red in colour but can sometimes be shades of yellow, green or purple. The shape of the test varies depending on the depth of the water. The sea urchins living in shallow water tend to be more flat than the ones living in deep water. The bristles on the 'test' or shell are covered in many protective reddish spines with lilac coloured tips.

The common sea urchin feeds on seaweeds and invertebrates (no backbone), moving along the sea floor using its 'tube feet', which stick out from the spines. The mouth is located centrally on the underside of the shell, and has a group of 5 specialised plates which act as a jaw.

Sea urchins become able to reproduce at between one and three years old, and are thought to live for 10 to 16 years.

# Giant Squid



The giant squid is one of the world's largest animals. It is known to reach a length of up to 20 metres! It is one of the largest known invertebrates (creatures without a back bone) in the world and one of the largest creatures in the sea. The giant squid is a member of the same family of creatures as the octopus.

The giant squid's body is composed of a body, eight arms, and two longer tentacles. The main body, of the squid is around 2 metres long. The insides of the arms and tentacles are lined with hundreds of suckers, of different sizes. Each sucker has sharp, rough edges that help the squid hold on to its prey. The top of the body has two small fins that are used to help the squid change direction in the water and it is pushed along really fast by jet propulsion! The squid can move through the water at high speeds by taking water into its body and then pushing it out again really hard.

The giant squid has a highly developed brain. They are thought to be very intelligent, and may be one of the smartest creatures in the ocean. Their eyes are extremely big. Large eyes are an important adaptation because they help the squid find food in the darkness of the deep ocean.

# Sperm Whale



The sperm whale (*Physeter macrocephalus*) is the largest of the toothed whales, with males growing up to 20 metres in length. The sperm whale also has the largest brain of any living animal.

Sperm whales have huge square heads that take up almost a third of their total body length. Unlike other whales, the blowhole of the sperm whale is on the left of its head rather than on the top.

Further down the body towards the tail there is usually a large hump (bump or lump) on its back, followed by a line of smaller bumps. The dark brown to bluish-black skin, which is splotched and scratched, is tough and helps the whale blend in with its environment. The whales have strong muscular tails, large tail fins and a stream-lined shape to help them swim large distances without having to use too much energy.

The huge heads of sperm whales contain a large chamber filled with a special waxy liquid (spermaceti oil). This wax can be cooled to make it shrink which helps the whale sink, or heated so that it gets bigger which helps the whale rise to the surface.