

Movement

PUPIL FACTSHEET

If you can “swim like a fish” it means that you have mastered the art of swimming, something that comes naturally to fishes. They swim like snakes wriggle: by a series of S-shaped curves, or “waves”, that travel along the body.

Most fish swim by moving their tails from side to side. A fish uses the fins on the side of its body to push itself through the water. They use them for steering and balance, too. The faster a fish moves its tail from side to side, the faster it can swim.

Some fish swim all the time without stopping. Swimming pushes water through their gills so that they can breathe.

Most fish swim in the horizontal position, but a few move very differently from all the others. Many kinds of mid water and deep sea fishes swim or rest vertically.

Seahorses hover in the water in a vertical position.

Catfishes in the Nile and other African rivers also swim in the vertical position.

Schools of **shrimp** fishes of the Indian Ocean swim vertically, their long tube-like snouts pointing directly upward.

A few fish can actually swim upside down for long periods – one of these is the **upside-down catfish**, originally from the Congo and now kept in freshwater aquariums around the world.

Eaglerays have large fins that look like wings and swim using a graceful movement of their fins, or by gliding.

Stingrays are graceful swimmers but often lie partially buried in the seabed.

The **Moray eel** lives in a deep rocky hole. It swims by rippling its long body.

Inshore lobsters tend to stay in one place, seldom moving more than a mile or so, but there are exceptions. The record travel so far is 225 miles covered by a deepwater lobster recovered at Long Island, New York.

To escape predators, **flying fish** leap out of the sea and glide 10 metres or more. The flying fish's side fins are like wings. Flying fish move their tails 50 beats a second to leap out of the water.

Sharks have no swim bladder and will sink if they stop swimming.

Herring in the ‘herring ring’ at Oban Sea Life Centre never stop swimming round and round a tank shaped like a doughnut. Every year they swim twice the distance from Earth to the Moon.

The tail of a **whale** (a mammal, remember) is horizontal, unlike the vertical tail of a fish. A whale swims by arching its body up and down, rather than from side to side like a fish does.

The walkers

The **gurnard** walks along the ocean floor on special feelers which it uses to find animals hiding under the sand.

Mudskippers live in mangrove swamps. At low tide, they move around on the mud using leg-like fins.

With arms like **starfish**, who needs legs to get around? Starfish have thousands of sucker-like tube feet beneath each arm to help them keep a firm grip.

Most **crabs** “walk” or run across the ocean bottom. Others, like the blue crabs of the Atlantic coast can swim - their back pair of legs is modified for swimming and legs are paddle-shaped.

Sleeping with the fishes

Are fish ever completely still? Do they sleep?

It all depends what you mean by sleep. One thing you might have noticed is that most fish do not have eyelids. Also, while some deep ocean fish never stop moving, a great many fishes live nearly motionless lives and many do so on a regular day/night cycle. So we can't generalize and say that all fish sleep like we do.

But most fish do rest. Usually they just blank their minds and do what we might call daydreaming! Some float in place, some wedge themselves into a spot in the mud or the coral, some even build themselves a nest. They will still be alert for danger, but they will also be “sleeping.”

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PUPIL WORKSHEET

How fast can you swim? Some sea creatures can swim really fast.

The sailfish is the sea's fastest fish. It can travel 115 km an hour. A submarine can only go 35 km in an hour. If you are a very good swimmer maybe you can manage perhaps 10 km in an hour.

Seahorses, on the other hand, are very slow – the smallest ones hardly move at all. They cling to plants with their tails, or water currents would wash them away.

How far do you think these fish can swim in an hour?

1. Barracuda
2. Blue fin tuna
3. Blue shark
4. Flying fish
5. Mackerel
6. Swordfish
7. Sailfish

After your teacher has given you the correct answers - or after you have guessed them all correctly yourself! - why not look for pictures and photos of these fish in books, magazines or the internet?

Why do some of these fish travel faster than others? Does it have anything to do with their body shape? Where they live? What they eat?

