

# SEA URCHIN



Photo by Meet the Sea

## Key Information

Typically, sea urchins grow between 3cm and 10cm, but some species have been observed to grow as large as 36cm.

The *arbacia lixula* (pictured here) is a medium-sized sea urchin characterised by its deep black colour which usually grow to around 5-8cm.

Sea urchins can be found in all environments, but certain species tend to prefer warmer waters.

They are recognisable from their round shape and distinctive spines, which are visibly symmetrical.

## Curiosities

Sea urchins don't have eyes, but researchers have discovered that they can still see, at least partially, using light-sensitive cells in their feet. However, they don't like light, which is why you often find sea urchins hiding in the shadows. If a sea urchin ends up in a sunny spot, it will make a little "hat" on top of its spines. It does this by collecting seaweed, stones, and shells to shield itself from the sunlight.

## Scientific Name:

*Arbacia lixula* (black sea urchin)

## Food

To eat, sea urchins use their mouths to scrape food off of the surface of rocks. They have very sharp teeth that they then use to grind up the food.

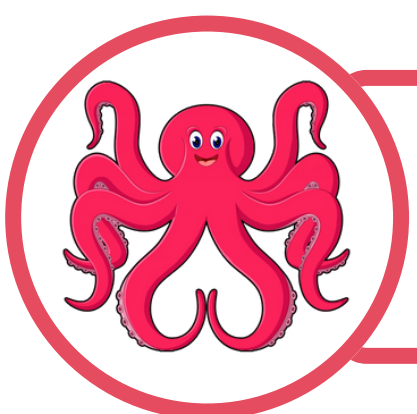
Sea urchins are almost entirely herbivores, mostly living on a diet of algae, but sometimes eating other invertebrates such as sea cucumbers, mussels and sponges.

Many marine creatures also hunt sea urchins, including sea otters, sharks, and starfish. When they sense a predator nearby, sea urchins either move away or point their spines in the predator's direction.

## Behaviour

Sea urchins spend a lot of their time sticking to the rocks they've settled on, but they can move, and often do in order to get food. While they aren't obvious, sea urchins actually have 'tube feet', which are an adapted version of the spines covering the rest of their bodies. They use these feet in a rowing-like motion to walk along the surface. The feet are also very sticky, helping sea urchins avoid being swept away by the movement of the water.

They will typically move along the rocks very slowly, travelling at around 8cm per minute, and moving about one metre per day so they can feed and then return to their resting spot. However, when they smell predators, they are able to move almost twice as fast at 15cm per minute, travelling in a straight line to escape as quickly as possible.



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