

# SEA SHELLS

Peering through the glassy water at the world of rock pools is a very special way to spend a morning or even a whole day. An amazing variety of creatures live in these special environments, let's take a look at a few.

Molluscs are all the animals with shells (except barnacles) and include chitons, limpets and whelks. The main features of a mollusc are an unsegmented, soft body, and either a muscular foot or tentacles.

Animals such as sea urchins, starfish, brittle stars, crinoids (sea lilies or feather stars) and sea cucumbers are called echinoderms. Many echinoderms can actually regrow a part of their body if it is broken off!



Encrusting sponges are the sponges that are most common in rock pools. They are usually found near the low-tide mark attached to rock surfaces. Sponges are classified as animals, and draw water into a cavity in the sponge where food particles are trapped and digested.

Arthropods have many jointed legs or limbs as well as an external skeleton, which they shed and renew as they grow. Marine arthropods include crabs, shrimp, and lobsters.

Although anemones look like flowers, they are actually carnivorous animals that trap their prey and digest it. Many have stinging tentacles that they use to catch and paralyse prey.

One of the most common types of worms that are found in rock pools are the tube worms who only come out of their shells when they are under water, and use their tentacles to filter out food particles.

## HERE ARE SOME FASCINATING FACTS ABOUT SEA SHELLS.



The turn of a snail's shell is called a *whorl*. In 99 percent of all snail species, that whorl goes in a clockwise direction.

By comparing fossil shells with today's seashells from warm and cold climates, scientists can discover what the climate may have been like in different regions millions of years ago.



Molluscs can turn their shells different colours by eating a variety of colourful food. For example, red seaweed gives some sea animals a red shell.

Some animals have carrier shells. They attach other shells or shell pieces to their own shells with a kind of glue that they make. The extra shells add protection and camouflage, helping the animals hide from predators.

When hermit crabs outgrow their shells, they look for a new empty snail shell to take over. If it weren't for snail shells, hermit crabs would have no homes.

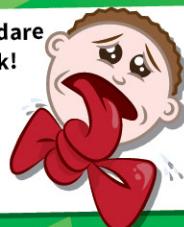


Seashells have been used many ways throughout history, from jewellery to money and animal feed. Molluscs are animals that live in shells for protection. There are between 50,000 and 200,000 different kinds of molluscs.



Try this seashell tongue twister... we dare you to say it five times fast! Good Luck!

She sells seashells by the seashore.  
The shells she sells are surely seashells.  
So if she sells shells on the seashore,  
I'm sure she sells seashore shells.



# SEA TURTLES

Sea turtles or marine turtles are turtles that live in oceans all over the world except the Arctic. Sea turtles, along with other turtles and tortoises, are part of the order 'Testudines'. The seven species that can be found today have been around for 110 million years, they have been around since the time of the dinosaurs. The seven living species of sea turtles are: flatback sea turtle, green sea turtle, hawksbill sea turtle, Kemp's ridley sea turtle, leatherback sea turtle, loggerhead sea turtle and olive ridley sea turtle. Unlike other turtles, sea turtles cannot retract their legs and head into their shells.



Sea turtles are generally found in the waters over continental shelves or areas with reefs. Once the males enter the water for the first time they will not return to the shore again. Green sea turtles in particular are often found in Sargassum beds, a brown seaweed in which they use for shelter and food. Once the sea turtle has reached adulthood it moves closer to the shore, females will then come ashore to lay their eggs on sandy beaches during the nesting season.

Sea turtles are found in all warm waters throughout the world and migrate hundreds of kilometres between nesting and feeding grounds. Most sea turtles go through long migrations, some as far as 2300 kilometres, between their feeding grounds and the beaches where they nest.

They feed on a wide range of sea creatures and plants, most sea turtles are omnivorous in their adult life, unlike most sea turtles, adult green turtles are herbivorous, feeding on sea grasses and algae. Juvenile green turtles, however, will also eat invertebrates like crabs, jellyfish, and sponges. Some species have a certain kind of prey that makes up the majority of their diet. The sea sponges are the main food source for the hawksbill sea turtles, constituting of 70-95% of their diet. The Leatherback sea turtles feed almost exclusively on jellyfish.

Six of the seven species of sea turtles are threatened or endangered. Sea turtles face a number of dangers when migrating and feeding, including accidental capture and entanglement in fishing gear, the loss of nesting and feeding sites to coastal development, intentional hunting (poaching), and ocean pollution.



## DID YOU KNOW?

Sea turtles have a great navigation system. They can very easily find a place and come back to where they were born.

Sea turtles can lay anywhere between 50 and 200 eggs at a time, the gender of the turtle will depend on the environmental temperature.

Green sea turtles can stay under water for as long as five hours even though the length of a feeding dive is usually five minutes or less. Their heart rate slows to conserve oxygen: nine minutes may pass between each heartbeat.



Green Sea Turtle



Kemp's Ridley Sea Turtle