Hard coral

From top: Plate coral; close up detail of hard coral; bright yellow polyps of turret coral

Coral reefs are built by and made up of thousands of tiny animals — coral 'polyps' — that are related to anemones and jellyfish. Polyps can live individually (like many mushroom corals do) or in large colonies that comprise of an entire reef structure.

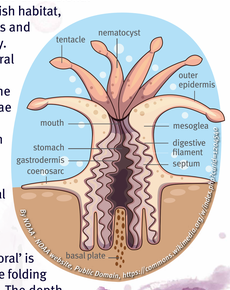
Learn more about corals of the Great Barrier Reef

The difference between hexacoral or hard coral and octocoral or soft corals can be explained by the number of tentacles and their external skeleton. Soft coral polyps always have eight tentacles (hence the term octocoral) while hard corals have multiples of six tentacles (hexacorals). Also, hard corals have hard calcium carbonate skeletons whereas most soft corals lack a hard external skeleton.

Below: Porites coral

The most common type of hard corals in the Great Barrier Reef are the Acropora (staghorn) corals. They comprise about a quarter of the Reef's corals. Staghorn corals have antler-like branches which are often colourful. They can grow up to 30 cm per year. These three-dimensional structures provide great fish habitat, stabilisation of coastlines and protection of biodiversity. The greatest threat to coral reefs is sea temperature increase which causes the corals to release the algae that live in their tissues and provide them food. In the absence of algae the coral's health declines.

Top: Vase coral
Below: Cross section of a coral polyp



Other species of hard coral such as the Faviidae (brain corals) are slow growing and can be very large. The name 'brain coral' is due to their shape and the folding pattern on their surface. The depth of the folds and their colour can vary.