A DIVE INTO THE WORLD OF CORAL 04

CORAL REEF STRUCTURE.
NOT ALL THE SAME, SO MANY DIFFERENT FORMATIONS.

1. FRINGING REEF

A fringing reef, (also called a shore reef), is directly attached to a shore, or borders it with an intervening narrow, shallow channel or lagoon. It is the most common reef type. Fringing reefs follow coastlines and can extend for many kilometres. They are usually less than 100 metres wide, but may develop to be hundreds of metres wide. Fringing reefs are initially formed on the shore at the low water level and expand seawards as they grow in size, with the final width dependent upon where the sea bed begins to drop steeply. A good example of a fringing reef is on the Red Sea where they are considered to be some of the best developed in the world.

2. BARRIER REEF

Barrier reefs are separated from a mainland or an island shore by a deep channel or lagoon. They resemble the later stages of a fringing reef with its lagoon, but differ mainly because of size and origin. Their lagoons can be several kilometres wide and 30m – 70m deep. Above all, the offshore outer reef edge is formed in open water rather than next to a shoreline. Its formation takes considerably longer than for a fringing reef, making barrier reefs that much rarer. The best known and largest example of a barrier reef is the Australian Great Barrier Reef.

3. PLATFORM REEF

Platform reefs, are also known as bank or table reefs. They can form on the continental shelf, as well as in the open ocean – in fact anywhere where the seabed rises close enough to the surface of the ocean to enable the growth of zooxanthemic (reef-forming corals). Platform reefs are found in the southern Great Barrier Reef, being the Swain and Capricorn Group on the continental shelf about 100–200 km from the coast. Unlike fringing and barrier reefs which extend only seaward, platform reefs grow in all directions. They are variable in size, ranging from a few hundred metres to many kilometres across, and their usual shape is oval to elongated.

4. ATOLL REEF

Atolls or atoll reefs are a more or less circular and are a continuous barrier reef that extends all the way around a lagoon without a central island. They are usually formed from fringing reefs around volcanic islands. Over time, the island erodes and sinks below sea level. Atolls may also be formed by the sinking of the seabed or rising of the sea level with the resultant ring of reefs which enclose a lagoon. Atolls are numerous in the South Pacific (i.e. Cook Island, French Polynesia) and in the Indian Ocean (i.e. Maldives, Seychelles and Cocos Island).

5. PLUS MANY MORE…

Some of these are:

APRON REEF – short, sloped, extending outwards and downwards – the initial stage of a fringing reef.
BANK REEF – isolated, flat-topped – a type of platform reef.
PATCH REEF – common, isolated, comparatively small – usually within a lagoon.
RIBBON REEF – long, narrow and usually associated with an atoll lagoon.
HABILI REEF – a reef specific to the Red Sea.
MICROATOLL – a community of species of corals with vertical growth limited by tidal height.
CAYS – small, low-elevation, sandy islands formed on the surface of coral reefs from eroded materials that piles up forming an area above sea level. Some can become stabilised sufficiently by plants to become habitable.
SEAMOUNT or GUYOT – formed when a coral reef on a volcanic island subsides. Seamounts are rounded, Guyots are flat.

Acknowledged and significantly sourced from https://en.wikipedia.org/wiki/Coral_reef