Guide to Life on the Rocky Shore

**Crustaceans**

Related to insects, this group typically has a hard outer shell and jointed legs. Many crustacean species are planktivorous and never grow to more than a millimeter in length.

- Hairy handed crab
- Purple shore crab
- Half crab
- Glass shrimp
- Barnacles

The shell resembles a volcano, but when the top does open, the barnacle kicks out its hair-covered legs to filter tiny plankton from the passing water.

**Seaweeds**

Plants in the ocean are vital as food producers and oxygen release. Oceanic plants may produce as much as 70% of the world’s oxygen. Phytoplankton are microscopic, but seaweeds are macroscopic and easy to find. Look out for the three main groups: red, green, and brown.

- Bladder kelp (brown)
- Corallina (red, green, brown)
- Sea lettuces
- Sea anemones
- Neptunes necklace (brown)

**Echinoderms**

Echinoderms have a radial symmetry like the seastar. They walk using tube feet for holding on to the rocks and are able to grow back lost body parts. They are found only at the water’s edge and deeper.

- Spring sea star
- Sea anemones
- Brittle star

**Molluscs**

Despite the variety, most molluscs share a basic body plan with a muscular foot and a protective shell. They are well adapted for life on the intertidal zone as the shell helps keep them wet and cool.

- Snails
  - Snails come in many shapes: long and thin, short and fat, with shell and without! Most snails are grazers, but whelks prey on barnacles and mussels.
  - Limpets have a cone-shaped shell for protection. The shell of the clacker limpet is so small it relies on its hard taste for protection.

- Octopus
  - Common but often unseen, octopus hark in the shallow water. Crab shells, leftover from its supper, may mark the entrance to an octopus lair!

- Bivalves (two shells)
  - Bivalves like mussels and oysters filter food. Extremely efficient plankton feeders, mussels can filter 99 liters of water per hour at high tide. At low tide the shells are pulled tightly closed to prevent them from drying out.

- Cnidarians
  - (a slang C pronounced ny-dairy-ance)
  - All cnidarians have stinging tentacles which stun their prey. Luckily, most anemones have such small stinging cells that they don’t harm us. However, beware of the blue bottle jellyfish often found washed up on the beach.

- Fish
  - During low tide you will only see small fish living in the rock pools. Tripods may be found under large rocks at low tide guarding eggs.

- Sea Squirts (ascidians)
  - Some sea squirt are colonial and look like shiny jelly. Others are solitary with obvious openings where water is pumped in and out to filter food.

- Sponges
  - Sponges are not plants but rather an apartment block of individual animals living together as one organism. On the rocky shore they keep a low profile and often encrust rocks and shells. Sponges suck in water, filter out tiny plankton, then expel it through the larger openings.

- Worms
  - Soft-bodied and tasty, intertidal worms hide in the sand or in their own hard tubes. Tube worms extend their gills to filter plankton at high tide. The brittle worms are carnivorous with sharp pincer-like jaws.