# Rocky Shore Mapping

Head to your local rocky shore at low tide on a nice day and see what you can find!

This activity will show you how to create a map of where the sea creatures live along the rocky shore.
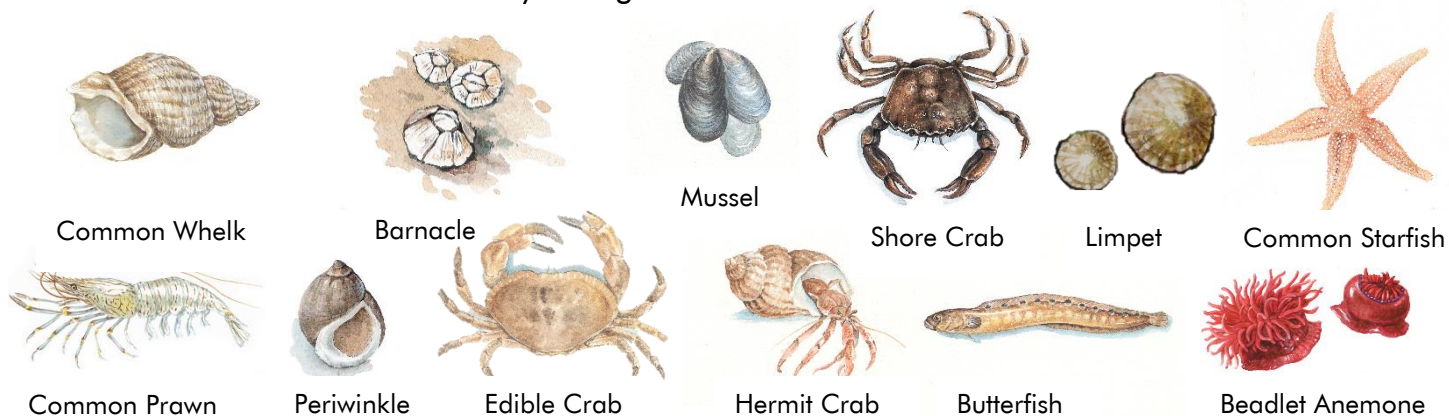
You will need a note pad or paper, crayons or colouring pencils and an adult. Make sure you dress for the weather and have appropriate footwear – we suggest wellies or water socks.

Before you go have a look on Google Maps for your beach – we used Macduff - and make a rough drawing of it in your notepad or on your sheet of paper, like we did below.
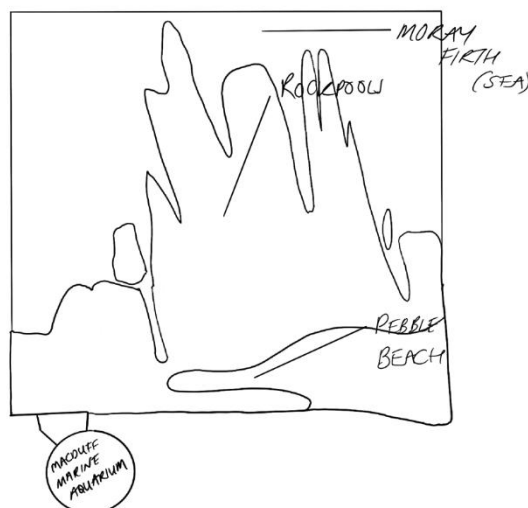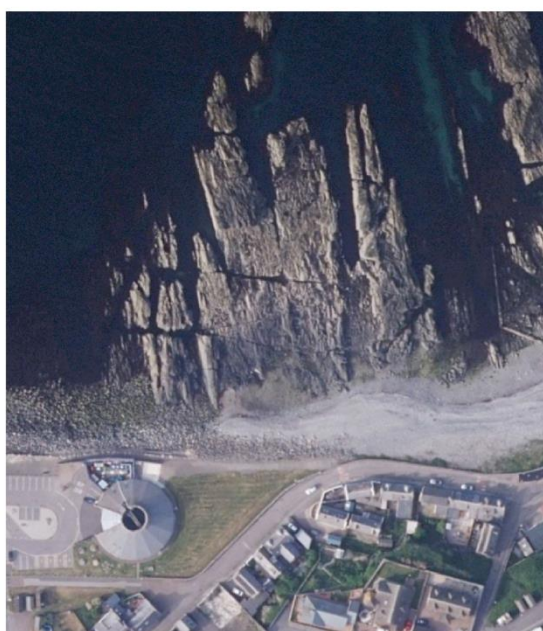
Macduff Marine Aquarium
Shoreline Sketch

Here are some of the animals you might find:

Common Whelk   Barnacle   Mussel   Shore Crab   Limpet   Common Starfish

Common Prawn   Periwinkle   Edible Crab   Hermit Crab   Butterfish   Beadlet Anemone

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You can create your own legend (key) or you can use one like ours opposite. Then head out to the beach and see what you can find! Mark on the map what you find and where, try to be as accurate as possible. When you have finished, you might have something like that looks like our sketch.

Can you notice any patterns?

The rocky shore is made up of zones – high, mid, and low shore. These zones exist because of the varying levels of "exposure". Exposure means open to the elements - sun, rain, snow, ice, or wind - and in this case, how long the zone is out of the sea at low tide.

On our map, you can see we found lots of periwinkles, and they were the only species we found on the high shore, the zone that is out of the water most of the time. At the low shore, which is usually covered by the sea you can find many different species and many more animals, like crabs, starfish and even fish.

For an extra challenge, try adding more species and even seaweeds such as cuvie kelp, sea lettuce, and Irish moss to your map!
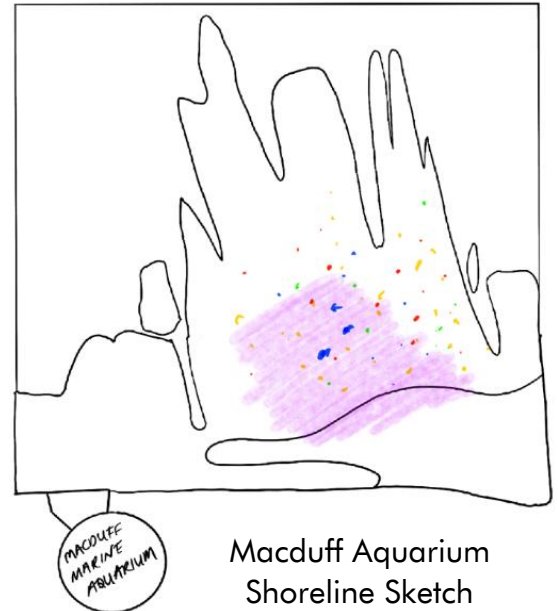
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For the aspiring marine biologist, think about what adaptations (special characteristics) the animals have in each zone. For example, periwinkles have a shell to hide in and stick to the rocks to stop them drying out (desiccating).

Rocky Shore Zonation

Splash Zone
Lichens and Sand Hoppers

High Shore
Green Algae, Barnacles, Limpets, Sand Hoppers, Periwinkles

Mid Shore
Brown and Red Algae, Mussels, Anemones, Crabs, Starfish, Whelks and Chitons

Low Shore
Brown and Red Algae, Worms, Sponges, Urchins and Fish