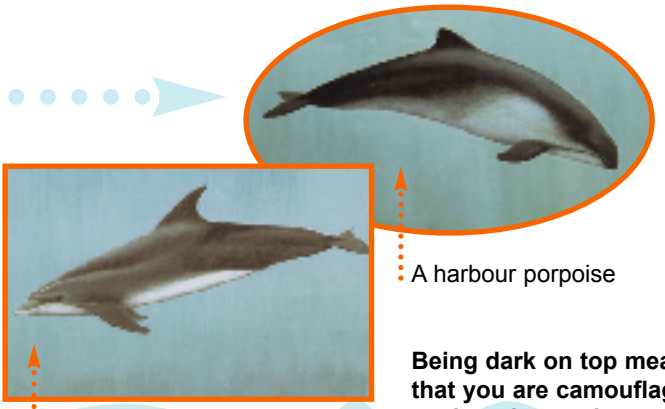
Harbour Porpoise Skull

Phocoena phocoena (phoca in latin means seal)

What is a Porpoise?

Porpoises and dolphins appear similar but they are as genetically different as cats and dogs! Porpoises are usually stubby, robust marine mammals, often shy and not particularly playful. Dolphins on the other hand are sleek, lively mammals, well known for their friendliness and curiosity. The other big difference is that dolphins have conical teeth for tearing large prey to bits, porpoises have spade-shaped teeth for holding their prey and swallowing it whole. Both porpoises and dolphins have been seen in the Solent.



A harbour porpoise

A bottlenose dolphin

Being dark on top means that you are camouflaged against the sea bottom and being light underneath means that you are camouflaged against the sunlight above. Very useful if your main predator is a shark!

Red arrows show noise leaving. Orange arrows show noise returning.

Seeing with your ears?

Like bats in the dark, porpoises have evolved to use their ears to find things in the murky seas. Objects in the sea are almost silent but porpoises use something called **'echolocation'** to make them noisy! Bats and porpoises have both evolved to use echolocation because they hunt in similar environments (i.e. dark ones) but bats and porpoises are only very distantly related. This wonderful phenomenon is called convergent evolution.

Echolocation - How to make a silent object noisy ...

Porpoises let out 'clicks' from their nasal passage, the clicks then pass through a flexible, oil-filled organ called the melon which directs them outwards. If there is something in front of the porpoise, the clicks will bounce off it and back to the porpoise. From the loudness and frequency of the clicks the porpoise can work out whether to eat the object or avoid it! The Harbour Porpoise can accurately (90%) detect objects from 24 metres away.