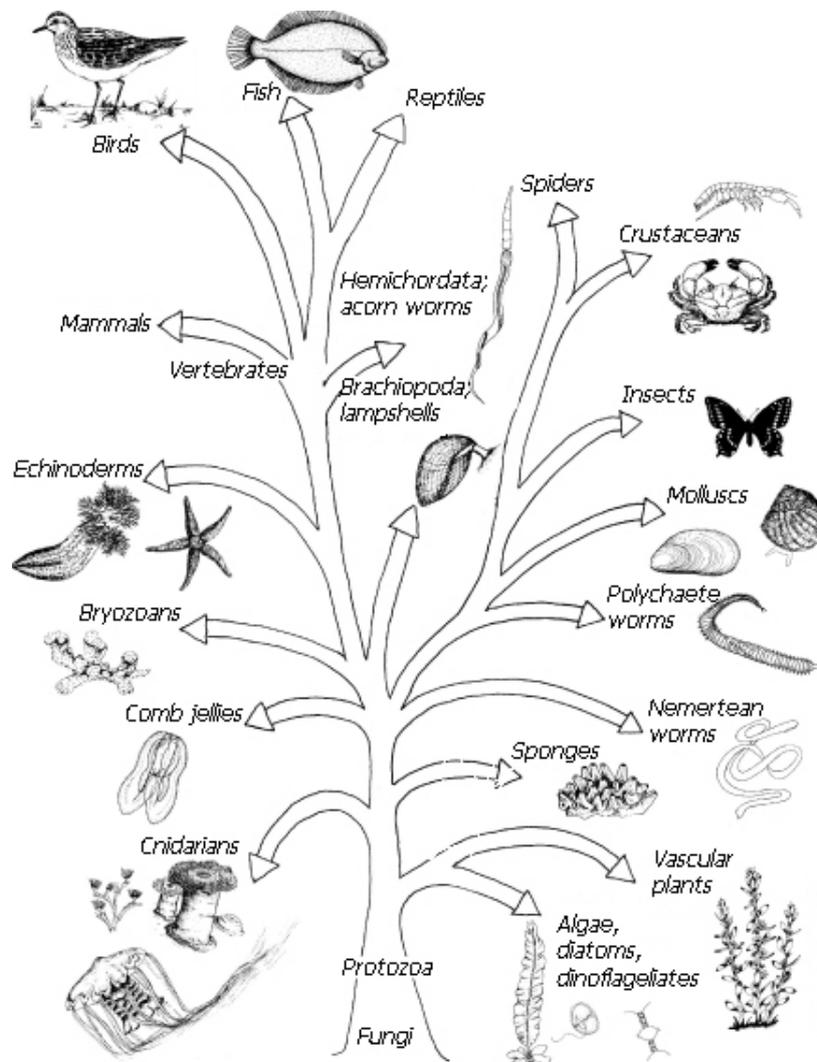


# My Passport to Marine Life

Name:

The ocean is home to a most amazing variety of marine life and getting to know all of these marine animals and plants can be confusing. That is why scientists use a process called *classification* - a way of organizing similar plants and animals into groups.

Here we will just look at marine animals. There are two main kinds of marine animals - those with backbones (*vertebrates*) and those without backbones (*invertebrates*). Use different colours to show the different invertebrate groups in the picture below.



# My Passport to Marine Invertebrates 1

## Porifera (Sponges)

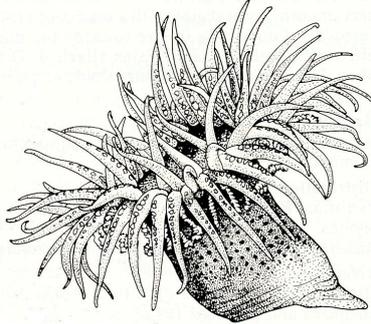


Because they are *sessile* (stuck down and don't move), colourful and have a simple structure, sponges are often mistaken for plants. However, they are invertebrates (animals) that survive by filtering small plants and animals (*plankton*) from the sea water around them. They do this by pumping water through their bodies. Look closely and you will see lots of small holes (pores - that's where the name *Porifera* comes from).

## My Drawings and Notes

# My Passport to Marine Invertebrates 2

## Cnidarians

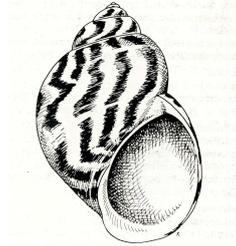


Sea anemones, corals and sea jellies (jellyfish) all belong to a group of invertebrates that scientists call the *Cnidaria* (say ni-dar-re-ah). They can all sting and capture their prey with special cells called *nematocysts*. These stinging cells are found in the tentacles that surround the mouth. The other interesting thing about cnidarians is that their digestive system has only one opening - the mouth. Cnidarians can have one of two body types - a *polyp* or a *medusa*.

### My Drawings and Notes

# My Passport to Marine Invertebrates 3

## Molluscs

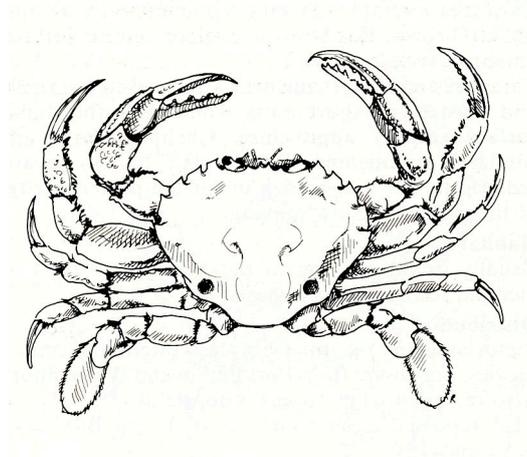


Sea snails, chitons, bivalves (mussels and clams) plus octopus and squid belong to a group of invertebrates that scientists call the **Mollusca**. They live in many different environments, on land, in the sea, and in fresh water. All molluscs have a soft body (that is what the word Mollusca means). However, most molluscs have some form of hard shell. They also have a muscular structure that called a "foot" (but it usually looks more like a tongue).

## My Drawings and Notes

# *My Passport to Marine Invertebrates 4*

## *Crustaceans*

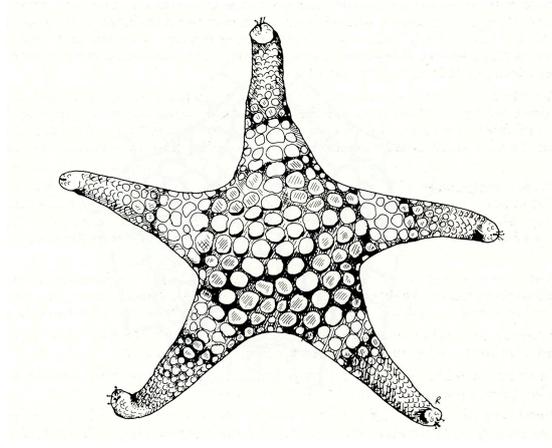


*Crabs, shrimp and barnacles belong to a group of invertebrates that scientists call the Crustacea. All crustaceans have a hard external shell (the crust in the name crustacean) and two pairs of antennae. Although it may often hard to see, crustaceans also have three body sections: head, thorax and abdomen. They belong to an even bigger group of invertebrates called the Arthropoda. Insects, millipedes, centipedes, spiders and scorpions are all arthropods.*

### *My Drawings and Notes*

# My Passport to Marine Invertebrates 5

## Echinoderms



*Echinoderms* are a group of marine animals that include sea stars (starfish), brittle stars, sea urchins and sea lilies. The name echinoderm means "spiny skin" and you can easily see (or feel) this hard spiny skin in most echinoderms. Another feature that all echinoderms share is that they move about using hundreds of water-filled tubes called *tube feet*. Most echinoderms also have an obvious five-way symmetry. For example, most starfish have five arms.

## My Drawings and Notes

# My Passport to Marine Vertebrates

## Fish and other vertebrates



### My Drawings and Notes

*Any animal with a backbone is called a vertebrate. All mammals, including humans, are vertebrates. So are birds, reptiles (such as snakes and lizards), amphibians (such as frogs) and fish. Although a few mammals, birds and reptiles live in the sea fish are the main vertebrates found in the sea. There are two kinds of fish. The first group, sharks and rays, have soft bones made of cartilage. The second group are called bony fish because their skeletons are made of solid bone.*