food chains

Food chains describe which plants or animals eat or are eaten by other animals. Some animals eat tiny plants that you can't see without a microscope (phytoplankton) or decaying bits of other plants and animals (detritus).

Plankton are a very important part of the food chain. Phytoplankton is the most important.

Phytoplankton are the only plants of the ocean and use the energy from the sun to grow. They drift in the top layer of the ocean where they can get light and are at the beginning of most ocean food webs.

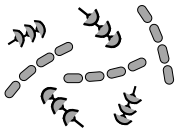
Phytoplankton is eaten by zooplankton. Zooplankton are microscopic animals. They are eaten by small marine animals like sea urchins, sea stars and small fish. It would be easy to think that smaller animals are eaten by larger animals. But this is not always true. Sometimes food chains can be a bit surprising. For example, the whale shark, which is one of the largest fish in the sea, doesn't eat large fish but has tiny teeth and uses its gills to strain the water to get its food, which is the tiny plankton.

Food chains can get complicated because like us, marine animals like to eat more than one kind of food. If we pieced together all the kinds of food each animal eats and all the different animals that eat it, we would have a food web.

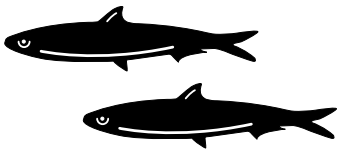
There are so many things that can change who eats what:

- Pollution can change habitats and may even kill off all of a particular species in an area
- Animals at the top of the food chain, like seals, whales and tuna, can be removed from an area because humans have captured them all
- Changes to the environment (eg changes to how much water flows into the ocean through rivers) can change habitats which in turn can change the number and kinds of marine animals in an area
- In nature there is competition between different types of animals all wanting to eat the same food.

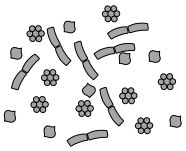
FOOD CHAIN 1



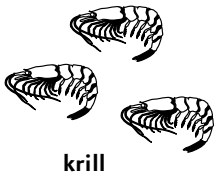
zooplankton



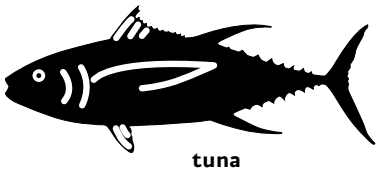
fish



phytoplankton

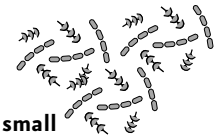


krill

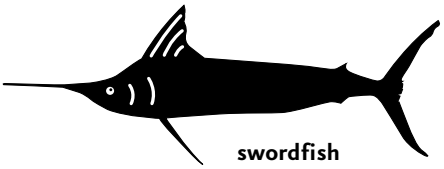


tuna

FOOD CHAIN 2

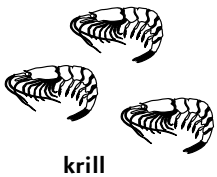


small zooplankton

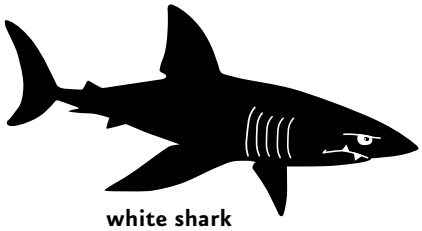


swordfish

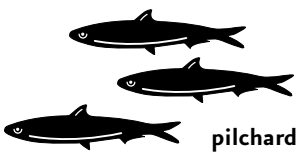
small phytoplankton



krill

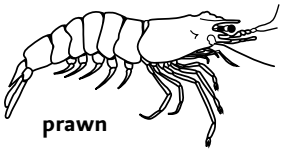


white shark

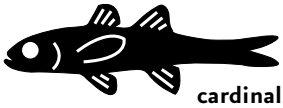


pilchard

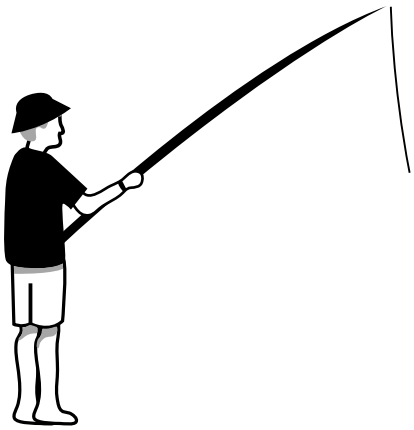
FOOD CHAIN 3



prawn

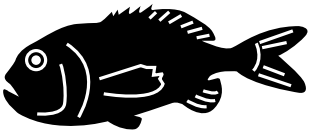


cardinal fish



human

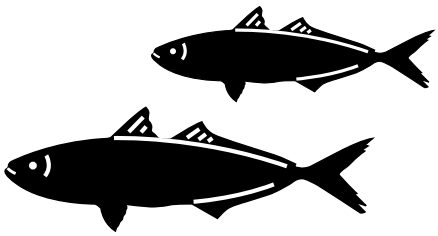
marine snow/detritus



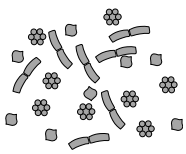
orange roughy

FOOD CHAIN 4

salps



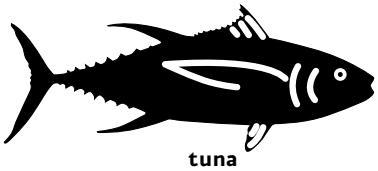
jack mackerel



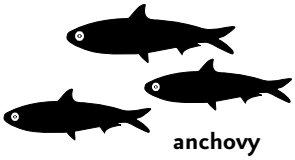
phytoplankton

flathead

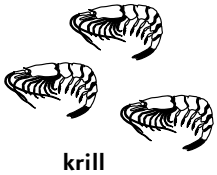
FOOD CHAIN 5



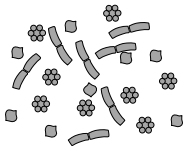
tuna



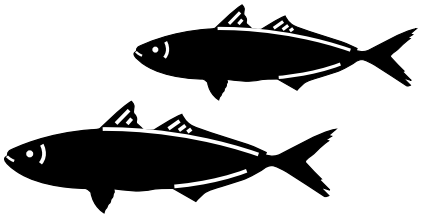
anchovy



krill

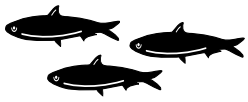


phytoplankton

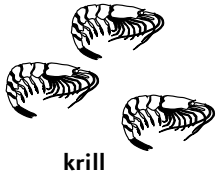


jack mackerel

FOOD CHAIN 6



redbait



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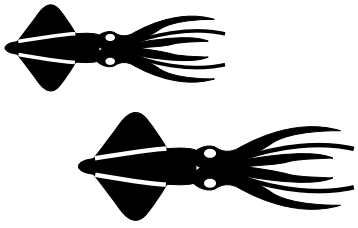

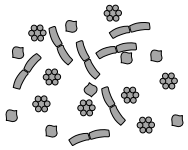

phytoplankton