

## Fish 1

### Fish are vertebrates

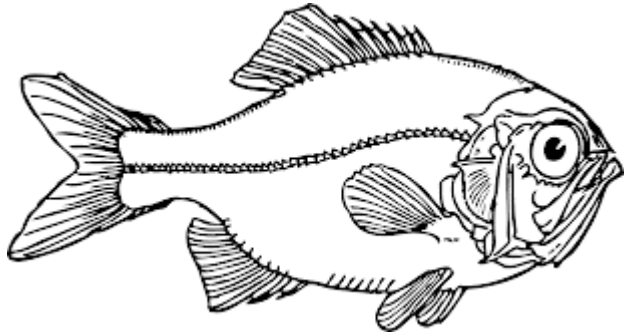
This means that they have backbones.

A Fish's skeleton is joined to its backbone.

Most fish have skeletons made of bone.

But sharks and stingrays have a skeleton made of cartilage.

Cartilage is softer than bone. It can bend, but it is very strong.



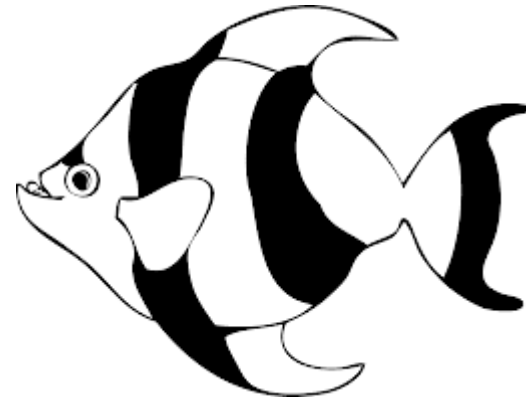
1. Draw a fish with a backbone.
2. What do sharks and stingrays have instead of bones?

## Fish 2

### Fish are cold blooded

Their body temperatures change with the water around them.  
Fish swim to a new area when the water temperature changes.

Fish that live in lakes will swim at the bottom of the lake in winter because the water is warmer there. Then they will swim to the surface of the lake in summer because the water is no warmer there.



1. Why do fish swim to a new area when the water temperature changes?
2. What other animals do you know of that are cold blooded?

### **Fish 3**

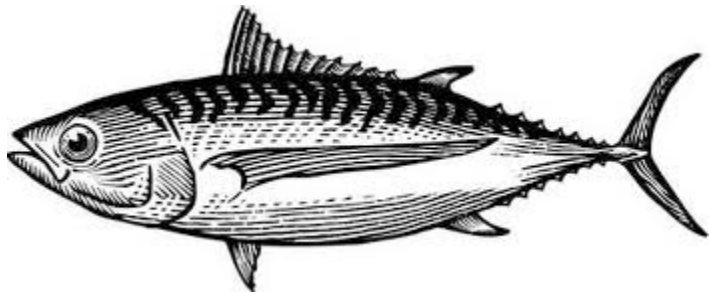
#### **Bodies of fish**

All fish have a body, a head and a tail.

Some fish like tuna have a torpedo shaped body. This is a long, narrow shape which helps them swim quickly through the water.

Fish have fins. Fins help a fish move through the water. Angelfish use their fins to swim between rocks.

Fish have scales. Their skin is covered with scales. Some fish have scales that are smooth. Others have rough scales that look like tiny teeth. Scales help protect fish from predators. (Predators are other animals that want to eat the fish.)



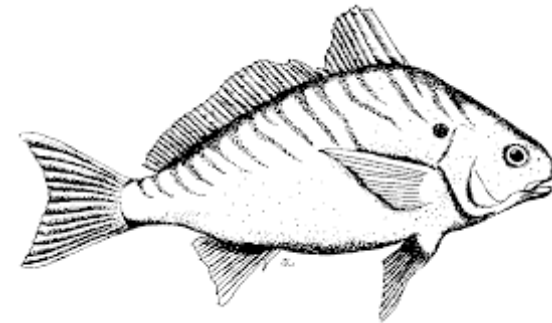
1. What is a torpedo shape?
2. How does a torpedo shape help some fish?
3. How do fins help fish?
4. How do scales help fish?

### **Fish 4**

#### **How fish breathe**

All living things need air to stay alive. We breathe air through our lungs. Air is made up of several gases including oxygen. The main gas that we need to breathe is oxygen. Sharks and other fish breathe the air that is in the water. Water moves through a fish's mouth and over its gills.

The gills take oxygen from the water. The oxygen enters the fish's blood. Animals need oxygen in their blood to live.



1. Draw a fish and label the gills.
2. What do fish use their gills for?
3. What is oxygen?
4. Where do we find oxygen?

## Fish 5

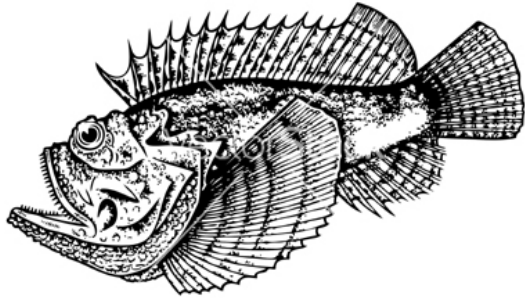
### What fish eat

Fish eat many kinds of food. Most fish eat other animals including other fish. Some fish eat plants.

### Poisonous fish

Some fish are poisonous to eat.

Some have a poisonous sting when you step on them. The stone fish has spines along its back which are attached to sacs of venom. Stone fish live in tropical coral reefs.



1. What do fish eat?
2. What might happen if you stand on a stone fish?
3. Where do stone fish live?

## Fish 6

### Eggs and young

Most fish hatch from eggs. Female fish usually lay many eggs at one time. Other fish eat many of the eggs before they can hatch.

Some fish, like sharks, give birth to baby sharks. The baby shark grows inside the mother shark's body until it is born.



1. How are most baby fish born?
2. How are baby sharks born?

## Fish 7

### Fish that do not look like fish

#### Is a seahorse a fish?

Yes! Even though it may not look like one, a seahorse is a type of fish.

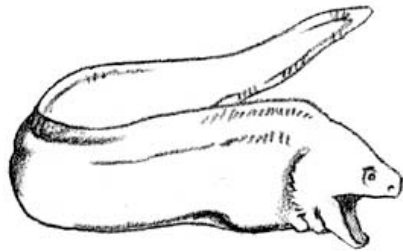
A seahorse can twist its curly tail around things to stop it from being washed away in the sea's current.



#### Is an eel a fish?

Yes! Although it looks like a snake, an eel is a type of fish.

One type of eel is a moray eel. It has a flat body like a ribbon with fins along the top and bottom to help it swim.



1. Draw a seahorse using its tail.
2. Moray eels have f\_\_\_ like other fish.

## Fish 8

### How fish protect themselves

#### Schools of fish

Some fish swim in schools because they are much safer from predators than if they were swimming alone.

Fish swimming together in one group look like a big cloud. This scares away hungry predators.

#### Fish can change colour.

Some fish are pale and striped during the day but at night the stripes disappear and the body turns red.

Red cannot be seen in the dark, so at night the colour red keeps the fish safe from predators.



1. What is a predator?
2. Why is it good for a fish to swim in schools?
3. Why are red fish safer at night?