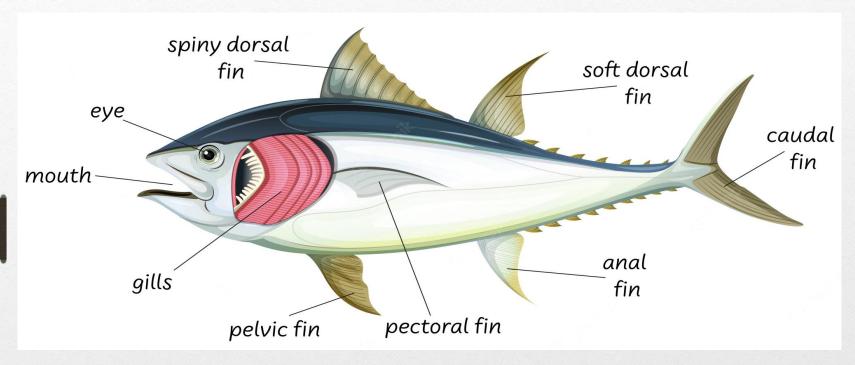
10th Grade

Fish and Pigeon



1.) There are over 30,000 species of fish.

- There are lots of fish in the sea and some haven't even been discovered yet.
- Currently there is just over 30,000 species of fish that exist!
- That's a lot of fish and if you see a big group of them together, that's called a school!

2.) Fish are cold-blooded!

- Most fish are cold-blooded unlike us who are warm-blooded.
- There is an exception though...
- Tuna and mackerel sharks have warm blood like us.
- An Opah fish also has warm blood.

3.) Scales help fish to swim.

- Scales are very useful to fish.
- They are often slimy which helps them glide through water more easily.

4.) Fish are vertebrate animals.

- A vertebrate animal is an animal with a spine and bones.
- However, you can find invertebrates in the sea too.
- For example, a jelly fish and star fish both have no spine.

5.) Fish are speedy!

- Fish are very speedy swimmers.
- Some of the fastest ones are sailfish, marlin and tuna.
- A sailfish can swim up to 68 miles per hour.
- A marlin can swim 50 miles per hour... and a tuna can swim up to 47 miles per hour.

6.) Fish talk to each other!

- Fish might not talk to each other like we do.
- However, studies show that they do communicate!
- They communicate through sound, colors and even motions.

7.) Fish live in all sorts of waters.

- You can find fish in lots of different places.
- . As long as it has water, of course!
- They can be found in the sea, lakes, rivers, streams and ponds.

8.) Most fish don't have eyelids.

- Imagine swimming in the sea and not being able to blink.
- The only fish that can blink is a shark.

9.) Some fish are huge!

- The biggest fish on the planet is a whale shark.
- It can grow up to 12 meters long and can be as heavy as 18.7 tonnes.
- That's as heavy as a double decker bus!

10.) Fish breathe through their gills.

- Fish use their gills for breathing.
- They are often found on the side of their bodies.
- Their gills have a very important job of extracting oxygen out of the water.

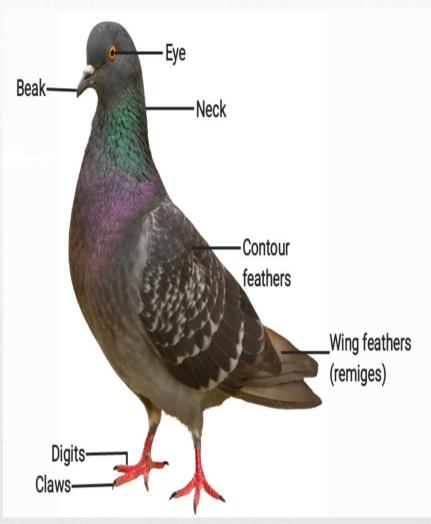
Observation:

a. Fish

Kingdom – Animalia phylum – Chordata Sub-phylum – Vertebrata Class - Pisces Example – Rohu fish

Characteristics:

- 1. Fish is a cold blooded animal with a spindle shaped body to minimize water-resistance.
- 2. Fish breathes with gills.



1) Intelligence

Pigeons are incredibly complex and intelligent animals. They are one of only a small number of species to pass the 'mirror test' – a test of self recognition. They can also recognize each letter of the human alphabet, differentiate between photographs, and even distinguish different humans within a photograph.

4) Mating

Pigeons mate for life, and tend to raise two chicks at the same time.

5) Parenting

Both female and male pigeons share responsibility of caring for and raising young. Both sexes take turn incubating the eggs and both feed the chicks 'pigeon milk' – a special secretion from the lining of the crop which both sexes produce.

6) Super-hearing

Pigeons have excellent hearing abilities. They can detect sounds at far lower frequencies than humans are able to, and can thus hear distant storms and volcanoes.

7) Cleanliness

Despite the social perception as dirty and disease-ridden, pigeons are actually very clean animals and there is very little evidence to suggest that they are significant transmitters of disease.

8) Ancient

Pigeons and humans have lived in close proximity for thousands of years. The first recordings of this date back to Mesopotamis, modern Iraq, in 3000bc.

9) Fertilizer

Although pigeon droppings are seen by some as a problem in modern society, a few centuries ago pigeon guano was seen as extremely valuable. It was viewed as the best available fertiliser and armed guards would even stand by dovecotes (pigeon houses) to stop others taking the droppings.

10) Fast

Pigeons can fly at altitudes up to and beyond 6000 feet, and at an average speed of 77.6 mph. The fastest recorded speed is 92.5 mph.

2) Natural Compass

Pigeons are renowned for their outstanding navigational abilities. They use a range of skills, such as using the sun as a guide and an internal 'magnetic compass. A study at Oxford University found that they will also use landmarks as signposts and will travel along man-made roads and motorways, even changing direction at junctions.

3) Highly Social

Pigeons are highly sociable animals. They will often be seen in flocks of 20-30 birds.

Observation:

a. Pigeon

Kingdom – Animalia phylum – Chordata Sub-phylum – Vertebrata Class - Aves Example – Pigeons

Characteristics:

- 1. Pigeons body is covered with feathers. Forelimbs are modified into wings. Heart has four compartments.
- 2. Pigeon has hollow bones and air bags inside the body. This is aerial adaption