

Summer Week 4 - Science lesson 3

Can I reason why living things are grouped in different ways?

Fast Five

True or False

- 1) Birds live on land and in water
- 2) Fish are cold blooded
- 3) Amphibians are warm blooded
- 4) Reptiles have scales
- 5) Mammals give birth to eggs.

Answers on the next slide

Fast Five

True or False

- 1) Birds live on land and in water **True**
- 2) Fish are cold blooded **True**
- 3) Amphibians are warm blooded **False**
- 4) Reptiles have scales **True**
- 5) Mammals give birth to eggs. **False**

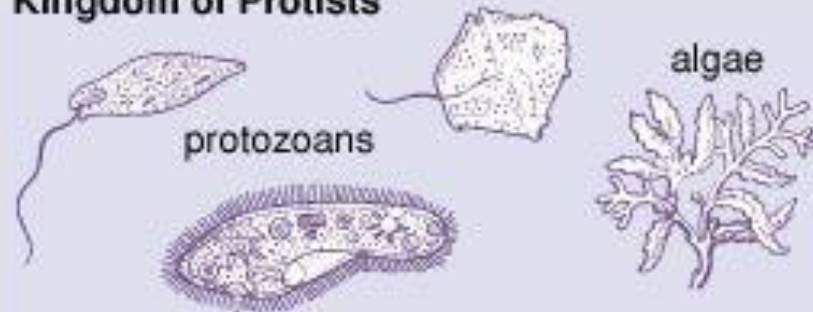
When we first looked at this topic of grouping living things we learnt that all living things are divided into large groups called 'kingdoms'.

Scientists haven't quite agreed how many kingdoms there are, but many think that there are five:

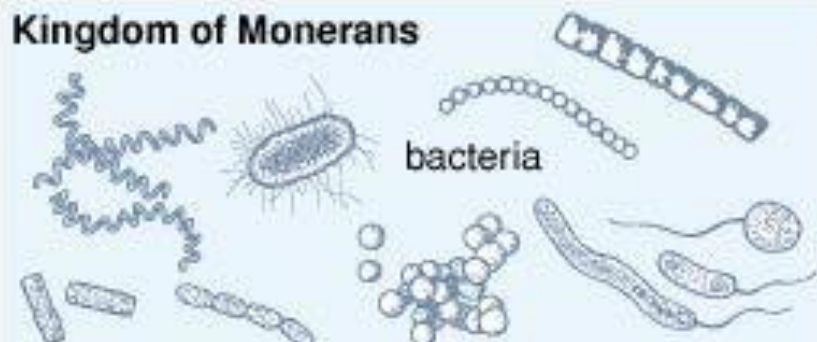
- monera
- protocista
- plants
- fungi
- animals

You probably know about the plants, animals and fungi (like mushrooms and yeast), but the monera and the protocista may be new to you.

Kingdom of Protists



Kingdom of Monerans



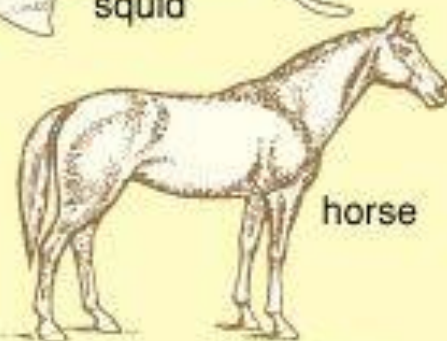
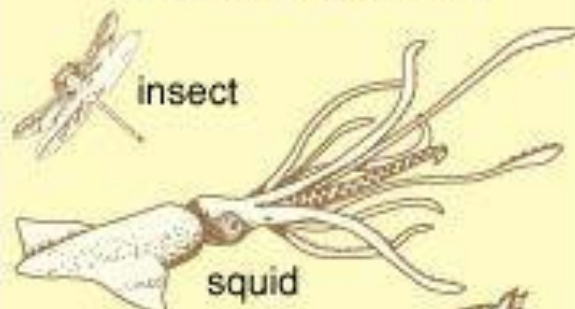
Kingdom of Fungi



Kingdom of Plants



Kingdom of Animals



Classification is all about organising living things into groups. The members of any group all have a shared characteristic - it is this feature that defines the group.

For example, plants contain a chemical called chlorophyll that they use to make their own food (it also makes them green). Every member of the plant kingdom shares this characteristic. By comparing the features of different living things they have been able to classify them further, dividing each of the kingdoms into smaller groups.

We learnt that the animal kingdom, as an example, can be split into two clear groups:

Invertebrates - animals without a backbone.

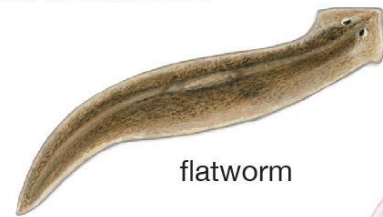
Vertebrates - animals with a backbone.

The animals have been divided into two groups based on whether they have a backbone or not.

These two groups are then divided into smaller 'sub-groups'.

Sponges, corals, worms, insects, spiders and crabs are all sub-groups of the invertebrate group - they do not have a backbone.

Invertebrates



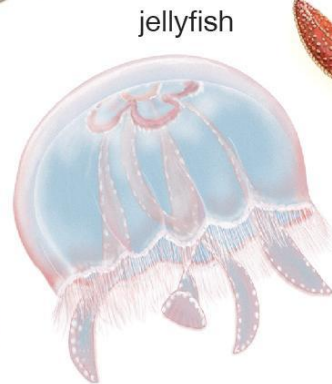
flatworm



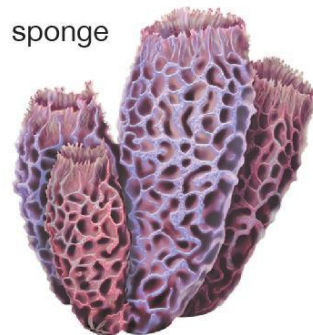
starfish



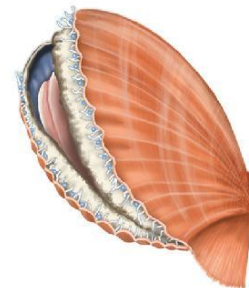
shrimp



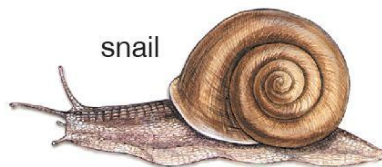
jellyfish



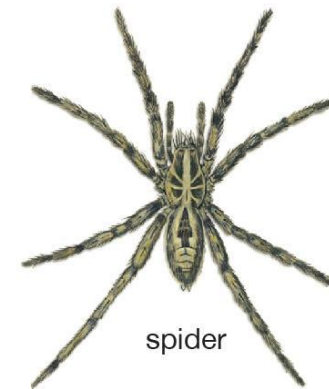
sponge



scallop



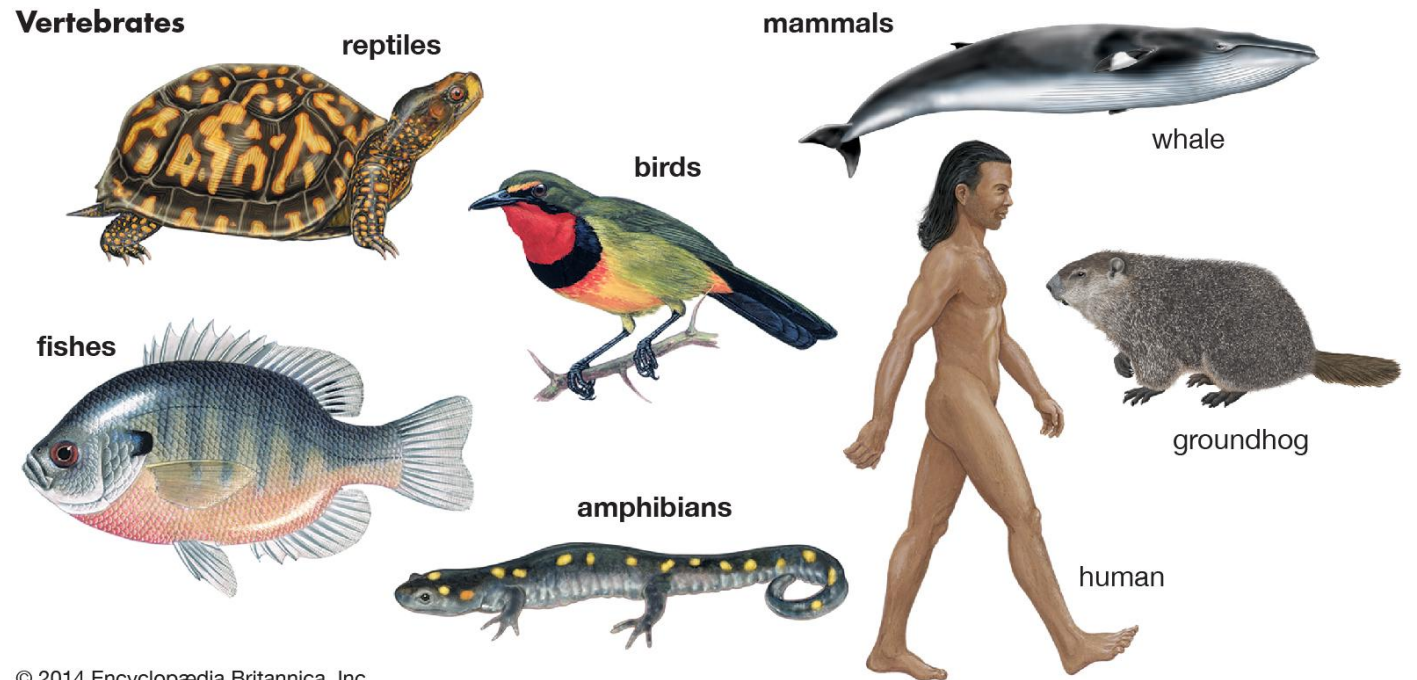
snail



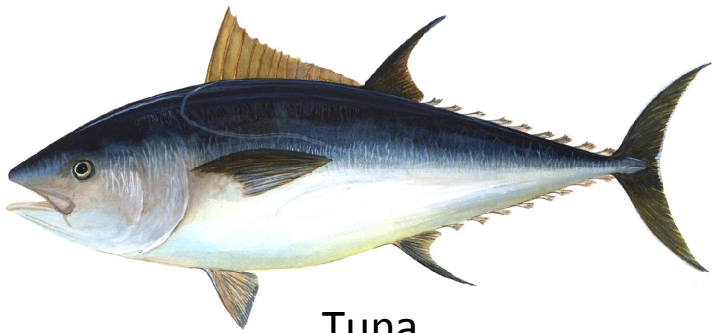
spider

These two groups are then divided into smaller 'sub-groups'.

Fish, reptiles, amphibians, birds and mammals are different sub-groups of vertebrates - they all have internal skeletons and backbones.

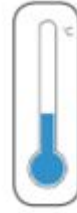


In the first lesson of our topic we looked at the Vertebrates in closer details and how the sub-groups differ from each other. We sorted animals into their groups.



Tuna

Fish

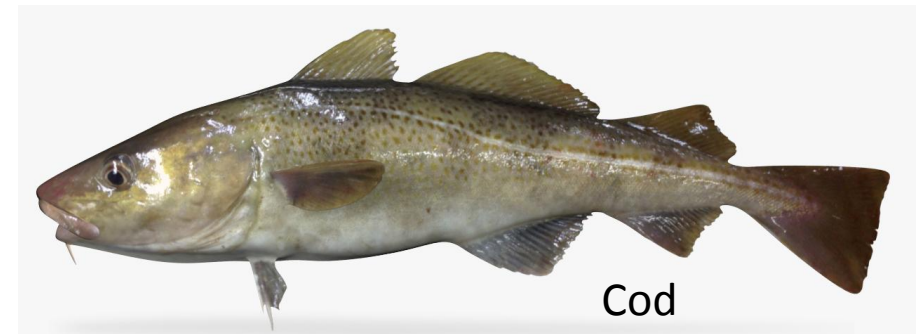


Blue Tang



Goldfish

- Are cold blooded
- Live in water
- Have fins to move
- Have gills to breathe underwater
- Have skeletons on the inside of their bodies
- Lay eggs (in water)

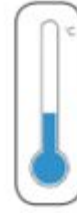


Cod



Tortoise

Reptiles



Lizard

- Are cold blooded
- Live on land and in water
- Have scales, ear holes and dry skin
- Have skeletons on the inside of their bodies
- Lay eggs



Turtle

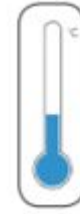


Snake



Newt

Amphibians



Toad

- Are cold blooded
- Live on land and in water
- Have moist skin no scales, and webbed feet
- Have skeletons on the inside of their bodies
- Lay eggs



Salamander



Frog



Magpie

Birds



Penguin



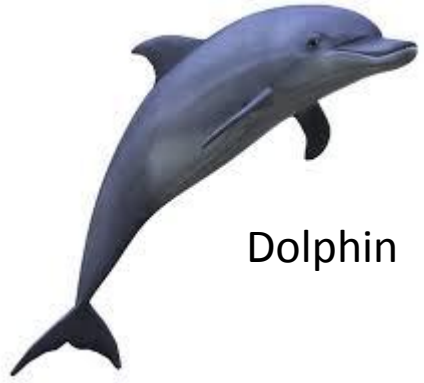
- Are warm blooded
- Live on land and in water
- Have feathers, wings and beaks
- Have skeletons on the inside of their bodies
- Lay eggs



Eagle

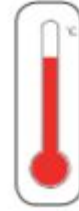


Flamingo



Dolphin

Mammals



Dog

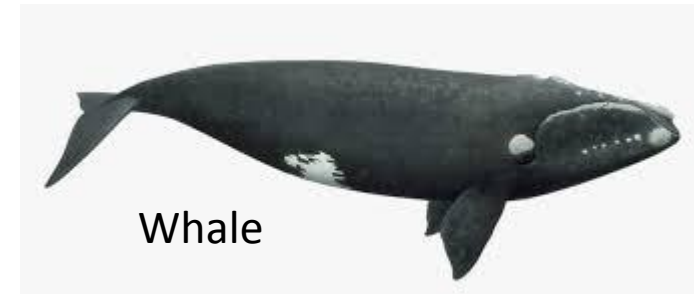


Human

- Are warm blooded
- Live on land and in water
- Have hair or fur
- Have skeletons on the inside of their bodies
- Give birth to live babies which drink their mother's milk



Tiger



Whale

We used the pictures of animals in the task document and created a table identifying which animals belonged to which groups.

The learning today is going to take this one step further and ask you to explain the reason for putting the animal in that group.

Fish	Reptile	Amphibian	Bird	Mammal
				<ul style="list-style-type: none"><li data-bbox="1918 811 2295 861">• Hippopotamus