

What are the **similarities** and **differences** between these two leaves?



What are the **similarities** and **differences** between these two leaves?



What are the **similarities** and **differences** between these two animals?

We have compared the different living things using common **observable characteristics**.

All living things have **similarities** and **differences** that can be used to classify them into different groups.

12.1.21

LO: To know how living things are classified



Success Criteria

1:

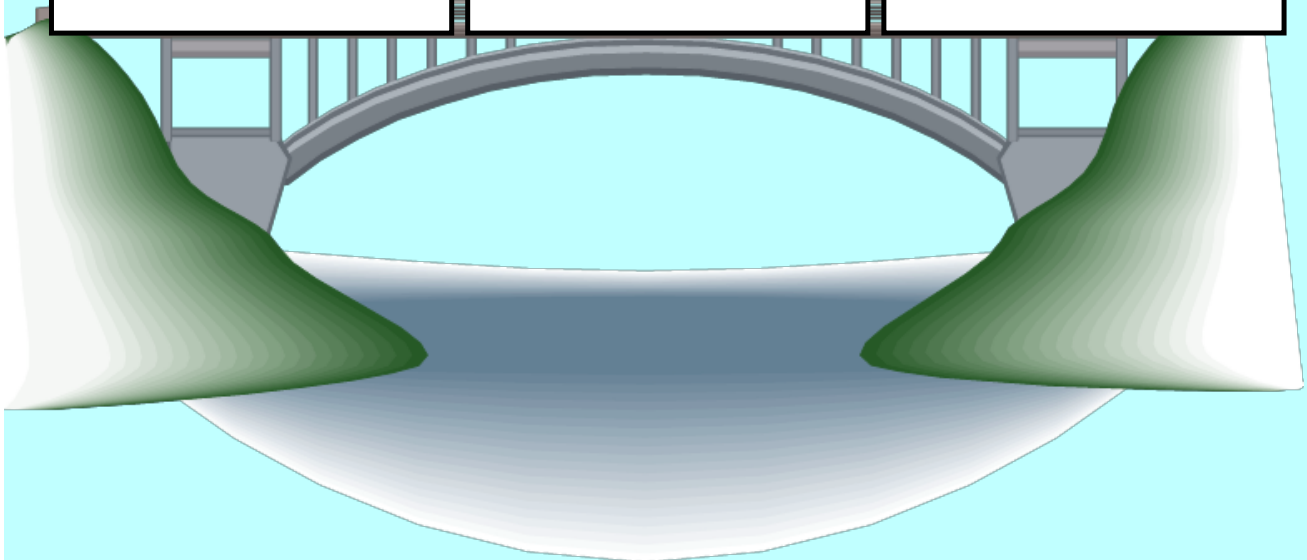
I know why
classifying living
things is important

2:

I understand that living
things are divided into 5
Kingdoms.

3:

I can say which
kingdom a living
thing belongs in



Why do we classify living things?

Classification is the grouping together of similar species of living things (plants, animals and other organisms). Classification means to group similar **species** together.

There are millions of different species living on our planet - different types of plants, animals, fungi, and bacteria. In order to learn more about them, it is necessary for scientists to sort them into groups. Related species can be compared by their **similarities** and **differences**.

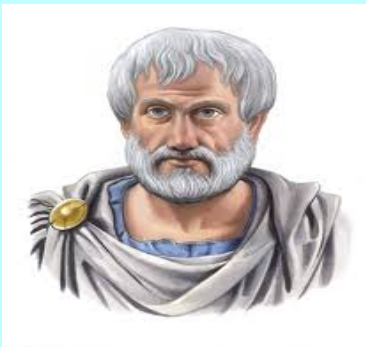
It's easier to understand & study them if they're sorted into groups that have similar characteristics. You can be sure that scientists all over the world are talking about the same species.

Time to reflect

What do you know about how living things are sorted?

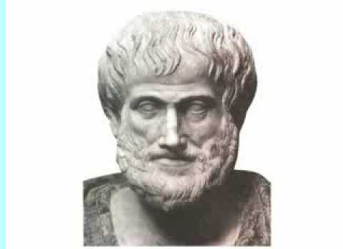
Make a list of the different groups living things can be sorted by?

Who is this?



Aristotle (384-322BCE)

What is he famous for?



Famous philosopher and scientist who was the first to classify living things.



Aristotle observed the world around him and decided there was a hierarchy (ranked in order) of living things, which he called the 'Ladder of Nature'. He saw two major groups: plants and animals, that he called Kingdoms. Plants were usually green and stationary and they could reproduce and grow. He placed animals at a higher level because they could move around to search for food and to escape from predators. He also thought they were sensitive to their surroundings too. Human beings were placed at the top of the ladder because they could also think and were creative.

Who was the first person to classify things? That honor belongs to the Greek scientist Aristotle. He first classified living things around 330 A.D.

Aristotle classified living things as being either plant or animal. Next, he classified plants and animals.



- Plants
 - Herbs
 - Bushes
 - Trees
- Animals
 - Land
 - Air

○ Water

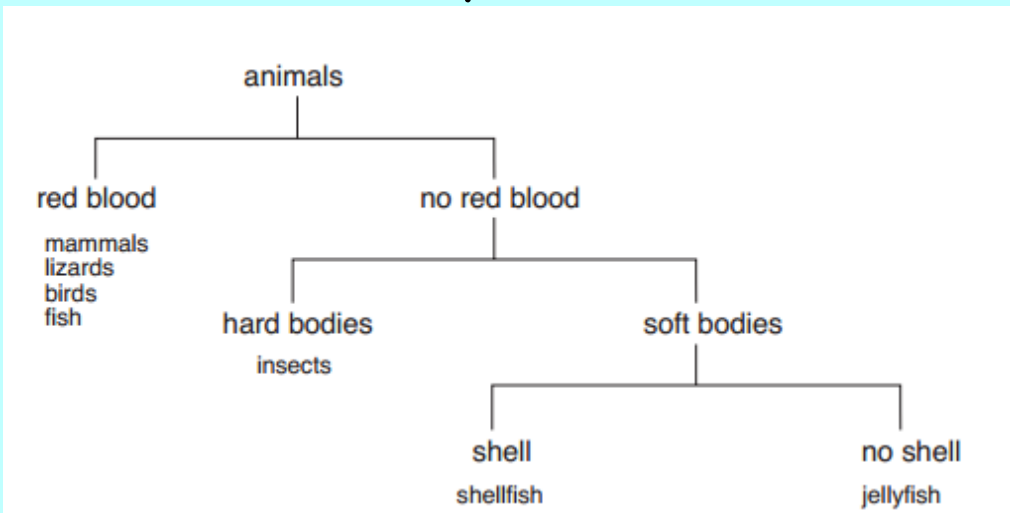
However, there is a problem with Aristotle's classification system:



There were problems with his system. Where do we put the frog?
It can live on both the land and the water. Where to place the frog?



Aristotle's classification:



Aristotle's system of classification of living things was not a perfect system and did not work for all living things.

Important point: science attempts to understand how the world works using the scientific process. As new information is discovered and evidence improves, the opinions and beliefs of scientists changes. What is considered scientific fact can change over time.

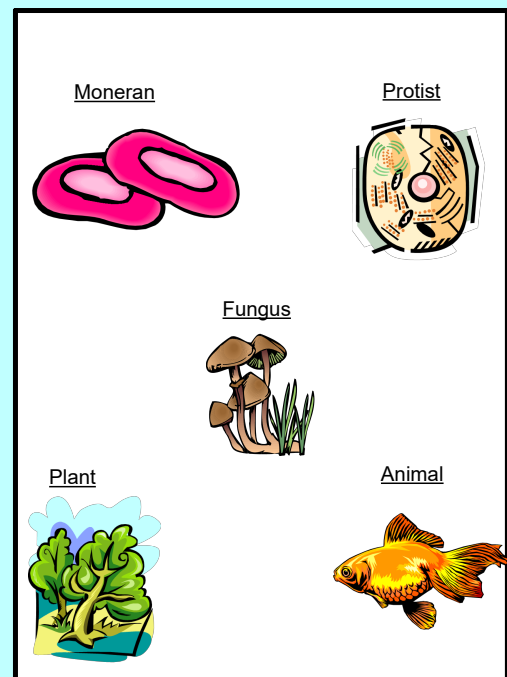
The five kingdoms

Scientists have therefore developed a way of classifying and dividing all living things into kingdoms. These divisions are based on what living things have in common and how they differ.

This system was developed over 2,000 years ago and has changed drastically over the years. Currently there are five kingdoms in which all living things are divided:

Read the slides 'The Five Kingdoms' to find out more detail about each one.

TASK: After reading the slides on '[The 5 kingdoms](#)', draw an example of each of the different kingdoms and add notes on each which describe the characteristics of each kingdom.



Attachments

scr_uks2_sc_y6_sa_living_things_and_their_habitats.pdf

12151-Classification - for 11-14 year olds - Guess Zoo Species Cards.ppt

Features of biography(1).doc

BiographyGraphicOrganizerElementary.pdf