

Science Knowledge Organiser

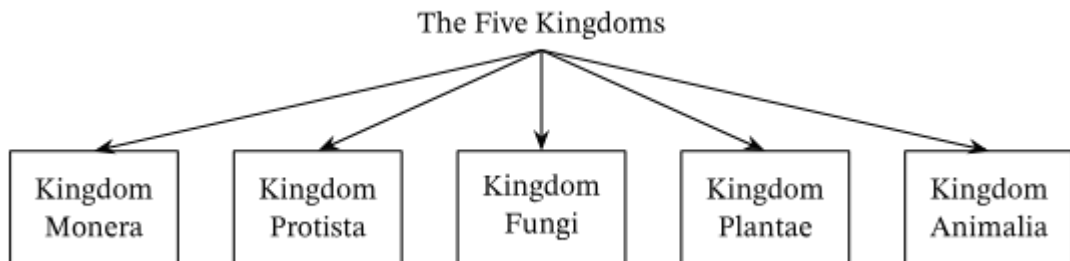
Year 6

Autumn (i)

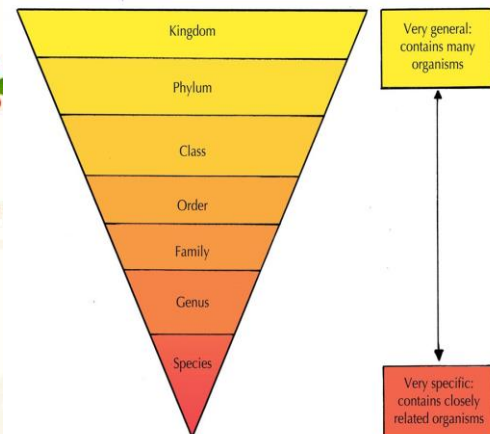
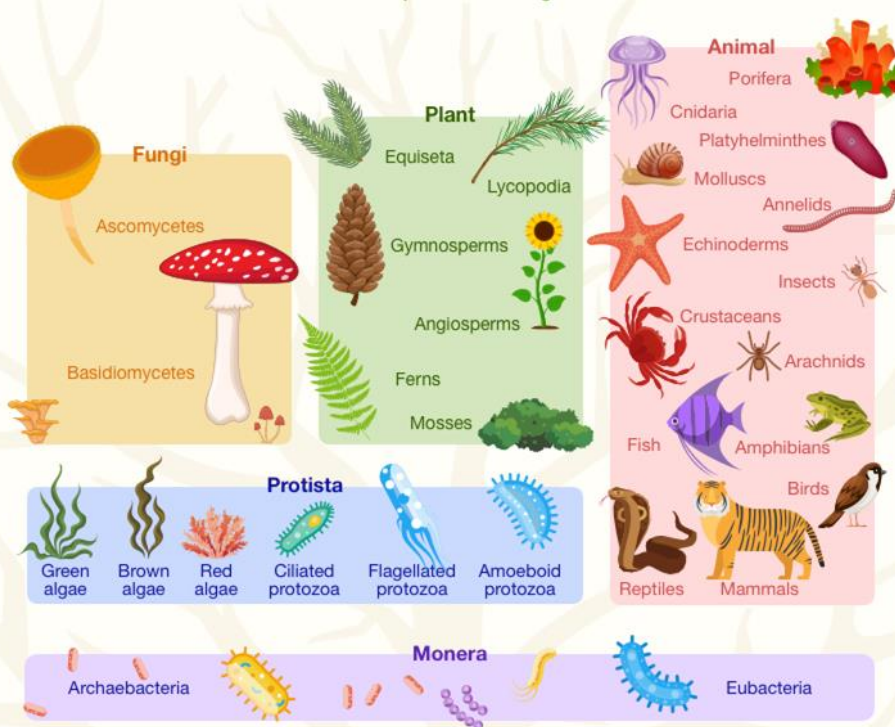
How does classification support scientific knowledge?

Substantive Knowledge

To know how living things are classified into broad groups using classification systems and keys.



The kingdoms of living things and their species at a glance



Think of a living thing...how could you use these systems to classify what kingdom it belongs to?

To work scientifically to classify living things using systems and keys.

How can you be sure you are accurate in your classification choice/ decision?

Core vocabulary

biomes - a large naturally occurring community of flora and fauna occupying a major habitat e.g. forest or tundra.

variation- the differences between individuals of the same species, caused by genetic and environmental factors

criteria- a principle or standard by which something may be judged or decided.

To give reasons for classifying plants and animals on specific characteristics

Plants can be grouped in a variety of ways; one of these ways depends on how the plant disperses its seeds. Plants have evolved to disperse their seeds in a number of ingenious ways, these include: animal dispersion, wind dispersion, explosion dispersion and water dispersion. If plants are not efficient when dispersing their seeds they could die out and face extinction! Seed dispersal is vital to the success of the plant and plant species.

Look at the images of seed dispersion below. Use the clues provided by each image to group the seeds according to their dispersion method



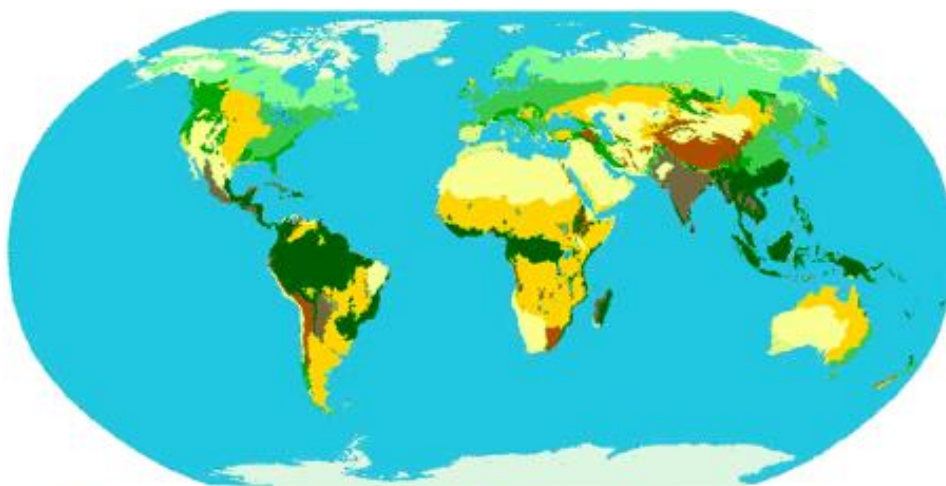
How would you sort the living things below? What would your reasons be? Is there more than one way to sort them?

Can you add another living thing into each of your groups? How did you know what living thing to add?



Scientists classify living things to help explain their relationships to each other and to be able to learn things about newly discovered organisms by noting their similarities to known organisms.

To study living things in different habitats and biomes using classification systems



Can you think of different living things within one of these biomes- how could you classify them?

Are there any living things that can live in more than one habitat?

What characteristic allows them to do this?

Boreal forests	Temperate grasslands and savannas
Deserts	Tropical and subtropical coniferous forests
Wetlands	Tropical and subtropical dry seasonal forests
Mangroves	Tropical and subtropical grasslands and savannas
Chaparral	Tropical Rainforests
Grasslands	Tundra
Temperate deciduous and mixed forests	Water
Temperate coniferous forests	Ice

Portable knowledge:

Living things can be classified into broad groups using a classification key