



Knowledge

<p>What kind of micro-organisms exist?</p>	<p>Observation over time · Microorganisms are very tiny organisms where a microscope has to be used to see them. · Examples of micro-organisms include dust mites, bacteria and fungi, such as mould. Some microorganisms can be helpful in certain situations. Others can be harmful and spread needs to be controlled or contained. Describe how microorganisms could be classified. Good microorganism—yeast in baking or harmful infectious diseases. · What do they look like? · What are their features? · How are the different groups different to each other?</p>
<p>What did Carl Linnaeus create in order to classify living things?</p>	<p>Ideas over Time Research the work of Carl Linnaeus Classification key How did it revolutionise the understanding of living things?</p>
<p>Which group do these organisms belong to?</p>	<p>Identifying and classifying Sort vertebrates and invertebrate animals into groups, describing their key features and based on similarities and differences. Use a classification key to identify which group of vertebrates animals belong to and then create own.</p>
<p>Which group do these organisms belong to?</p>	<p>Pattern Seeking Fish, amphibians, reptiles, birds, and mammals. Describe similarities and differences Justify your choice of group according to their features.</p>
<p>How can these invertebrates be classified?</p>	<p>Pattern Seeking Arachnids, insects, molluscs Describe how these invertebrates could be classified. What do they look like? What are their features? How are the different groups different to each other?</p>
<p>How can plants in your local environment be described and classified?</p>	<p>Observing over Time / Identifying and Classifying Use classification systems and keys to identify plants in the local environment. Record these in a variety of ways · Venn diagrams · Carrol diagrams · Tables · Classification key</p>
<p>Why are some organisms difficult to classify into groups?</p>	<p>Research For example the platypus · The platypus is hard to classify because it is part mammal and part reptile. · It lays eggs, just like reptiles do, but it has fur and he is warm-blooded. Bats · Bats are mammals because they are warm-blooded and they have fur. They also give milk to their babies. But bats have wings that they use to fly. · Other mammals such as flying squirrels just glide. Explain why based on characteristics and similarities and differences.</p>



Vocabulary

Adaptation	A change in structure or function that improves the chance of survival for an animal or plant within a given environment.
Carnivore	An animal that eats meat.
Environment	All the circumstances, people, things and events around them that influence their life.
Evolution	A process of change that takes place over many generations, during which species of animals, plants, or insects slowly change some of their physical characteristics.
Food chain	A series of living things that are linked to each other because each thing feeds on the one next to it in the series.
Habitat	The natural environment in which an animal or plant normally lives or grows.
Herbivore	An animal that only eats plants.
invertebrate	A creature that does not have a spine, for example an insect, worm or octopus.
microhabitat	A small part of the environment that supports the habitat such as a fallen log in a forest.
microorganism	A very small living thing that you can only see if you see a microscope.
Mini beast	A small invertebrate such as an insect or spider.
omnivore	Person or animal that eats all kinds of food including meats and plants.
Organism	A living thing.
Predator	An animal that kills and eats other animals.
Prey	An animal hunted or captured by another for food.
Species	A class of plants or animals whose members have the same main characteristics and are able to breed with each other.
Vertebrate	A creature which has a spine.

Hurst Hill Primary School Knowledge Organiser

Science

Living things and their habitats

Year 6

Autumn 1

Biology

Biology is the science that understands living organisms, including animals and plants.

Living things and their habitats

Statutory requirements

Pupils should be taught to:

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics.