

Living things and their habitats- Year 4- Kapow unit- Classification and changing habitats

Previous learning

Explore and compare the differences between things that are living, dead, and things that have never been alive.

Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.

Identify and name a variety of plants and animals in their habitats, including microhabitats

Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

Key Vocabulary for Year 4

Vertebrates	Worms
Fish	Spiders
Amphibians	Insects
Reptiles	Environment
Birds	Habitats
Mammals	
Invertebrates	
Snails	
Slugs	

Previous vocabulary

Living, dead, habitat, energy, food chain, predator, prey, woodland, pond, desert

Useful links

- <https://www.stem.org.uk/resources/community/collecion/12774/year-4-living-things-and-their-habitats>
- <https://www.hamilton-trust.org.uk/science/year-4-science/living-things-and-their-habitats-name-living-thing/>
- https://www.outstandingscience.co.uk/index.php?action=view_page&page=view_unit&unit=4a

Key scientists you could look at...

Alfred Russel Wallace

Scientific skills

Working scientifically	Questioning and enquiry	Observing and measuring	Investigating	Recording	Grouping and classifying
To use practical scientific method, processes and skills	Ask relevant questions and use different types of scientific enquiry to answer them	Make systematic and careful observations, take accurate measurements using standard and non-standard units and a range of equipment, including thermometers and data loggers. Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. Help make decisions about what observations and equipment they will need to use.	Set up simple practical experiments, comparative and fair tests. Recognise when a simple fair test is necessary and help to decide how to set it up. Be able to think of more than one variable factor.	Gather, record, classify and present data in a variety of ways to answer a question. Record simple findings using scientific vocabulary, drawings, labelled diagrams, keys, bar charts and tables. Report on findings including oral and written explanations, displays or presentation of results and conclusions. Use notes, simple tables and standard units to decide how to record and analyse data.	Identify differences, similarities and changes related to scientific ideas and processes. Talk about criteria for grouping, sorting and classifying and use simple keys. Compare and group according to behaviour or properties, based on testing.

Experiment and activity ideas

Visit to zoo, Sealife centre etc. observe animals in own environment	Farming- investigate importance of producers and consumers- real life farming	Hunt for invertebrates using forest school	Animal classification keys	Pond dipping
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Knowledge- objectives

Recognise that living things can be grouped in a variety of ways

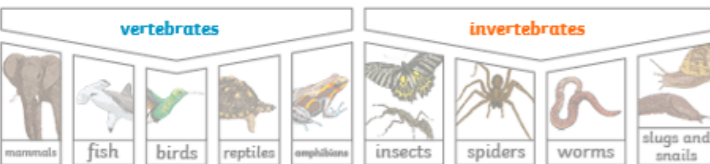
Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

Recognise that environments can change and that this can sometimes pose dangers to living things.

Resources in school

Use of the forest school site to observe living things in their habitats, bug finders, magnifying glasses.

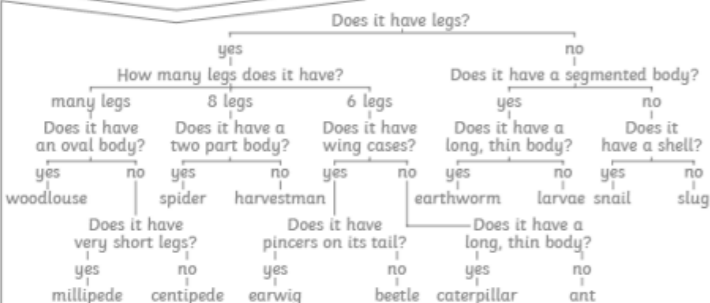
Animals can be grouped in lots of different ways based upon their **characteristics**.



Vertebrates can be separated into five broad groups.

You could sort **invertebrates** you might see around school in different ways, such as in this example. The vast majority of living things on the planet are **invertebrates**.

Invertebrate Classification Key



Life Processes

To stay alive and healthy, all living things need certain conditions that let them carry out the seven **life processes**:

- Movement
- Growth
- Respiration
- Reproduction
- Sensitivity
- Excretion
- Nutrition



Plants can be sorted into many different groups. For example:



Changes to an **environment** can be natural or caused by humans. Changes to an **environment** can have positive as well as negative effects. Here are some examples of things that can change an **environment**.

- Natural**
- earthquakes
 - storms
 - floods
 - droughts
 - wildfires
 - the seasons

- Human-Made**
- deforestation
 - pollution
 - urbanisation
 - the introduction of new animal or plant species to an environment
 - wildfires

Plants and animals rely on the **environment** to give them everything they need. Therefore, when **habitats** change, it can be very dangerous to the plants and animals that live there.