

Subject	Term	Unit
Science- Year 4	Autumn 1	Living things and their habitats

Intent

Interweaving knowledge and enquiry to discover the world around us.



Prior knowledge	National Curriculum
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.

What?	To understand how animals and plants can be grouped. To understand how plants and animals are effected by humans.
Why?	The help them with their work on food chains. To think about the impact we have on the environment.
How?	Through going outside and investigating at different habitats.

Vocabulary

Biomes	A natural area of vegetation and animals.
Carnivore	An animal that eats meat
Classification Key	A system that divide things into groups or types.
Deciduous	Trees that lose leave in the autumn every year.
Evergreen	A tree or bush that has green leaves all year round.
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	Creature that does not have a spine.
Micro Habitat	A small part of the environment that supports the habitat such as a fallen log in a forest.
Mini Beast	A small invertebrate animal such as an insect or spider.
Omnivore	Person or animal that eats all kind of food incusing meat and plants.
Organism	A living thing.
Urban	Belonging to or relating to a town or city.
Vegetation	Plants trees and flowers
Vertebrate	Creature that has a spine.

Learning	
Objective	Learning
<p>Can classify?</p> <p><i>Can animals be grouped into two or more groups?</i></p>	<p>Identifying and classifying</p> <p>Using a Venn diagram sort animals into groups- Children should already know fish, reptiles, mammals, birds and amphibians.</p> <p>Carnivore, omnivore, herbivore. How else could we sort the animals. Look at their characteristics. Introduce the terms vertebrate and invertebrate and sort animals (link to year 3 learning on the skeleton). Children to sort animals into carnivore, omnivore, herbivore then into vertebrates and invertebrates.</p>
<p>Can I compare?</p> <p><i>How can you group fish, amphibians, birds, reptiles and mammals?</i></p>	<p>Comparative</p> <p>Living things can be grouped according to different criteria for e.g. according to where they live, type of organism or features.</p> <p>For example a camel can belong in a group of vertebrates, a group of animals that live in the desert and group of animals that have four legs. Children have pictures of animals to label as many different characteristics as possible. Have charts for the children to sort the animals into 2 groups based on their features. They choose the groups they would like.</p>

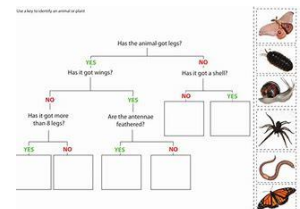
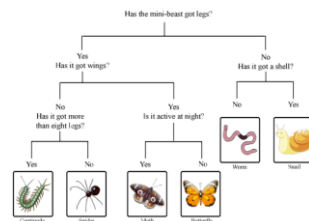
Can I classify mini beasts according to their habitats?

Identifying and classifying

Carefully observe mini beasts in a microhabitat and use a classification key to identify them. Go on a minibeast hunt around school. Use the classification keys to identify the minibeasts.

Give the children classification keys to work through.

Answer questions on how they have been classified e.g. this animal has no leg, it has a shell, which animal is it?



Can I explain the process of classification for different plants and grasses?

Identifying and classifying

Sort plants into flowering and non-flowering plants then create a classification key to help identify plants. Go outside and find plants in the local area. Use the chromebooks or the Iseek app to identify. Create their own keys using the plants and grasses. Use questions such as: Is it a flowering plant? Is the flower yellow? Does it have rounded leaves. They could create their keys by sticking the plants on to paper, or by using technology such as Purple Mash. Get the children used to splitting their collection of plants into smaller groups using a question until there is only one possibility in each group.

Can I understand how humans have impacted on the environment over time?

Observing over time

Environments change

Habitats can change throughout the year and this can have an effect on the plants and animals that live there.

Humans can have positive and negative effects on the environment.

Positive: nature reserves, ecological parks

Negative: litter, urban development

Create a poster or chart to show the ways we can have positive and negative impacts on the environment. [How do human beings affect the environment? - BBC Bitesize](#)

Use secondary sources to find out.

Can I understand how human actions have an impact on living things?

Research

Consider disposal of plastics and its impact on the oceans. Use secondary sources to show the damage plastic causes to our world. This will link to Year 5 when we write a speech about plastic pollution.

What can we do to make things better?

[The problem with plastic pollution - National Geographic Kids \(natgeokids.com\)](http://natgeokids.com)

Websites

[How do human beings affect the environment? - BBC Bitesize](http://BBC.com)

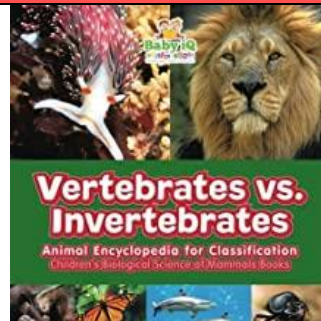
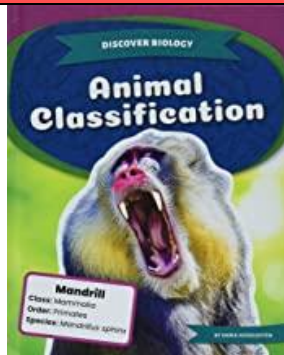
[The problem with plastic pollution - National Geographic Kids \(natgeokids.com\)](http://natgeokids.com)

[What are classification keys? - BBC Bitesize](http://BBC.com)

[KS2 Science Year 4 - 1a Living Things - Classification - The Schools of King Edward VI in Birmingham](http://TheSchoolsOfKingEdwardVIinBirmingham.com)

[Year 4: Living things and their habitats | STEM](http://STEM.com)

Recommended Reads



Golden Thread

Living things and their habitats