



Subject: Science

Year group: 2

Term: Spring

Unit name: Living things and their habitats

**Prior Knowledge** - deciduous and evergreen trees. (Y1 - Plants)

Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants)

Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans)

Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans)

Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans)

Observe changes across the four seasons. (Y1 - Seasonal changes)

**Scientific enquiry**

Classifying	Living/Dead/Never alive A variety of plants and animals and their habitats
Observing over time	Food chains
Pattern seeking	Food chains
Comparative/fair testing	Not relevant
Researching	Habitat types Design a habitat Animal diets for survival

**National curriculum:**

- 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 micro-habitats
- 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

**Assessment for learning**

Recapping prior knowledge- beginning of unit- what do children already know?

Beginning of each lesson- focus on recall of previous learning (quick quizzes)

## Knowledge Organiser

**Topic: Living things and their habitats**

**Year: 2**

**Strand: Biology**

### What should I already know?

- Which things are living, dead and things which have never been alive.
- The names of some common **plants** and types of **trees**.
- Some animals are suitable to be kept as **pets** but others are not.
- All animals need water, **air** and food to **survive**
- Animals can be grouped into **vertebrates** and **invertebrates**
- Animals can be grouped into **carnivores**, **herbivores** and **omnivores**
- Animals, including humans, have **offspring** which grow into adults.
- Different **vegetation** belts and **biomes** around the world.

### Vocabulary

biomes	a natural area of <b>vegetation</b> and animals
carnivore	an animal that eats meat
<u>depend</u>	If you <b>depend</b> on someone or something, you need them <u>in order to</u> be able to <b>survive</b> physically
food chain	a series of living things which 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 <b>plant</b> normally lives or grows
herbivore	an animal that only eats plants
invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus
microhabitat	a small part of the environment that supports

### What will I know by the end of the unit?

What is a **habitat**?

- A **habitat** is a place where living things, such as animals and **plants**, can find all of the things they need to **survive**. This includes food, water, air, space to move and grow and some shelter.
- Some **habitats** are large, like the ocean, and some are very small, such as under a log.
- Some **habitats** in our local area include the river and woodlands. Other habitats include the coast and the forest.



What is a **micro-habitat**?

- **Microhabitats** are very small **habitats** where **minibeasts** may live.
- Examples of **microhabitats** include under stones, in grass, under fallen leaves and in the soil.
- **Minibeasts** that can be found there include worms, snails, ants, centipedes, millipedes, and butterflies and they help to keep the **microhabitat** healthy.

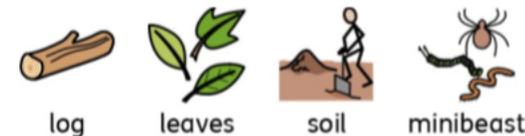
invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus
microhabitat	a small part of the environment that supports a habitat, such as a fallen log in a forest
minibeast	a small <b>invertebrate</b> animal such as an insect or spider
offspring	a person's children or an animal's young
omnivore	person or animal eats all kinds of food, including both meat and <b>plants</b>
plant	a living thing that grows in the earth and has a stem, leaves, and roots
source	where something comes from
tree	a tall plant that has a hard trunk, branches, and leaves
vegetation	<b>plants</b> , trees and flowers
vertebrate	a creature which has a spine

### Investigate!

- Observe carefully a **microhabitat** (forest school) and sketch the **plants** you find. Can you find any evidence of **plants** being eaten? What other living things can you see?
- Compare two different **habitats** and explain what animals and **plants** can be found there.
- Go on a **minibeast** hunt. What **minibeasts** can you find? Why can they **survive** in their **habitat**? Create a tally chart or pictogram to show

worms, snails, ants, centipedes, millipedes, and butterflies and they help to keep the **microhabitat** healthy.

- **Minibeasts** are able to **survive** in their **habitats** because they can find the things they need to **survive** there, such as food and water. For example, caterpillars can **survive** on leaves as they give them food.

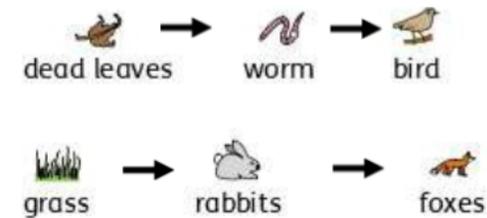


How do **animals** and **plants** **depend** on each other?

- Animals and **plants** depend on each other to **survive**. For example, worms **depend** on **plants** because they feed on dead leaves, but **plants** depend on worms who make the soil healthy by digging holes and allowing air in.
- Birds also need worms because they eat them. Worms are a **source** of food for birds.
- This called a **food chain**.
- If there were no worms, there would be less birds as there would be more competition for food. The soil would not be as healthy without worms.

your resources.

- Compare two different **microhabitats**. What do you notice about the **minibeasts** that live in each one? Why do you think that is? Discuss how the **minibeasts** help keep the **microhabitat** healthy.
- Use your knowledge of **biomes** to describe the types of animals and **plants** that live there. Match animals and **plants** to their **habitats** (e.g. forest, ocean, poles, desert).
- Answer questions such as 'Why would a polar bear not survive in the desert?'
- Create simple **food chains** that begin with a **plant**. Discuss what would happen if one of those living things in a **food chain** did not exist.



- All living things (or things that were once living) have a part to play in **food chains**. Without them, other animals and **plants** may not be able to survive.

### Lesson Sequence



1. Compare the differences between things that are living, dead, and things which have never been alive



2. Identify and name a variety of plants and animals in a microhabitat



3. Design a suitable microhabitat where living things could survive



4. Find out what animals eat to survive in their habitat



5. Understand food chains



6. Understand the journey food makes from the farm to the supermarket

### Food Chain

The grass is eaten by the rabbit.



The rabbit is eaten by the fox.



### Microhabitats



in a flower



in a log



under a leaf



under a log

### Dead or Alive

living			All <b>living things</b> breathe, eat, grow, move, reproduce and have senses.
dead			Something that was once a living thing.
non-living			Something that has never been alive.

### Habitats



woodland



farmland



pond



coastal



desert



mountain