



Knowledge

<p>What is a habitat?</p>	<p>Identifying and Classifying 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. Other examples of habitats could be rivers, woodlands, coasts and forests.</p>	
<p><i>How does the habitat of the Arctic compare with rainforest habitats?</i></p>	<p>Comparative Testing Polar region vs. equatorial region. Differences to be considered: level of moisture/rainfall; temperature ranges; seasonal change; weather; availability of land; plant growth; wildlife; day/night cycle, etc.</p>	
<p>What are micro-habitats?</p>	<p>Research Micro-habitats are very small habitats where minibeasts may live. Minibeasts that can be found in micro-habitats include worms, snails, ants, centipedes, millipedes and butterflies and they help to keep the micro-habitat healthy.</p>	
<p>Can we find examples?</p>	<p>Research Examples of micro-habitats include under stones, in grass, under fallen leaves and in the soil. Minibeasts are able to survive in their micro-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.</p>	
<p>Which habitat do worms prefer? Where can we find the most worms?</p>	<p>Pattern Seeking Worms depend on plants because they feed on dead leaves, but plants depend on worms, which make the soil healthy by digging holes and allowing air in. Which types of habitat have a high level of soil/vegetation to best accommodate the worms' favoured conditions?</p>	
<p>How do living organisms become dependent upon each other in a habitat?</p>	<p>Ideas Over Time Animals and plants depend on each other to survive. 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. For example, worms depend on plants because they feed on dead leaves, but plants depend on worms, which make the soil healthy by digging holes and allowing air in. If there were no worms there would be less birds, as there would be more competition for food, and the soil would not be as healthy.</p>	
<p>Can we construct simple food chains for different habitats?</p>	<p>Pattern Seeking For example, in woodlands or a forest habitat, worms feed on dead leaves, but worms are a source of food for birds.</p>	
<p><i>How is the work of Rachel Carson and Liz Bonnin helping to protect and conserve marine habitats for future generations?</i></p>	<p>Ideas Over Time Rachel Carson (1907-1964) https://www.youtube.com/watch?v=eZVEzCmiXM4 Marine biologist, author and conservationist. Liz Bonnin (1976-) http://www.lizbonnin.com/science-conservation http://www.lizbonnin.com/broadcasts Wild animal biologist, biochemist and science, wildlife and natural history presenter.</p>	
<p>How would you group things to show which are living, dead, or have never been alive?</p>	<p>Identifying and Classifying All living things breathe, eat, grow, move, reproduce and have senses. Something that is dead/non-living will have done the same things as something that is living at one time, but is not able to do so anymore. The difference between something that is dead and something that has never been alive does not eat, grow, move, reproduce, or have senses.</p>	
<p><i>Does a tree die in winter?</i></p>	<p>Observing Over Time Using trees within forest school/on school site, observe visible changes between deciduous and evergreen varieties. What adaptations may take place inside the tree and underground to help it survive in colder temperatures? Does the bark protect the tree? How does it draw water from frozen ground, or create food without leaves?</p>	



Hurst Hill Primary School Knowledge Organiser

Science

Living things and
their habitats

Year 2

Summer

Biology

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

Statutory requirements

Pupils should be taught to:

- 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.

Vocabulary

Biomes	A natural area of vegetation and animals.
Carnivore	A person or animal that eats meat.
Depend	Someone or something that you need in order to physically survive.
Food chain	A series of living things where each thing feeds on the next one in the chain.
Habitat	The natural environment in which an animal or plant normally lives or grows.
Herbivore	A person or animal that only eats plants .
Invertebrate	A creature that does not have a spine, like an insect, worm or octopus.
Microhabitat	A small part of the environment that supports a habitat , such as a fallen log in a forest.
Minibeast	A small invertebrate animal such as an insect or spider.
Offspring	A person's children or an animal's young.
Omnivore	A person or animal that eats all kinds of food, including meat and plants .
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	Plants, trees and flowers.
Vertebrate	A creature which has a spine.