	Year	2	SCIENCE	Living Things and Habitats (1)
WOODVALE PRIMARY ACADEMY				How does food from the farm make its journey to the supermarket ?

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 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.

Prior Learning

- Identify and name a variety of common wild and garden plants, including 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 change)

Future Learning

- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)
- **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.**
- Construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans)

What Pupils Need To Know Or Do To Be Secure

Key Substantive Knowledge

- All objects are either living, dead or have never been alive. Living things are plants (including seeds) and animals. Dead things include dead animals and plants and parts of plants and animals that are no longer attached e.g. leaves and twigs, shells, fur, hair and feathers (This is a simplification, but appropriate for Year 2 children.)
- An object made of wood is classed as dead. Objects made of rock, metal and plastic have never been alive (again ignoring that plastics are made of fossil fuels).
- Animals and plants live in a habitat to which they are suited, which means that animals have suitable features that help them move and find food and plants have suitable features that help them to grow well. The habitat provides the basic needs of the animals and plants – shelter, food and water.
- Within a habitat there are different micro-habitats e.g. in a woodland – in the leaf litter, on the bark of trees, on the leaves. These micro-habitats have different conditions e.g. light or dark, damp or dry. These conditions affect which plants and animals live there. The plants and animals in a habitat depend on each other for food and shelter etc. The way that animals obtain their food from plants and other animals can be shown in a food chain.
- **SCIENTIST:** Greta Thunberg (2003 – present). Greta is an environmental activist. She was born in Stockholm, Sweden. When she was eight, she started learning about climate change. The more she learned, the more baffled she became as to why so little was being done about it. She believes that climate change will mean that animals will lose their habitats.

Key Disciplinary Skills/ Knowledge

Working Scientifically:
Asking simple questions and recognising that they can be answered in different ways - The children are involved in planning how to use resources provided to answer the questions using different types of enquiry, helping them to recognise that there are different ways in which questions can be answered.
Observing closely, using simple equipment - Children make careful observations to support identification, comparison and noticing change. They begin to take measurements, initially by comparisons, then using non-standard units.
Performing simple tests - The children use practical resources provided to gather evidence to answer questions
Identifying and classifying - Children use their observations and testing to compare objects, materials and living things. They sort and group these things, identifying their own criteria for sorting.
Gathering and recording data to help in answering questions. - The children record their observations e.g. using photographs, videos, drawings, labelled diagrams or in writing; They record their measurements e.g. using prepared tables, pictograms, tally charts and block graphs; They classify using simple prepared tables and sorting rings.
Using their observations and ideas to suggest answers to questions. - The children recognise 'biggest and smallest', 'best and worst' etc. from their data.

Lesson Sequence	Curriculum Drivers	Common Misconceptions
1. What are the differences between things that are living, dead, and things which have never been alive?	**Oracy-** Pupils will be given opportunities to work collaboratively as part of a small group and a class, describing what they have seen and naming living things using a classification key, giving a reason for their answer.	Some children may think: • an animal's habitat is like its 'home' • plants and seeds are not alive as they cannot be seen to move • fire is living • arrows in a food chain mean 'eats'.
2. What is the difference between a habitat and a microhabitat?		
3. Can you design a suitable microhabitat where living things could survive?	**Diversity**	
4. What do animals eat to survive in their habitats?	**Social Intelligence**	
5. What is a food chain?	Pupils will be taught to have respect for living things and their habitat. When observing microhabitats children will be taught the importance of working with care and returning anything they move to where they found it.	
6. How does food from the farm make its journey to the supermarket ?		
7. Assessment		

Key Vocabulary

reproduce	excrete	respire	habitat	microhabitat	survive	producer	consumer