

What should I already know?

- Explore and compare the differences between things that are living dead, and things that have never been alive
- Describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.

Scientific Skills:

- With help, pupils begin to realise that scientific ideas are based on evidence
- Decide on an appropriate approach in their own investigations to answer questions
- Make a series of observations and measurements adequate for the task
- Select information from a range of sources provided for them
- Record observations, comparisons and measurements using tables and bar charts

Key Vocabulary and Definitions:

Carbon dioxide	a colorless, odorless, incombustible gas (CO ₂), present in the atmosphere and formed during respiration
Environment	the air, water, and land in or on which people, animals, and plants live:
Excretion	(in living organisms and cells) the process of eliminating or expelling waste matter
Habitat.	The natural environment of an animal or plant.
Invertebrate	an animal without a backbone
Nutrition	the sum of the processes by which an animal or plant takes in and utilises food substances
Organism	An individual living thing, such as a plant, an animal, or a bacteria
Reproduction	the process of having babies, producing young, or producing new plants:
Respiration	the action of breathing
Vertebrate	An animal with a backbone.



Teaching Sequence

1. To understand the characteristics of a living thing
2. To observe features of living things and sort them into different groups. (TAPs)
3. To use a classification key to name a variety of living things
4. To understand what living things can do to survive natural changes of the environment
5. To understand what the effect of a greenhouse is
6. To recognise that changes to an environment can be dangerous to living things

Key Knowledge

Vertebrates	
Vertebrates can be grouped 5 ways	<ul style="list-style-type: none"> Fish Amphibians Reptiles Birds Mammals
How to spot a fish 	<ul style="list-style-type: none"> Breathes with gills Lays eggs in water Has fins and scales Its body changes temperature
How to spot an amphibian 	<ul style="list-style-type: none"> Born with gills then develops lungs Lays eggs in water Damp skin Body temperature changes
How to spot a reptile 	<ul style="list-style-type: none"> Breathes with lungs Lays eggs on land Dry scaly skin Body temperature changes
How to spot a bird 	<ul style="list-style-type: none"> Breathes with lungs Lays eggs with hard shells Has feathers Steady body temperature
How to spot a mammal 	<ul style="list-style-type: none"> Breathes with lungs Babies are born live Body hair or fur Steady body temperature Feeds babies milk

Plant Groups	
Plants can be put into one of two groups	Flowering plants Non flowering plants
Flowering plants are made up of 4 groups	<ul style="list-style-type: none"> Grasses Cereals Garden shrubs Deciduous trees
Non flowering plants are made up of 3 groups	<ul style="list-style-type: none"> Algae Coniferous trees Ferns

Invertebrates	
Invertebrates can be grouped 4 ways	<ul style="list-style-type: none"> Insects Arachnids Snails and slugs Worms
How to spot an insect 	<ul style="list-style-type: none"> 3 body sections 6 legs
How to spot an arachnid 	<ul style="list-style-type: none"> 2 body sections 8 legs

