

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 <sub>2</sub> ), 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.
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

- Fish
- Amphibians
- Reptiles
- Birds
- Mammals

How to spot a fish



- Breathes with gills
- Lays eggs in water
- Has fins and scales
- Its body changes temperature

How to spot an amphibian



- Born with gills then develops lungs
- Lays eggs in water
- Damp skin
- Body temperature changes

How to spot a reptile



- Breathes with lungs
- Lays eggs on land
- Dry scaly skin
- Body temperature changes

How to spot a bird



- Breathes with lungs
- Lays eggs with hard shells
- Has feathers
- Steady body temperature

How to spot a mammal



- 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

- Grasses
- Cereals
- Garden shrubs
- Deciduous trees

Non flowering plants are made up of 3 groups

- Algae
- Coniferous trees
- Ferns

#### Invertebrates

Invertebrates can be grouped 4 ways

- Insects
- Arachnids
- Snails and slugs
- Worms

How to spot an insect



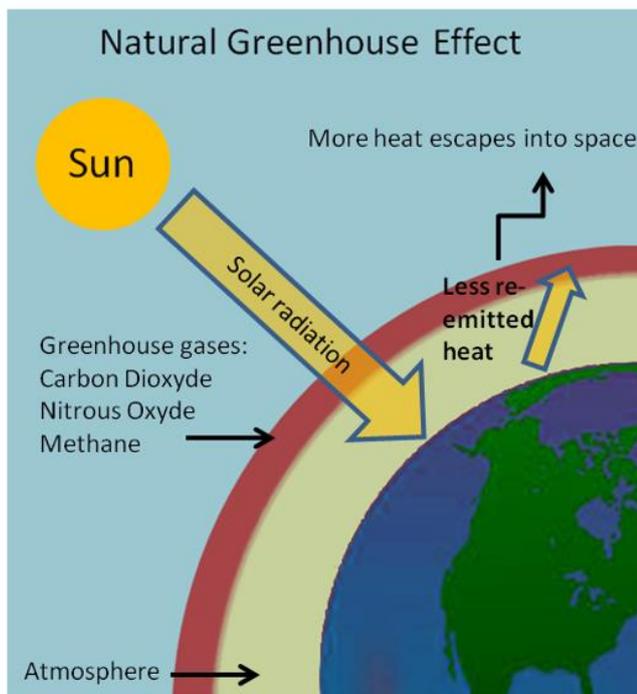
- 3 body sections
- 6 legs

How to spot an arachnid



- 2 body sections
- 8 legs

#### Natural Greenhouse Effect



#### Human Enhanced Greenhouse Effect

