

What Prior Knowledge should students have?

- Animals eat different types of food
- Animals are suited to different habitats
- What plants need to grow
- Materials and their properties
- Materials and their different purposes

What Skills will students learn (Disciplinary Knowledge)

- Observations over time
- Evidence gathering and data recording
- Use of results to make suggestions
- Classifying

What key knowledge will be taught (Substantive Knowledge)

- Different habitats: how living things are suited to the habitat and the interactions between the living organisms within a habitat.
- How habitats change throughout the year: develop an understanding of the different animals living in a habitat to build up simple food chains.
- Animal life cycles.
- Different materials and their properties: consolidate understanding that one type of object can be made from different materials and also that one material can be used for a number of different objects.
- Develop understanding of the simple physical properties of materials and consider in more detail how these properties make materials useful for particular purposes.

Key Vocabulary	Definition
Absorbent	able to soak up liquid easily.
Classify	to group objects according to similarities in appearance or properties.
Compost	decayed organic material which is used as a fertiliser for plants.
Food Chain	a series of organisms dependent on the previous as a source of food.
Habitat	a place where an animal finds the things it needs to live – food, water, and shelter.
Offspring	the young of a living organism.
Once-lived	was once a living organism, or part of one, but is now dead, for example wood.
Opaque	not able to be seen through; not transparent.
Stem	the part of a plant that supports the branches, leaves and flowers. It helps to take water and nutrients around the plant.
Translucent	property of a substance which light can be seen through, but not detailed shapes.

Transparent	See-through.
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Common Misconceptions

- Children will not necessarily define seeds/berries as living.
- Children may not realise that wooden objects are once-lived.
- When constructing food chains, children may incorrectly link animals that do not live in the same habitat.
- Children often put the arrows the wrong way round in a food chain as they use the arrows to indicate what an animal eats rather than what it is eaten by.
- Children sometimes use the word 'material' to describe fabric and textiles. They need to be reminded that in science the word material is a generic word used to describe what something is made of.