

Science



Learning Outcomes

Content of this grid is from the [National Curriculum in England: science programmes of study](#) with adapted outcomes from the [STEM Schemes of Work for Students Working up to Level 1](#). The 'Working Scientifically' outcomes of the National Curriculum are incorporated into the different topics covered.

Living things and their habitats			
By the end of KS5 pupils should know:	Redway Pre-Formal Pathway Encounter → Foundation	Redway Semi-formal Pathway Core → Development	Redway Formal Pathway Enrichment → Enhancement
1. Explore and compare the differences between things that are living, dead, and things that have never been alive.	a. Responds with curiosity when exploring a variety of things that have never been alive. b. Responds with curiosity when exploring a variety of things that are living including: i. Plants ii. Mammals e.g., dog, rabbit. iii. Insects iv. Fish c. Make differentiated responses to living things and things that have never lived.	a. Know that living animals need food and water. b. Know that plants need water and sunlight. c. Can suggest some things that are living and some things that have never been alive.	a. Can differentiate between alive and never alive. b. Know some features of living things. c. Know that all living things move. Can give examples of how living things move including plants. d. Know that all living things feed. Can give examples of how living things feed including plants (i.e., sunlight) e. Know that all living things reproduce. f. Know that all living things use senses g. Know that all living things breathe h. Know that all living things grow. i. Understand that all living things die and know, when they are dead, they no longer show the features of living things.

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2. 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.	a. Responds to changes in their environment. b. Responds with curiosity when moving to a new environment. c. Experiences different habitats that are found in their local environment e.g., garden, woodland, urban, hedgerow etc. d. Use their senses to explore different plants and animals found in their local environment.	a. Explore different habitats that are found in their local environment e.g., garden, woodland, urban, hedgerow, pond etc. b. Observe different plants and animals that live in the different habitats using: i. Sight ii. Hearing.	a. Know that a habitat is where animals and plants live. b. Understand that a habitat needs to provide: i. Food ii. Water iii. Shelter from weather and predators. iv. Space to grow and reproduce. c. Can investigate different types of habitats and identify how each provide the needs of the plants and animals that live there. d. Know how animals and plants depend on each other within a habitat.
3. Identify and name a variety of plants and animals in their habitats, including microhabitats.			a. Investigate a variety of different habitats found in the local environment (e.g., hedgerow, long grass, tree, fallen log, pond, classroom etc.) b. Identify some of the plants and animals found in those habitats. c. Use magnifying glasses to observe animals that live in microhabitats. d. Understand that some plants and animals adapt to living in a particular environment.

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			e. Can match some animals and plants to a particular habitat e.g., cactus and camel to a desert habitat. f. Can record observations in a scientific way.
4. 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.	a. Explore through sight, touch, feel and smell (NOT taste) different types of animal food e.g., hay, grass, dried rabbit food, dog biscuit, bird feed.	a. Know some foods that common animals eat e.g., cow, rabbit, bird, cat etc. b. Can match some foods to the animals that eat them.	a. Know that some animals just eat plants. b. Know that some animals just eat other animals. c. Know that some animals eat both plants and other animals. d. Begin to understand the concept of a simple food chain e.g., sunlight - grass - rabbit - fox