

Knowledge Progression: Biology

Learning together, we grow kind hearts and healthy minds.

Year	Plants	Animals Including Humans	Living Things & Their Habitats
1	 Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. Identify the leaf, root, stem and flower of a plant. Identify the trunk, branch, roots and leaves of a tree. Sequence pictures that show how plants change 	 Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 	 Observe seasonal changes across the four seasons. Observe and describe weather associated with the seasons and how the length of the day varies. Use descriptive words, photos and pictures to record changes. Collect evidence of changes (eg. Leaves, seeds, flowers). Observe and name types of weather (eg. Rain, sun, wind, clouds).
2	 Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and suitable temperature to grow and stay healthy. Identify seeds and bulbs do not need light to germinate and identify how this is different to the needs of a plant. Explain how plants in the desert survive with little water and plants in the rainforest survive with little light. 	 Notice that animals, including offspring which grow into adults. Recognise changes that take place as animals get older. Find out about and describe the basic needs of animals, including humans, for survival (water, food, air). Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene. 	 Explore and compare the differences between things that are living, dead and thigs that have never been alive. Identify the most living things live in habitats to which they are suited and describe how different habitats provide for basic needs of different kinds of animals and plants. Identify and name a variety of plants and animals in their habitats. Describe how animals obtain their food from other animals, using the idea of a simple food chain. Identify and name different sources of food.
3	 Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Investigate the way in which water is transported within plants 	 Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Identify and group animals with and without skeletons, comparing their movement. Compare and contrast the diets of different animals, and decide ways of grouping them according to what they eat. 	•

	 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 		
Year 4W		 Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains, identifying producers, predators and prey. (P Y3/4) Describe the simple functions of the basic parts of the digestive system in humans. (P Y4/5) 	 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.
5		Describe the changes as humans develop to old age.	 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird Describe the life process of reproduction in some plants and animals. (PY6)
6	 Classification (building on prior learning from plants, animals and living things units) Describe how living things are classified into broad groups according to common observable characteristics an based on similarities and differences, including micro-organisms, plants and animals Give reasons for classifiying plants and animals based on specific characteristics. Devise own keys to classify organisms and objects. Recognise that broad groupings can be subdivided into increasingly specific groups. 	 Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood (P Y4/5) Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans. 	 Evolution and Inheritance Recognise that living things produce offspring of some kind, but normally offspring vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment in different ways and adaptation may lead to evolution. Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Explore the idea that characteristics are passed from parents to offspring.

Respect Inclusive Creative Hardworking