

Science Curriculum Map

Biology

Year 6

- Know how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.
- Know reasons for classifying plants and animals based on specific characteristics.
- Know and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- Know the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
- To describe the ways in which nutrients and water are transported within animals, including humans
- Know that living things change over time.
- Know that fossils provide information about living things that inhabited the Earth millions of years ago.
- Know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- Know how animals and plants are adapted to suit their environment.

Upper KS2

Year 5

- Know and be able to describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Know and describe the life process of reproduction in some plants and animals.
- Know and describe the changes as humans develop to old age.

Lower KS2

Year 2

- Know the differences between things that are living, dead, and things that have never been alive.
- Know that most living things live in habitats to which they are suited
- Know the name of a variety of plants and animals in their habitats, including micro-habitats.
- Know a basic food cycle
- Know how seeds and bulbs grow into mature plants.
- Know that plants need water, light and a suitable temperature to grow and stay healthy (and how changing these affects the plant).

KS 1

Year 1

- Know and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- Know the names & Identify a variety of common animals that are carnivores, herbivores and omnivores.
- Know how to sort living and non-living
- Know the names and label the basic parts of the human body and know their associated sense.
- Know humans are animals
- Know and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- Know and describe the basic structure of a variety of common flowering plants (petal, leaf, stem, root) including trees (roots, trunk, branches, leaves)

Year 4

- Know the functions of the basic parts of the digestive system in humans.
- Know the different types of teeth in humans and their simple functions.
- Know how to Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Know that living things can be grouped in a variety of ways.
- Know how to use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- Know that environments can change and that this can sometimes pose dangers to living things.

Year 3

- Know 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.
- Know that a varied diet is beneficial to health (along with a good supply of air/ clean water).
- Know that exercise beneficial to health (focus on energy in versus energy out. Include information on making informed choices).
- Know the names and can locate and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- Know what plants need for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- Know how water is transported within plants.
- Know the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

EYFS

EYFS

- Looks closely at similarities, differences, patterns and change.
- Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.