SCIENCE whole school overview Y1 to Y6

| | Autumn | Spring | Summer |
|--------|---|--|--|
| Year 1 | Seasonal change – Autumn – Why are the leaves falling | Seasonal change- Winter – Is it going to snow soon? -> | Seasonal change- Summer – Why is it so hot? |
| | off the trees? | Spring – Can you spot the signs spring? | This is an ongoing science unit that will be returned |
| | This is an ongoing science unit that will be returned to | This is an ongoing science unit that will be returned to | to throughout the year as appropriate so that |
| | throughout the year as appropriate so that children can | throughout the year as appropriate so that children can | children can observe, explore and carry out scientific |
| | observe, explore and carry out scientific investigations. | observe, explore and carry out scientific investigations. | investigations. |
| | Identifying animals — What am I? (Part of the Year 1 transition unit All Creatures Great and Small) In this unit children will learn about mammals, birds, reptiles, amphibians and fish. They will think about the needs of different pets and become familiar with the terms carnivore, herbivore and omnivore. | Identifying Plants - What's that plant? In this unit children are introduced to the basic names of common plants including those that grow in the wild and garden plants. They begin to name common British trees and identify those that are evergreen and deciduous. Children will name the basic structures of plants and trees | Everyday Materials - What are my toys made from? In this unit children will identify, classify and describe the everyday materials around them, such as wood, plastic, metal, glass and fabric, all through a variety of fun activities and experiments. |
| | My body – Do I need all of my five senses? In this unit children will learn the names of the main body parts and organs. They will develop their knowledge of the 5 senses through scientific investigations. | and list the things that they need to grow. | |
| Year 2 | Growing, Surviving and Thriving – How do I keep my | Exploring Everyday Materials - What is the best material to | Living in habitats – Where do you live? |
| real Z | body healthy so that I can grow big and strong? In this unit children will learn about the human life cycle and the things all animals need in order to grow, thrive and survive. As well as information and activities about the reproduction and survival needs of all | use for ? In this unit children will explore the properties of materials, such as wood, plastic, metal, glass and fabric, and start to explore the uses of everyday materials. | In this unit children will learn about habitats in familiar local areas, such as woodlands or ponds, before looking further afield from seaside's to the Sahara! They will also explore microhabitats. |
| | animals, there's a strong focus on how diet, exercise | The Secret World of Plants – Would plants still grow if there | |
| | and rest are important for the health of humans. | was no one to look after them? | |
| | | In this unit children develop their knowledge of plants | |
| | | further comparing the differences between seeds and | |
| | | bulbs, and consider what is needed for successful | |
| | | germination and growth. Children will conduct experiments to discover the effects a lack of water and | |
| | | light may have on a plant. | |
| Year3 | Health and Movement - How do I keep my body | Rocks, Fossils and Soils – What is Beneath our Feet? | Forces and magnets – Why does everything fall to fall |
| . 5415 | moving? | In this unit children learn about the three different types | to the floor? |
| | In thin unit children will learn how animals, including | of rocks and their individual features. They will learn how | In this unit children will learn about gravity and |
| | humans, need specific nutrition to help them move and | rocks, soil and fossils are formed. | forces. They will explore the forces of pushing and |
| | grow, and how humans and some other animals have | | |

SCIENCE whole school overview Y1 to Y6

| | skeletons and muscles to help their bodies move. With plenty of opportunities to carry out research and undertake practical investigations | How Plants Grow- Where do weeds come from? In this unit children will identify the functions of the different parts of a plant, find out what plants need in order to grow well and explore how plants reproduce. | pulling. They will learn that magnets attract and repel and that not all materials are magnetic. Light and shadow – Why is it dark? In this unit children will learn about how light travels, what shadows are, how the length and position of a shadow changes throughout the day. |
|--------|--|---|---|
| Year 4 | Teeth and Digestion – What happens to the food we eat? In this unit the children will learn about the human digestive system and the importance of a healthy diet and why the body needs certain nutrients and vitamins in order to survive and flourish. The children will learn about the different teeth and purpose within the digestive system. | States of matter — Is a solid always a solid? In this unit the children are introduced to the differences between solids, liquids and gases, and how different materials can change state. They will undertake practical experiments to help them understand the processes of evaporation and condensation, and the water cycle. Living in Environments — Could a polar bear live in the desert? In this unit children will become more familiar with the plants and animals in their local and wider environments. They will learn how to identify a range of British plants and animals, and how to classify organisms, including the use of classification keys. They will also consider why organisms live in different habitats and the impact, both positive and negative, that humans can have on environments. | Circuits and conductors – How does electricity travel? In this unit children will learn about where electricity comes from and how it is used before moving onto electrical safety. Changing Sound – How do we hear? In this unit children will explore what sound is and how it is made, before investigating how sound travels, how it can be blocked, how different pitches can be attained. |
| Year 5 | Keeping our bodies healthy – How do we keep our bodies in tip top condition? In this unit children will extend their knowledge of nutrition, the importance of exercise and the function of the heart and circulatory system. They will investigate how water and nutrients are transported in the circulatory system and recognise the impact of diet, exercise, drugs and lifestyle on how their bodies function. | Properties and changes of materials – How can we change materials? In this unit children will extend their knowledge of the differences between a variety of materials, and how materials can be mixed and dissolved, and reversibly and irreversibly changed. The Circle of Life – Are all lifecycles the same? In this unit will explore the processes of sexual and asexual reproduction in plants, find out about sexual reproduction in animals, investigate the differences in the life cycles of different animals, find out about the work of naturalists | Earth and Space – Why is the sun so important? In this unit children will learn about the earth and space including the movement of the Sun, Earth and Moon, day and night, seasons and phases of the Moon. Forces in action – How does a move? In this unit children will learn about the effects of gravity, friction, air and water resistance as well as build models to explore the ways in which pulleys, levers and gears work! |
| Year 6 | Evolution and Inheritance – How do we know about animals from the past and why have some species changed so much? | Classifying organisms – How are organisms similar and different? In this unit children will extend their knowledge of organisms through the use of classifying systems. They will | Seeing Light – How do we see things? In this unit children will learn about the complexities of the human eye and how we see things. They will |

SCIENCE whole school overview Y1 to Y6

In this unit children learn how characteristics are passed from one generation to the next and how species have adapted to suit their environments. They will develop their knowledge of the process of natural selection, and how our understanding of the process of evolution has developed over time thanks to the work of scientists and palaeontologists.

take a detailed look at the Linnaeus classification system, how it works and how different species of organisms that are closely related can be identified.

It's Electrifying! – How can we change circuits safely?
In this unit children will learn how circuits can be adapted and changed to produce different outcomes. They will learn the importance of electrical safety.

extend their knowledge of light and shadow through investigations and discover how we see colour.

Changes and reproduction – Why is my body changing?

In this unit children will learn about sexual reproduction and gestation, how young children grow and develop, the changes that occur during puberty as well as discovering about the changing needs of humans during old age.

N.B This unit will be taught in line with the school's SRE policy

Green = biology

Blue = chemistry

Red = physics