



Our Curriculum

SCIENCE

Seasonal changes/
Earth and Space

Plants/Living
things/habitats

Forces/Electricity

Learning
Areas

Animals including
humans/Evolution

Light/Sound

Materials/Matter/
Rocks

**“Science is a way of thinking
much more than it is a body
of knowledge”**

- Carl Sagan

EYFS

Early Learning Goal Links:

- Explore the natural world around them.
- Describe what they see, hear and feel whilst outside..
- Understand the effect of changing seasons on the natural world around them
- Ask questions to find out more and to check they understand what has been said to them.

YEAR 1

Children will learn about:

- Autumn:**
Humans: the basic parts of the human body and its communication to the senses
- Spring:**
Materials: everyday materials; compare/group materials by simple physical properties
- Seasonal Changes:** seasonal changes in the environment; weather changes; how day length varies
- Summer:**
Plants: common wild/garden plants; recognise deciduous and evergreen trees; label the structure of a flowering plant
- Animals:** common animals including the terms carnivore, herbivore and omnivore; the structure of animals

YEAR 2

Children will learn about:

- Autumn:**
Uses of everyday materials: identifying and comparing the suitability of a variety of everyday materials for particular uses
- Living things and their habitats:** identifying and naming a variety of plants and animals in their habitats, including microhabitats
- Spring:**
Plants: observing and describing how seeds and bulbs grow into mature plants
- Summer:**
Animals including humans: describing the importance for humans of exercise, eating the right amounts of different types of food, and hygiene; describing the basic needs of animals, including humans, for survival

INTENT

Children will know the essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils will develop a sense of excitement and curiosity about natural phenomena, as well as how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

YEAR 3

Children will learn about:

- Autumn:**
Rocks and soils : classification of rocks and soil; formation of stone; fossilisation.
- Light :** absence of light; reflection and the dangers of UV
- Spring:**
Forces and Magnets: gravity; pushes; pulls; friction and the behaviour of magnets
- Summer:**
Living things: nutrition; skeletal structure; how things grow from seed to plant

IMPLEMENTATION

Children will learn through building on their knowledge of different science topics, developing their understanding of scientific processes, skills and vocabulary. Children are encouraged to revisit and retrieve past learning to help build their understanding. Science is also taught in blocks as part of the year group topic work. Teachers make full use of the school grounds and the local area as well as science events in order to promote the value and importance of having a secure scientific understanding of the world around them.

YEAR 4

Children will learn about:

- Autumn:**
Humans: teeth and the digestive system
- Electricity:** simple circuits, including those with buzzers and breaks
- Spring:**
Outdoor Science: importance of bees; the impact of extinction; plant growth
- Sound:** how sounds are made; pitch; sound proofing and vibrations
- Summer:**
States of Matter: liquids, solids and gases; evaporation; condensation
- Living Things:** classifying animals; vertebrates; invertebrates and habitats; food chains



IMPACT

Children will be able to demonstrate the impact of their science understanding through investigations using the scientific enquiry skills, and our end of unit review quizzes (Year 1-6) and class discussion in EYFS.

YEAR 5

Children will learn about:

- Autumn:**
Forces: gravity; air resistance; water resistance; friction; levers, gears and pulleys
- Materials:** compare/group materials; dissolving and solutions; separating mixtures; reversible/irreversible changes; uses of everyday materials
- Spring:**
Earth and Space: the movement of the Earth and planets; the movement of the Moon; spherical bodies; day and night
- Living things:** life cycles of a mammal, an amphibian, an insect and a bird
- Summer:**
Living things: the life process of reproduction in some plants and animals

YEAR 6

Children will learn about:

- Autumn:**
Living Things: characteristics of living things and organisms; classification; plant life; microorganisms
- Humans:** human circulatory system; the heart and how to be healthy
- Spring:**
Outdoor Science: importance of bees; the impact of extinction; plant growth; bird activity and irrigation systems
- Evolution:** Charles Darwin's work; the theory of evolution; survival; natural selection adaptation and inheritance
- Summer:**
Light: properties of light sources; travel and reflection
- Electricity:** circuits with increased components; electrical symbols and the dangers of electricity

