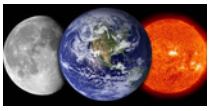
St Botolph's C of E Primary School

SCIENCE CURRICULUM ROADMAP

'Striving to be the best we can'

Science Week - Whole Day school event.
Year 3 - Magna Trip
Year 5 - Space Centre Trip



YEAR 6

To recognise symbols when representing a simple circuit and diagram.
To know why shadows have the same shape as the objects that cast them.
To recognise that light appears to travel in straight lines.
To know that the number of cells and voltage increases the output in a circuit.
To explain how light travels from a light source to our eyes.
To understand that adaptation may lead to evolution.
To recognise that living things produce offspring of the same kind, but not identical to their parents.
To recognise that fossils provide information about living things that inhabited the Earth millions of years ago..
To recognise the impact of diet, exercise, drugs and lifestyle on our bodies.
To identify and name the main parts of the human circulatory system.
To give reasons for the classification of plants and animals.
To describe how living things are classified.

Light
Electricity
Evolution and Inheritance
Animals, including humans
Living Things and their Habitats



YEAR 5

To understand the effects of gravity.
To describe the Sun, Earth and Moon.
To use knowledge of solids, liquids and gases to decide how mixtures might be separated.
To describe the life process of reproduction in some plants and animals.
To use the idea of the Earth's rotation to explain day and night.
To describe the movement of the Moon.
To describe the movement of Earth and other planets.
To have an understanding of reversible and irreversible changes.
To know that some materials are soluble.
To compare and group everyday materials based on their properties.
To describe the changes as humans develop to old age.
To describe the differences in the life cycles of living things.

Earth and space
Forces
Properties and changes of materials
Animals, including humans
Living Things and their Habitats



To identify the effects of air resistance, water resistance and friction.
To recognise that some mechanisms allow a smaller force to have a greater effect.
To recognise that vibrations from sounds travel through a medium to the ear.
To identify common appliances that run on energy.
To construct a simple electrical circuit and identify its basic parts.
To recognise that a switch opens and closes a circuit.
To name some common conductors and insulators.
To find patterns between the pitch and volume of a sound and the object that produced it.
To identify the part played by evaporation and condensation in the water cycle.
To know how sounds are made.
To observe that some materials change state when they are heated or cooled.
To compare and group materials as solids, liquids or gases.
To construct and interpret a variety of food chains.
To identify the different types of teeth in humans.
To describe the simple functions of the digestive system to humans.
To explore and use classification keys to group a variety of living things.
To recognise that changing environments can pose danger to living things.
To recognise that living things can be grouped in a variety of ways.

Sound
Electricity
States of matter
Animals, including humans
Living Things and their Habitats

YEAR 4

To identify that animals, including humans, cannot make their own food, they get nutrition from what they eat.
To identify that humans and some other animals have skeletons and muscles for support, protection and movement.
To describe how fossils are formed.
To recognise that we need light in order to see things and that dark is the absence of light.
To compare how things move on different surfaces.
To recognise that soils are made from rocks and organic matter.
To compare and group different kinds of rocks based on their properties.
To recognise that light from the sun can be dangerous.
To notice that some forces need contact between two objects.
To notice that light is reflected from surfaces.
To know how shadows are formed.
To know that magnets have two poles..
To identify some magnetic and non-magnetic materials..
To observe and predict how magnets attract or repel each other..
To explore the part that flowers play in the life cycle of flowering plants.
To explore what plants need to survive and how they vary from plant to plant..

Plants
Animals, including humans
Rocks
Light
Forces and Magnets

YEAR 3

To identify and describe the functions of flowering plants.



I can find out how the shapes of solid objects can be changed.
I understand the importance of exercise, healthy eating and hygiene.
I can notice that animals including humans will grow into adults.
I can observe and describe how seeds grow into mature plants.
I can identify and compare suitability of a variety of everyday materials.
I know what animals and humans need to survive.
I know what plants need to grow and stay healthy..
I can identify and name a variety of plants and animals in their habitats.
I can identify different animals habitats and describe how they are suited to the animals living there.

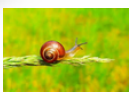
Use of everyday materials
Living Things and their Habitats
Plants
Animals including humans

YEAR 2

I can say which body part is associated with each sense.
I can name, draw and label the basic parts of the human body.
I can identify carnivores, herbivores and omnivores.
I can identify and name a variety of animals.
I can describe the physical properties of everyday materials.
I can identify and name a variety of everyday materials.
I can group materials based on their properties
I can observe changes across the four seasons
I can describe the weather associated with the seasons.
I can compare living and non-living things.

Plants
Animals, including humans
Everyday materials
Seasonal Changes





YEAR 1

I understand changing seasons.
I know the similarities and differences between the natural world around me and contrasting environments..
I can use all my senses in hands on exploration of natural materials.
I can understand the importance of healthy food choices.

Seasonal Changes
Animals including humans
Materials
Living things and their habitats.



EYFS



Respect **Thankfulness** **Perseverance** **Truthfulness** **Friendship** **Compassion**