

# Science

## Intent Statement

At St Peter's Primary School, children are encouraged to be inquisitive throughout their time at the school and beyond. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout each topic, children will acquire and develop key knowledge that has been identified within each unit and across each year group. This knowledge is identified and informed by the National Curriculum and builds towards identified 'end points' in accordance with National Curriculum expectations.

Key 'Working Scientifically' skills are also mapped for each year group and are progressive throughout the school. These ensure systematic progression for each learner within the subject.

St Peter's Primary School believes that practical experiences for all learners should be the norm; using equipment, conducting experiments, building arguments and explaining concepts confidently are skills which are taught throughout the school. The school's approach to science takes account of the school's own context, ensuring regular access to the local, natural environment and places of scientific interest as part of the school's commitment to learning outside the classroom. Cross curricular opportunities are also identified, mapped and planned to ensure contextual relevance.

Children are encouraged to ask questions and to be curious about their surroundings and a love of science is nurtured through whole school themes and a vibrant, varied science curriculum.

SPPS SCIENCE CURRICULUM

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Who we are/where we come from; our bodies.	Space; light and dark.	Talents & powers: materials	Animals, mini-beasts; healthy eating; Life cycles: plants & animals; recycling; natural world.		Seasons and changes; STEM.
Year 1	<b>Physics:</b> Seasonal changes <i>(Observing changes across four seasons and describing associated weather)</i>	<b>Biology:</b> Animals including humans <i>(identifying animals; human body)</i>	<b>Chemistry:</b> Everyday materials <i>(identify materials; describe physical properties)</i>	Scientists & inventors	<b>Biology:</b> Plants <i>(Identifying and naming common plants and describing basic structures)</i>	<b>Physics:</b> Seasonal changes <i>(Observing changes across four seasons and describing associated weather)</i>
Year 2	<b>Biology:</b> Living things and their habitats <i>(food chains &amp; introduction to habitats)</i>	<b>Chemistry:</b> Uses of everyday materials <i>(compare materials &amp; their uses)</i>	<b>Biology:</b> Animals including humans <i>(Animals need water, food and air to survive and to have offspring)</i>	Scientists & inventors	<b>Biology:</b> The Environment <i>(global warming; energy conservation)</i>	<b>Biology:</b> Plants <i>(Observe that plants grow from seeds and require water, light and a suitable temperature)</i>
Year 3	<b>Biology:</b> Animals including humans <i>(nutrition; skeletal &amp; muscular systems)</i>	<b>Chemistry:</b> Rocks <i>(Comparisons of types of rocks and how fossils are formed)</i>	<b>Physics:</b> Light <i>(Relationship between light and how we see; the formation of shadows)</i>	Scientists & inventors	<b>Biology:</b> Plants <i>(Features of flowering plants and what they need to survive)</i>	<b>Physics:</b> Forces and magnets <i>(opposing &amp; balanced forces; contact &amp; non-contact forces including magnetism)</i>
Year 4	<b>Physics:</b> Electricity <i>(Simple series circuits)</i>	<b>Physics:</b> Sound <i>(Relationship between strength of vibrations and volume of sound)</i>	<b>Chemistry:</b> States of matter <i>(Particle model &amp; arrangement)</i>	Scientists & inventors	<b>Biology:</b> Living things and their habitats <i>(classification keys)</i>	<b>Biology:</b> Animals including humans <i>(digestive system &amp; teeth)</i>
Year 5	<b>Physics:</b> Earth and space <i>(Movements of planets and the Moon; relationship to day and night)</i>	<b>Physics:</b> Forces <i>(gravity; air &amp; water resistance; friction; mechanisms)</i>	<b>Chemistry:</b> Properties and changes of materials <i>(Identifying and separating mixtures; reversible and irreversible changes)</i>	Scientists & inventors	<b>Biology:</b> Living things and their habitats <i>(animal life cycles; sexual &amp; asexual plant reproduction)</i>	<b>Biology:</b> Animals including humans <i>(Human development to old age)</i>
Year 6	<b>Physics:</b> Light <i>(how light travels; light composition)</i>	<b>Physics:</b> Electricity <i>(comparing components &amp; varying voltage)</i>	<b>Biology:</b> Evolution and inheritance <i>(Fossils; introduction to the idea that adaptation may lead to evolution)</i>	Scientists & inventors	<b>Biology:</b> Animals including humans <i>(Human circulatory system; transport of nutrients within the body)</i>	<b>Biology:</b> Living things and their habitats <i>(Further classification of organisms; Linnaeus classification)</i>

	<b>Animals including humans</b>	<b>Plants</b>	<b>Seasonal changes</b>	<b>Everyday materials</b>	<b>Working Scientifically</b>
<b>Year 1</b>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>-Identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>-Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</li> <li>-Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>-Identify and describe the basic structure of a variety of common flowering plants, including trees.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>- Observe changes across the four seasons</li> <li>-Observe and describe weather associated with the seasons and how day length varies</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Distinguish between an object and the material from which it is made</li> <li>- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>-Describe the simple physical properties of a variety of everyday materials</li> <li>-Compare and group together a variety of everyday materials on the basis of their simple physical properties</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Asking simple questions and recognising that they can be answered in different ways.</li> <li>-Observing closely, using simple equipment.</li> <li>-Performing simple tests.</li> <li>-Identifying and classifying.</li> <li>-Using their observations and ideas to suggest answers to questions.</li> <li>-Gathering and recording data to help in answering questions.</li> </ul>

	Uses of everyday materials	Living things and their habitats	Animals including humans	Plants	Working scientifically
<b>Year 2</b>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>-Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Explore and compare the differences between things that are living, dead, and things that have never been alive</li> <li>-Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</li> <li>-Identify and name a variety of plants and animals in their habitats, including microhabitats</li> <li>-Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Notice that animals, including humans, have offspring which grow into adults</li> <li>-Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> <li>-Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Observe and describe how seeds and bulbs grow into mature plants</li> <li>-Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Asking simple questions and recognising that they can be answered in different ways.</li> <li>-Observing closely, using simple equipment.</li> <li>-Performing simple tests.</li> <li>-Identifying and classifying.</li> <li>-Using their observations and ideas to suggest answers to questions.</li> <li>-Gathering and recording data to help in answering questions.</li> </ul>

	<b>Animals including humans</b>	<b>Plants</b>	<b>Rocks</b>	<b>Forces and magnets</b>	<b>Light</b>	<b>Working scientifically</b>
<b>Year 3</b>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-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</li> <li>-Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>-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</li> <li>-Investigate the way in which water is transported within plants</li> <li>-Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</li> <li>-Describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>-Recognise that soils are made from rocks and organic matter</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Compare how things move on different surfaces</li> <li>-Notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>-Observe how magnets attract or repel each other and attract some materials and not others</li> <li>-Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials</li> <li>-Describe magnets as having two poles</li> <li>-Predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Recognise that they need light in order to see things and that dark is the absence of light</li> <li>-Notice that light is reflected from surfaces</li> <li>-Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>-Recognise that shadows are formed when the light from a light source is blocked by a solid object</li> <li>-Find patterns in the way that the size of shadows change</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Asking relevant questions and use scientific evidence to support my answers.</li> <li>-Setting up simple practical tests.</li> <li>-Making accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.</li> <li>-Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.</li> <li>-Recording findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.</li> <li>-Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>-Using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.</li> <li>-Identifying differences, similarities or changes related to simple scientific ideas and processes.</li> <li>-Using straightforward scientific evidence to answer questions or to support their findings</li> </ul>

	Living things and their habitats	Animals including humans	States of matter	Sound	Electricity	Working scientifically
<b>Year 4</b>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Recognise that living things can be grouped in a variety of ways</li> <li>-Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> <li>-Recognise that environments can change and that this can sometimes pose dangers to living things.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Describe the simple functions of the basic parts of the digestive system in humans</li> <li>-Identify the different types of teeth in humans and their simple functions</li> <li>-Construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Compare and group materials together, according to whether they are solids, liquids or gases</li> <li>-Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</li> <li>-Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Identify how sounds are made, associating some of them with something vibrating</li> <li>-Recognise that vibrations from sounds travel through a medium to the ear</li> <li>-Find patterns between the pitch of a sound and features of the object that produced it</li> <li>-Find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>-Recognise that sounds get fainter as the distance from the sound source increases.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Identify common appliances that run on electricity</li> <li>-Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>-Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</li> <li>-Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>-Recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Asking relevant questions and use scientific evidence to support my answers.</li> <li>-Setting up simple practical tests.</li> <li>-Making accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.</li> <li>-Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.</li> <li>-Recording findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.</li> <li>-Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>-Using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.</li> <li>-Identifying differences, similarities or changes related to simple scientific ideas and processes.</li> <li>-Using straightforward scientific evidence to answer questions or to support their findings.</li> </ul>

	Earth and space	Forces	Properties and changes of materials	Living things and their habitats	Animals including humans	Working scientifically
<b>Year 5</b>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</li> <li>-Describe the movement of the Moon relative to the Earth</li> <li>-Describe the Sun, Earth and Moon as approximately spherical bodies</li> <li>-Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <li>-Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> <li>-Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</li> <li>-Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>-Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>-Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> <li>-Demonstrate that dissolving, mixing and</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>-Describe the life process of reproduction in some plants and animals</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Describe the changes as humans develop to old age.</li> </ul>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>-Planning enquiries, including recognising and controlling variables where necessary.</li> <li>-Taking measurements, using a range of scientific equipment, with increasing accuracy and precision</li> <li>-Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models</li> <li>-Reporting findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</li> <li>-Presenting findings in written form, displays and other presentations.</li> <li>-Using test results to make predictions to set up further comparative and fair tests.</li> <li>-Using simple models to describe scientific ideas.</li> <li>-Identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>

			<p>changes of state are reversible changes</p> <p>-Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>			
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	Electricity	Light	Evolution and inheritance	Animals including humans	Living things and their habitats	Working scientifically
<b>Year 6</b>	<p><u>Outcomes</u></p> <p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>-Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>-Use recognised symbols when representing a simple circuit in a diagram.</p>	<p><u>Outcomes</u></p> <p>-Recognise that light appears to travel in straight lines</p> <p>-Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>-Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>-Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>	<p><u>Outcomes</u></p> <p>-Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>-Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>-Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p><u>Outcomes</u></p> <p>-Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>-Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>-Describe the ways in which nutrients and water are transported within animals, including humans.</p>	<p><u>Outcomes</u></p> <p>-Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals</p> <p>-Give reasons for classifying plants and animals based on specific characteristics.</p>	<p><u>Outcomes</u></p> <p>-Planning enquiries, including recognising and controlling variables where necessary.</p> <p>-Taking measurements, using a range of scientific equipment, with increasing accuracy and precision</p> <p>-Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models</p> <p>-Reporting findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</p> <p>-Presenting findings in written form, displays and other presentations.</p> <p>-Using test results to make predictions to set up further comparative and fair tests.</p> <p>-Using simple models to describe scientific ideas.</p> <p>-Identifying scientific evidence that has been used to support or refute ideas or arguments.</p>

Science Knowledge Progression

	Scientific Attitudes & Planning (A&P)	Measuring & Observing (M&O)	Recording & Presenting (R&P)	Analysing & Evaluating (A&E)
<u>EYFS</u>	Make predictions about what might happen when I try something	Measure/observe using senses Observe using a magnifying glass safely	Use hoops to classify objects based on simple criteria	Notice patterns in the world around me
<u>Y1</u>	Scientists look for patterns in the world around them Scientists group objects or living things based on their properties Scientists conduct secondary research to learn from what other scientists have already learned	Gather information from text/ books/ images	Record numerical or descriptive observations in a table Draw a diagram, a simple scientific drawing that explains or informs Use a table to classify items based on properties Use a Carroll diagram to classify items based on properties Use a Venn diagram to classify items into two or three sets based on properties	Make simple statements about the results of an enquiry
<u>Y2</u>	It is important that we keep as much as we can the same, apart from the one thing we measure and the one thing we change Make a prediction based on substantive knowledge	Make systematic observations of an object	Use a pair of axes to classify items based on the extent it displays two properties	Ask further questions that could be explored to extend findings

	<p>There are four main stages of enquiry (A&amp;P, M&amp;O, R&amp;P, A&amp;E)</p> <p>Scientists identify potential hazards in their experiments and plan ways to reduce them</p> <p>Scientists conduct investigations to identify whether a pattern they think they've seen is really there</p>			
<p><u>Y3</u></p>	<p>Select most appropriate equipment to measure (the variables) that will give you the best chance of an accurate result</p> <p>A dependent variable is what you measure; an independent variable is what you change; controlled variables are things that stay the same</p> <p>Scientists identify factors in an investigation that should be controlled, and try to find ways to control them</p> <p>Write an appropriate method</p> <p>Science is studied as three disciplines: biology (study of organisms), chemistry (study of</p>	<p>Gather information from the internet</p> <p>Anomalous results should be discarded and rerecorded</p> <p>Data is repeatable if the same person repeats the investigation and gets the same results; data is reproducible if the investigation is repeated by a different person and the results are the same</p> <p>Taking multiple readings allows you to see if your data is repeatable and helps identify outliers</p>	<p>Design a table to collect data with the appropriate number of rows and columns and correct headings</p>	<p>Draw conclusions (e.g. 'the greater the..., the greater the...')</p> <p>Use scientific understanding to explain their findings</p> <p>Suggest ways to improve practical procedures to obtain more accurate measurements</p> <p>Use findings of investigation to make further predictions</p>

	materials) and physics (study of energy)			
<u>Y4</u>	<p>Set a hypothesis to test</p> <p>Draw diagram of the investigation</p> <p>Scientists use models to help explain their ideas</p>	<p>Gather information using a data logger (e.g. sound meter app; heart rate app)</p>	<p>Use a classification key to identify an object</p> <p>Draw a dichotomous classification key to help others identify an object</p> <p>Present information orally using a prop or demonstration</p> <p>Present information in a written format</p>	<p>Identify scientific evidence that has been used to support or refute ideas</p>
<u>Y5</u>	<p>Science is studied as three disciplines: biology (study of organisms), chemistry (study of properties of matter and how it interacts with energy) and physics (study of energy)</p> <p>Scientists look for patterns in data to try to identify correlations</p>	<p>Measure force using a Newton meter</p>	<p>Scatter graphs can help you decide if there is a relationship between two variables</p> <p>(Geography: Interpret and construct climate graph)</p> <p>Line graphs can be used when data is continuous; bar charts can be used when data is discrete</p>	<p>Make judgements on the accuracy of the data</p> <p>Some people may agree or disagree with the use of some scientific discoveries</p> <p>Science is never 'complete' and scientists are always working to make models more accurate or to discover new explanations</p>

	Scientists must work out if the factor is the cause of the outcome in a correlation			
Y6	Scientists consider how to improve testing based upon the results acquired	Taking multiple readings allows pupils to see if data is repeatable, helps identify outliers and allows a mean to be calculated	Decide which graph is most appropriate for the enquiry	Calculating the mean can be used as a method of analysing data

## Year 1 Science Curriculum Key Vocabulary

### Animals including humans

Fish, Reptiles, Mammals, Birds, Amphibians (+ examples of each), Herbivore, Omnivore, Carnivore, Leg, Arm, Elbow, Head, Ear, Nose, Back, Wings, Beak.

### Plants

Deciduous, Evergreen trees, Leaves, Flowers (blossom), Petals, Fruit, Roots, Bulb, Seed, Trunk, Branches, Stem.

### Everyday Materials

Wood, Plastic, Glass, Paper, Water, Metal, Rock, Hard, Soft, Bendy, Rough, Smooth.

### Seasonal Changes

Summer, Spring, Autumn, Winter, Sun, Day, Moon, Night, Light, Dark.

## **Year 2 Science Curriculum Key Vocabulary**

### **Animals including humans**

Survival, Water, Air, Food, Adult, Baby, Offspring, Kitten, Calf, Puppy, Exercise, Hygiene.

### **Plants**

Seeds, Bulbs, Water, Light, Temperature, Growth.

### **Living things and their habitats**

Living, Dead, Habitat, Energy, Food chain, Predator, Prey, Woodland, Pond, Desert.

### **Everyday materials and their uses**

Hard, Soft, Stretchy, Stiff, Shiny, Dull, Rough, Smooth, Bendy, Waterproof, Absorbent, Opaque, Transparent Brick, Paper, Fabrics, Squashing, Bending, Twisting, Stretching Elastic, Foil.

## **Year 3 Science Curriculum Key Vocabulary**

### **Animals including humans**

Movement, Muscles, Bones, Skull, Nutrition, Skeletons.

### **Plants**

Air, Light, Water, Nutrients, Soil, Reproduction, Transportation, Dispersal, Pollination, Flower.

**Rocks**

Fossils, Soils, Sandstone, Granite, Marble, Pumice, Crystals, Absorbent.

**Light**

Light, Shadows, Mirror, Reflective, Dark, Reflection.

**Forces and magnets**

Magnetic, Force, Contact, Attract, Repel, Friction, Poles, Push, Pull.

**Year 4 Science Curriculum Key Vocabulary**

**Animals including humans**

Mouth, Tongue, Teeth, Oesophagus, Stomach, Small Intestine, Large Intestine, Herbivore, Carnivore, Canine, Incisor, Molar.

**Living things and their habitats**

Vertebrates, Fish, Amphibians, Reptiles, Birds, Mammals, Invertebrates, Snails, Slugs, Worms, Spiders, Insects, Environment, Habitats.

**States of Matter**

Solid, Liquid, Gas, Evaporation, Condensation, Particles, Temperature, Freezing, Heating.

**Sound**

Volume, Vibration, Wave, Pitch, Tone, Speaker.

**Electricity**

Cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators.

## **Year 5 Science Curriculum Key Vocabulary**

### **Animals including humans**

Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty.

### **Living things and their habitats**

Mammal, Reproduction, Insect, Amphibian, Bird, Offspring, Pollination.

### **Properties and changes of materials**

Hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing.

### **Earth and Space**

Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, Star, Constellation.

### **Forces**

Air resistance, Water resistance, Friction, Gravity, Newton, Gears, Pulleys, Levers.

## **Year 6 Science Curriculum Key Vocabulary**



**Animals including humans**

Circulatory, Heart, Blood Vessels, Veins, Arteries, Oxygenated, Deoxygenated, Valve, Exercise, Respiration.

**Living things and their habitats**

Classification, Vertebrates, Invertebrates, Micro-organisms, Amphibians, Reptiles, Mammals, Insects.

**Evolution and inheritance**

Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetics.

**Light**

Refraction, Reflection, Light, Spectrum, Rainbow, Colour.

**Electricity**

Cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators, Amps, Volts.