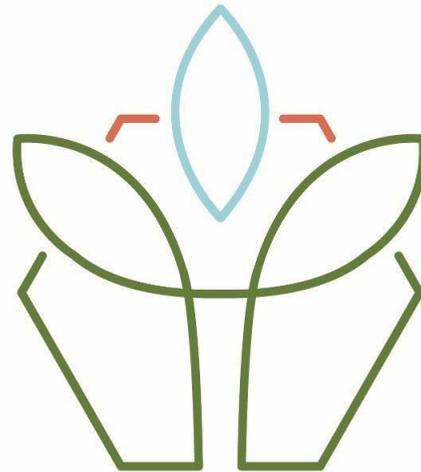


Science

Progression in Knowledge



John Randall

Be Ready, Be Respectful, Be Safe

Coverage of Science topics in each year group Years 1-6

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| Animal Kingdom (National Curriculum: Animals including Humans) Biology | Animals and their needs (National Curriculum: Animals including Humans) Biology | Animals and Skeletons (National Curriculum: Animals, including Humans) Biology | Digestion (National Curriculum: Animals, including Humans) Biology | Human Development (National Curriculum: Animals including Humans) Biology | Heart and Lungs (National Curriculum: Animals including Humans) Biology |
| | Habitats (National Curriculum: Living things and their Habitats) Biology | Rocks Chemistry | Classification (National Curriculum: Living things and their Habitats) Biology | Life Cycles (National Curriculum: Living things and their Habitats) Biology | Classification (National Curriculum: Living things and their Habitats) Biology |
| Materials (National Curriculum: Everyday Materials) Chemistry | Materials (National Curriculum: Uses of Everyday Materials) Physics | Magnets (National Curriculum: Forces and Magnets) Physics | Electricity Physics/ chemistry | Forces Physics | Electricity Physics/ chemistry |
| Plants Biology | Plants Biology | Plants Biology | States of Matter Chemistry | Mixtures and Reactions (National Curriculum: Properties and Changes of Materials) Chemistry | Evolution (National Curriculum: Evolution and Inheritance) Biology |
| Weather (National Curriculum: Seasonal Changes) Biology | Living Things (National Curriculum: Living things and their Habitats) Biology | Light Physics | Sound Physics | Earth and Space Physics | Light Physics |
| Environment (Covered throughout year) Biology | Local Habitats (Covered throughout the year) Biology | Animals Homes (Covered throughout the year) Biology | Respecting our environment (Covered throughout the year) | Decay and Recycling (Covered throughout the year) | Field Studies (Covered throughout the year) |

| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| <p>Plants Pupils should be taught to:</p> | <p>Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants;</p> | <p>- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>-identify and describe the basic structure of a variety of common flowering plants, including trees.</p> | <p>-observe and describe how seeds and bulbs grow into mature plants</p> <p>-find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> | <p>-identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>-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</p> <p>-investigate the way in which water is transported within plants</p> <p>-explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> | Plants topic not covered in Years 4, 5 and 6 in the National Curriculum | | |
| Skills Progression | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| <p>Plants</p> | <p>Plant seeds and care for growing plants and observe them over time.</p> <p>After close observations draw plants in a variety of settings and environments.</p> <p>Listen to children describe and comment on</p> | <p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Identify and describe the basic structure of a flowering plant including roots, stem/trunk,</p> | <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p>Identify and describe the functions of different parts of flowering plants, including roots, stem/trunk, leaves and flowers.</p> | <p>Explore in detail the parts that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p>Identify and describe detail the functions of different parts of flowering plants, including roots, stem/trunk, leaves and flowers.</p> | Plants topic not covered in Years 4, 5 and 6 in the National Curriculum. | | |

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| | <p>plants they have seen outside.</p> <p>Name, describe and recognise some plants that children are likely to see.</p> | <p>leaves and flowers.</p> <p>Find out about and describe what plants need to grow and stay healthy, including, water, light and temperature.</p> | <p>Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how these vary from plant to plant and the way in which water is transported in plants.</p> | <p>Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how these vary from plant to plant and the way in which water is transported in plants.</p> | | | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| <p>Animals Including Humans</p> <p>Pupils should be taught to:</p> | <p>Children at the expected level of development will:</p> <ul style="list-style-type: none"> - Explore the natural world around them, making observations and drawing pictures of animals. <p>Name, describe and recognise some animals that children are likely to see.</p> | <ul style="list-style-type: none"> -identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals -identify and name a variety of common animals that are carnivores, herbivores and omnivores -describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) | <ul style="list-style-type: none"> -notice that animals, including humans, have offspring which grow into adults -find out about and describe the basic needs of animals, including humans, for survival (water, food and air) -describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene | <ul style="list-style-type: none"> -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 -identify that humans and some other animals have skeletons and muscles for support, protection and movement | <ul style="list-style-type: none"> -describe the simple functions of the basic parts of the digestive system in humans -identify the different types of teeth in humans and their simple functions -construct and interpret a variety of food chains, identifying producers, predators and prey | <ul style="list-style-type: none"> -describe the changes as humans develop to old age | <ul style="list-style-type: none"> -identify and name the main parts of the human circulatory system -describe the functions of the heart, blood vessels and blood -recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function -describe the ways in which food and water are transported in animals, including humans |

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| | | -identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense | | | | | |
| Skills Progression | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Animals including Humans | <p>Play with different small world animals and name them whilst playing.</p> <p>Help children to care for animals and take part in first-hand scientific explorations of animal life cycles, such as caterpillars or chick eggs.</p> <p>After close observations draw pictures of the natural world including animals</p> <p>Listen to children describe and comment on animals they have seen outside.</p> <p>Throughout the year take children outside to observe how</p> | <p>Draw and label the main parts of the human body and link body parts to the associated senses.</p> <p>Name and talk about the young of humans and other animals.</p> <p>Identify and name a variety of common animals such as amphibians, mammals and invertebrates.</p> <p>Find out about and describe the basic</p> | <p>Identify and describe simple features of human and other animal skeletons, and how muscles are used for support, protection and movement.</p> <p>Describe in simple terms the changes that take place as animals grow.</p> <p>Identify that animals including humans need the right types and amount of nutrition and that they cannot make</p> | <p>Name and describe key features of the human body, including organs, skeleton and muscles.</p> <p>Talk in simple terms about how animals grow & reproduce.</p> <p>Describe the simple functions of the human digestive system in humans.</p> | <p>Describe scientifically the function of the main organs in the body, including muscles, the skeleton and their main functions.</p> <p>Describe the changes that take place as humans develop from birth to old age. Learn about the changes that take place during puberty.</p> <p>Use scientific terms to describe the key features of a healthy diet, including main food groups.</p> | <p>Identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood.</p> <p>Recognise that normally the offspring of a living thing will not be identical to its parents.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the functions of the body</p> | <p>Explain how and why our r oxygen.</p> <p>Explain in detail the impac exercise, drugs and lifestyle way the body functions.</p> |

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| | animals behave differently when the seasons change. | needs of animals including humans for survival (water, food and air). Describe the importance for humans of exercise, a balanced diet and hygiene, including how to look after teeth. | their own food, that they need nutrition from what they eat. Describe the link between an animal's diet and their type of teeth. | Identify the different types of teeth in humans and their simple functions. | Draw a timeline to indicate stages in the growth and development of humans. | Describe the ways in which nutrients and water are transported within animals, including humans. | Name all the main food groups and explain how they are used in the body. |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Living Things and their Habitats Pupils should be taught to: | Living Things and their Habitats not covered in the statutory framework for the early years foundation stage | Living Things and their Habitats not covered in Year 1 in the National Curriculum | -explore and compare the differences between things that are living, dead, and things that have never been alive -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 -identify and name a variety of plants and animals in their habitats, including microhabitats | Living Things and their Habitats not covered in Year 3 in the National Curriculum | -recognise that living things can be grouped in a variety of ways -explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment -recognise that environments can change and that this can sometimes pose dangers to living things | -describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird -describe the life process of reproduction in some plants and animals | -describe how living things are classified into broad groups based on common observable characteristics and based on similarities and differences, including microorganisms, plants and animals -give reasons for classifying animals based on specific characteristics |

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| | | | -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 | | | | |
| Skills Progression | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Living Things and their Habitats | Living Things and their Habitats are not covered in the statutory framework for the early years foundation stage | Living Things and their Habitats not covered in Year 1 in the National Curriculum | <p>Recognise that living things grow and reproduce.</p> <p>Describe the basic conditions that plants and animals need in order to survive.</p> <p>Describe and compare features of living, dead and non-living things.</p> | Living Things and their Habitats not covered in Year 3 in the National Curriculum | <p>Describe the life process of reproduction in some plants and animals.</p> <p>Use scientific vocabulary to describe life processes, e.g. respiration in animals, pollination in flowering plants etc.</p> <p>Identify the key features of living and non-living things in detail</p> | <p>Recognise that micro-organisms feed, grow and reproduce like other organisms.</p> <p>Recognise and suggest ways of preventing the spread of harmful micro-organisms.</p> <p>Identify an increasing range of features of living and non-living things in detail.</p> | <p>Use scientific vocabulary to describe and explore relationships between related processes, e.g. pollination and fertilisation.</p> <p>Describe how micro-organisms feed and reproduce between food sources and how this can cause food poisoning.</p> <p>Explain how and why feeding and reproduction are essential for the survival of micro-organisms.</p> |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Rocks Pupils should be taught to: | Rocks are not covered in the statutory framework for the early years foundation stage | Rocks is not covered in Key Stage One in the National Curriculum | <p>-compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>-describe in simple terms how fossils are formed when things that have</p> | | Rocks is not covered in years 4, 5 and 6 in the National Curriculum. | | |

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| | | | | lived are trapped within rock -recognise that soils are made from rocks and organic matter | | | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Everyday Materials Pupils should be taught to: | Children at the expected level of development will: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. | -distinguish between an object and the material from which it is made -identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock -describe the simple physical properties of a variety of everyday materials -compare and group together a variety of everyday materials on the basis of their simple physical properties | Everyday Materials is not covered in year 2 in the National Curriculum. | Everyday Materials is not covered in Key Stage 2 in the National Curriculum. | | | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |

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| Uses of Everyday Materials Pupils should be taught to: | Use everyday, open-ended materials to support overall co-ordination. Suggestions: sponges and cloths to hold, squash and throw, or wet and squeeze. Regularly provide new materials and interesting things for children to explore and investigate | Uses of Everyday Materials is not covered in year 1 in the National Curriculum. | -identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses -find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching | Uses of Everyday Materials is not covered in years 3, 4, 5 and 6 in the National Curriculum. | | | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Properties and Changes of Materials Pupils should be taught to: | Children at the expected level of development will: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Identify new vocabulary before planning activities, for example, changes in materials: 'dissolving', 'drying', 'evaporating'; in | Properties and Changes of Materials is not covered in Key Stage 1 in the National Curriculum. | Properties and Changes of Materials is not covered in Year 3 in the National Curriculum. | Properties and Changes of Materials is not covered in Year 4 in the National Curriculum. | <ul style="list-style-type: none"> •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 •know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution •use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating •give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday | Properties and Changes of Materials is not covered in Year 6 in the National Curriculum. | |

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| | <p>music: 'percussion', 'tambourine'.</p> <p>Provide a variety of construction materials like blocks and interlocking bricks. Provide den-making materials. Allow children to play freely with these materials, outdoors and inside. When appropriate, talk about the shapes and how their properties suit the purpose.</p> | | | | | <p>materials, including metals, wood and plastic</p> <ul style="list-style-type: none"> •demonstrate that dissolving, mixing and changes of state are reversible changes •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 | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Forces and Magnets Pupils should be taught to: | Forces and magnets are not covered in the statutory framework for the early years foundation stage | Forces and Magnets is not covered in Key Stage 1 in the National Curriculum. | | <p>-compare how things move on different surfaces</p> <p>-notice that some forces need contact between 2 objects, but magnetic forces can act at a distance</p> <p>-observe how magnets attract or repel each other and attract some materials and not others</p> <p>-compare and group together a variety of everyday materials on the basis of whether they are attracted to a</p> | Forces and Magnets is not covered in year 4 in the National Curriculum. | <p>Forces</p> <p>-explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>-identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p>-recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect and the action of acid on bicarbonate of soda</p> | Forces and Magnets is not covered in year 6 in the National Curriculum. |

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| | | | | <p>magnet, and identify some magnetic materials</p> <p>-describe magnets as having 2 poles</p> <p>-predict whether 2 magnets will attract or repel each other, depending on which poles are facing</p> | | | |
| | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Forces and Magnets | Forces and magnets are not covered in the statutory framework for the early years foundation stage | Forces and Magnets is not covered in Key Stage 1 in the National Curriculum. | | <p>Recognise that pushes and pulls will bring an object to rest more quickly.</p> <p>Describe situations where friction is helpful and where it is not.</p> <p>Identify the effects of friction acting between moving surfaces.</p> <p>Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> | Forces and Magnets is not covered in year 4 in the National Curriculum. | <p>Identify the effects of air and water resistance that act between moving surfaces.</p> <p>Recognise that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.</p> <p>Explain how motion is affected by forces such as gravitational attraction, magnetic attraction and friction.</p> <p>Describe motion in detail, in terms of balanced and unbalanced forces.</p> | Forces and Magnets is not covered in year 6 in the National Curriculum. |

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| | | | | Describe situations where there is more than one force acting on an object. Compare and group everyday materials that are magnetic and identify magnetic materials. Identify factors than increase resistance. | | Describe how gravity acts between the Earth and a falling object. | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Electricity: Pupils should be taught to: | Electricity not covered in the statutory framework for the early years foundation stage | Electricity not currently covered in Years 1, 2 and 3 in the National Curriculum. | | | <ul style="list-style-type: none"> -identify common appliances that run on electricity -construct a simple series electrical circuit, and naming its basic parts, including cells, wires, bulbs, switches and buzzers -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 -recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit -recognise some common conductors and insulators, and associate | Electricity not currently covered in Year 5 in the National Curriculum. | <ul style="list-style-type: none"> -associate the brightness of the volume of a buzzer with number and voltage of cells in the circuit -compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and on/off position of switches -use recognised symbols when representing a simple circuit diagram. |

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| | | | | | metals with being good conductors. | | |
| Skills Progression | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Electricity: | Electricity not covered in the statutory framework for the early years foundation stage | Electricity not currently covered in Years 1, 2 and 3 in the National Curriculum. | | | <p>Explain scientifically what happens if you change the number of bulbs.</p> <p>Record and construct a series electrical circuit, identifying and naming its basic parts. Identify whether or not a bulb will light in a simple series circuit based on whether or not the bulb is part of a complete loop with a battery.</p> <p>Explain how to/what happens when you connect more than 1 battery.</p> <p>Describe the use of conductors & insulators in wires.</p> | Electricity not currently covered in Year 5 in the National Curriculum. | <p>Draw a complex circuit using scientific symbols.</p> <p>Explain and use the term correctly.</p> <p>Talk about what happens when connecting components in a circuit.</p> <p>Use an effective model to describe electrical flow.</p> |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| States of Matter: Pupils should be taught to: | Children at the expected level of development will: Understand some important | States of matter is not currently covered in Years 1, 2 and 3 in the National Curriculum. | | | •compare and group materials together, according to whether they are solids, liquids or gases | States of matter is not currently covered in Year 6 in the National Curriculum. | |

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| | processes and changes in the natural world around them, including the seasons and changing states of matter. | | | | <ul style="list-style-type: none"> •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) •identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature | | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Sound: Pupils should be taught to: | Sound is not covered in the statutory framework for the early years foundation stage | Sound is not currently covered in Years 1, 2 and 3 in the National Curriculum. | | | <ul style="list-style-type: none"> •identify how sounds are made, associating some of them with something vibrating •recognise that vibrations from sounds travel through a medium to the ear •find patterns between the pitch of a sound and features of the object that produced it •find patterns between the volume of a sound and the strength of the vibrations that produced it •recognise that sounds get fainter as the distance from the sound source increases | Sound is not currently covered in Year 6 in the National Curriculum. | |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Seasonal Changes: | Children at the expected level of | •observe changes across the 4 seasons | Seasonal Changes is not currently covered in Years 2, 3, 4, 5 and 6 in the National Curriculum. | | | | |

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| <p>Pupils should be taught to:</p> | <p>development will: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> <p>Guide children's understanding by draw children's attention to the weather and seasonal features. Provide opportunities for children to note and record the weather. Select texts to share with the children about the changing seasons. Throughout the year, take children outside to observe the natural world and encourage children to observe how animals behave differently as the seasons change. Look for children incorporating their</p> | <ul style="list-style-type: none"> •observe and describe weather associated with the seasons and how day length varies | |
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| | understanding of the seasons and weather in their play. | | | | | | | |
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| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | |
| Evolution and Inheritance: Pupils should be taught to: | Earth and space is not covered in the statutory framework for the early years foundation stage | Evolution and Inheritance is not currently covered in Years 1, 2, 3, 4 and 5 in the National Curriculum. | | | | | | <ul style="list-style-type: none"> •recognise that life has changed over time and that fossils provide information about things that inhabited Earth millions of years ago •recognise that living organisms can produce offspring of the same kind, but not identical to their parents •identify how animals and plants are adapted to their environment in different ways and how adaptation may change over time through evolution |
| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | |
| Earth and Space: Pupils should be taught to: | Earth and space is not covered in the statutory framework for the early years foundation stage | Earth and Space is not currently covered in Years 1, 2, 3 and 4 in the National Curriculum. | | | | <ul style="list-style-type: none"> •describe the movement of the Earth and other planets relative to the sun in the solar system •describe the movement of the moon relative to the Earth •describe the sun, Earth and moon as approximately spherical bodies •use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky | Earth and Space is not currently covered in the National Curriculum. | |

| National Curriculum | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| <p>Light: Pupils should be taught to:</p> | Light is not covered in the statutory framework for the early years foundation stage | Light is currently not covered in Key Stage 1 in the National Curriculum. | | <ul style="list-style-type: none"> •recognise that they need light in order to see things and that dark is the absence of light •notice that light is reflected from surfaces •recognise that light from the sun can be dangerous and that there are ways to protect their eyes •recognise that shadows are formed when the light from a light source is blocked by an opaque object •find patterns in the way that the size of shadows change | Light is currently not covered in Years 4 and 5 in the National Curriculum. | | <ul style="list-style-type: none"> •recognise that light appears to travel in straight lines •use the idea that light travels in straight lines to explain that objects are seen because they either emit or reflect light in straight lines •explain that we see objects because light travels from light sources to our eyes •use the idea that light travels in straight lines to explain why shadows are the same shape as the objects that cast them |
| Skills Progression | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| | Light is not covered in the statutory framework for the early years foundation stage | Light is currently not covered in Key Stage 1 in the National Curriculum. | | <ul style="list-style-type: none"> -Describe what happens to a light source in the dark. -Find patterns to determine the size of shadows. -Describe the way in which light is reflected from surfaces. -Describe in simple terms how light travels and what happens. | Light is currently not covered in Years 4 and 5 in the National Curriculum. | | <ul style="list-style-type: none"> -Use knowledge of how light travels to predict the size of a shadow and the position of the light source. -Explain the concept of reflection and explain how non-luminous objects are seen. |

How Parents can help

Science consists of observing the world by using our senses to observe, listen and record. Science is curiosity in thoughtful action about the world.

A scientist gathers and uses research and evidence, making a hypothesis and testing it, to gain and share understanding and knowledge.

Play, Look and Ask

Play should be the starting point for engaging children in Science. Children learn through play, but that learning turns into thinking scientifically when children are encouraged to focus their attention on certain aspects and consider questions about what they think might happen.

See Science everywhere

Parents can take opportunities to ask 'what would happen if...?' questions to encourage children to be inquisitive and seek out answers. Children need to understand that Science isn't just a subject, but it is a way of understanding the world around us.

Points to Ponder

As part of Mary Le Breuilly- Engaging Science, the children begin every new science topic with 'points to ponder' which are a set of questions related to the topic to encourage children to think deeper. These could be shared with children at home in addition to school to evolve children's natural curiosity. They would be fantastic to share at the dinner table/ during meal times to form a discussion and share thoughts.

Family discussions at the dinner table/during mealtimes

Mealtimes would provide the opportunity to discuss news stories that are science based. For example, space shuttle missions, severe weather conditions. Over time, children will develop a deeper understanding of science and how it affects many aspects of our lives.

Show excitement for Science

Children will absorb your positivity and excitement to be inspired by science and a desire to explore it in more depth.

Read

Read non-fiction texts about science related topics that are of interest to your child.

Ask questions

Parents and children alike can have scientific questions. If your child asks you a question or if you have a question that you don't know the answer to, use this as an opportunity to explore together to find the answer. Make sure questions are open ended to keep children engaged and thinking about what they're doing eg. what do you think will happen?

Educational days out/visits

Research places to visit in the local area to further evolve and support topics children are learning in science. Ask your child's teacher about your child's science topic and ask for suggestions on days out/visits.