



Curriculum Progression of Knowledge and Skills for Science

Curriculum Progression for Science

Progression of essential enquiry skills common to all children across the primary age range: -

- Asking questions Observing and measuring
- Planning and setting up different types of enquiries
- Identifying and classifying
- Performing tests Gathering and recording data
- Using equipment Reporting, presenting and communicating data/findings

Key to understanding this document: **Black = National Curriculum objectives (knowledge)** **Purple = Working Scientifically (skills)**

| | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| Working Scientifically | | explore the world around them and raise their own simple questions experience different types of science enquiries, including practical activities begin to recognise different ways in which they might answer scientific questions carry out simple tests use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying) ask people questions and use simple secondary sources to find answers observe closely using simple equipment with help, observe changes over time with guidance, they should begin to notice patterns and relationships | | raise their own relevant questions about the world around them should be given a range of scientific experiences including different types of science enquiries to answer questions start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions Set up simple practical enquiries, comparative and fair tests recognise when a simple fair test is necessary and help to decide how to set it up talk about criteria for grouping, sorting and classifying; and use simple keys recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations | | use their science experiences to explore ideas and raise different kinds of questions talk about how scientific ideas have developed over time select and plan the most appropriate type of scientific enquiry to use to answer scientific questions recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why use and develop keys and other information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact | |

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| | | <p>use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data record simple data use their observations and ideas to suggest answers to questions talk about what they have found out and how they found it out with help, they should record and communicate their findings in a range of ways and begin to use simple scientific language</p> | <p>make systematic and careful observations help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used begin to look for patterns and decide what data to collect to identify them take accurate measurements using standard units learn how to use a range of (new) equipment, such as data loggers / thermometers appropriately collect and record data from their own observations and measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse this data with help, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions. use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences, including oral and written explanations, displays or presentations of results and conclusions with support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have</p> | <p>make their own decisions about what observations to make, what measurements to use and how long to make them for look for different causal relationships in their data and identify evidence that refutes or supports their ideas choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately decide how to record data and results of increasing complexity from a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, and bar and line graphs identify scientific evidence that has been used to support or refute ideas or arguments use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas, use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of results use simple models to describe scientific ideas use their results to make predictions and identify when further observations, comparative and fair tests might be needed</p> |
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| | | | collected and finding ways of improving what they have already done. | |
| Rocks Y3 | <p>Working scientifically: Classifying and presenting data to help answer questions. Using results to draw a simple conclusion and suggest improvements. Using simple scientific equipment. Setting up simple practical enquiries. R1-compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</p> <p>Working scientifically: Use systematic and careful observations using a range of equipment. R2- describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p> <p>Working scientifically: Setting up practical enquiries, comparative and fair tests. Record findings using simple scientific language/ using tables (scaffolded table) Using results to draw simple conclusions and make predictions for new values. R3-recognise that soils are made from rocks and organic matter.</p> | | | |
| Sound Y4 | <p>Working scientifically: Setting up simple practical enquiries. Making systematic, careful observations. Reporting on findings from enquiries. S1: Identify how sounds are made, associating some of them with something vibrating.</p> <p>Working scientifically: Setting up simple practical enquiries. Making systematic and careful observations. Reporting on findings from enquiries. Using results to draw simple conclusions. S2. Recognise that vibrations from sounds travel through a medium to the ear.</p> <p>Working scientifically: Setting up simple practical enquiries. Making systematic and careful observations. Gathering, recording and presenting data to help answer questions. S3: Find patterns between the pitch of a sound and features of the object that produced it.</p> <p>Working scientifically: Setting up simple practical enquiries. Making systematic and careful observations. Reporting on findings from enquires. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. S4: Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> | | | |

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| | <p>Working scientifically: Setting up simple practical enquiries, comparative and fair tests. Taking accurate measurements using scientific equipment (e.g. data loggers). Gathering and recording data in a table. Use results to draw simple conclusions and make predictions for new values. SS: Recognise that sounds get fainter as the distance from the sound source increases.</p> |
| States of Matter Y4 | <p>Working scientifically: Making systematic and careful observations. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. SM1: Compare and group materials together, according to whether they are solids, liquids or gases.</p> <p>Working scientifically: Setting up practical enquiries, comparative and fair tests. Making systematic and careful observations. Using a range of scientific equipment. Gathering and recording data using a table. SM2: 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).</p> <p>Working scientifically: Setting up a simple practical enquiries. Making systematic and careful observations. Identifying differences, similarities or changes related to simple scientific ideas and processes. Recording findings using simple scientific language and a table. SM3: Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. Show children a video of the water cycle e.g. bbc bitesize</p> |
| Earth & Space Y5 | <p>Working Scientifically To be able to plan a scientific enquiry to answer a question. ES1. To be able to describe the movement of the Earth, and other planets, relative to the Sun in the solar system. (This will take two lessons)</p> <p>Working Scientifically To be able to plan a scientific enquiry to answer a question. To identify scientific evidence that has been used to support or refute ideas or arguments. ES2 To be able to describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Working Scientifically reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations ES2 :To be able to describe the movement of the Moon relative to the Earth</p> <p>Working Scientifically To be able to plan a scientific enquiry to answer a question ES4 To be able to use the idea of the Earth’s rotation to explain day and night and the apparent movement of the Sun across the sky.</p> |

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| <p>Evolution and Inheritance Y6</p> | <p>Working Scientifically WS1.To be able to plan a scientific enquiry to answer a question. ES1. To be able to describe the movement of the Earth, and other planets, relative to the Sun in the solar system. (This will take two lessons)</p> <p>Working Scientifically To be able to plan a scientific enquiry to answer a question. To identify scientific evidence that has been used to support or refute ideas or arguments. ES2 To be able to describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Working Scientifically reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations ES2 :To be able to describe the movement of the Moon relative to the Earth.</p> <p>Working Scientifically To be able to plan a scientific enquiry to answer a question ES4 To be able to use the idea of the Earth’s rotation to explain day and night and the apparent movement of the Sun across the sky</p> <p>To be able to recognise that living things have changed over time and that fossils provide information about living things that inhabited Earth millions of years ago. WS: To be able to identify scientific evidence that has been used to support or refute idea or arguments.</p> <p>To be able to recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Working Scientifically To be able to identify scientific evidence that has been used to support or refute idea or arguments. OR Working Scientifically To be able to explain (written or verbally) that living things grouped together have more things in common than with living things in other groups.</p> <p>To be able to identify how animals are adapted to suit their environment in different ways and that adaptation may lead to evolution. Working Scientifically To be able to talk about their degree in trust in the sources they have used</p> | | |
| <p>Plants Y1 Y2 Y3</p> | <p>Year 1: Working scientifically: Using simple observations to identify and classify. P1 Identify and name a variety of common wild and garden plants including deciduous and evergreen tree</p> | <p>Year 2: Working scientifically: Using observations and ideas to answer questions. P1 Observe and describe how seeds and bulbs grow into mature plants.</p> | <p>Year 3: Working scientifically: Record findings using a labelled diagram. Using straightforward scientific evidence to answer simple questions. P1 Identify and describe the functions of different flowering plants: roots, stem/trunk, leaves and flowers.</p> |

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| | <p>Working scientifically: Observing closely. P2 identify and describe the basic structure of a variety of common flowering plants, including trees.</p> | <p>Working scientifically: Performing a simple test choosing one variable. Observing closely using simple equipment. P2 Find out and describe how plants need water, light and a suitable temperature to grow healthy.</p> | <p>Working scientifically: Gathering, recording, classifying and presenting data in a variety of ways. Setting up simple practical enquiries. (variables given to children) Using results to draw simple conclusions through pictures and simple sentences. P2 explore the requirements of plants for life and growth (air, light, and water, nutrients from soil and room to grow.) and how they vary from plant to plant.</p> |
| Materials Y1 Y2 Y5 | <p>Year 1: Working scientifically: Identifying and classifying as part of group. EM1 distinguish between an object and the material from which it is made.</p> <p>Working scientifically: Identifying and classifying. EM2- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>Working scientifically: Using observations and ideas to suggest answers to questions. Gathering and recording data to help answer questions. EM3 describe the simple physical properties of a variety of everyday materials</p> | <p>Year 2: Working scientifically: Performing a simple test. Using observations to answer simple questions. EM1 identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses.</p> <p>Working scientifically: Performing a simple test. Gathering and recording data. Using observations to answer questions. EM2 find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> | <p>Year 5: Working scientifically: Recording data and results of increasing complexity. Taking measurements using a range of scientific equipment. Reporting and presenting findings in a conclusion. EM1 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.</p> <p>Working scientifically: Recording data and results of increasing complexity using a table. Using a range of scientific equipment. Reporting results in a conclusion. EM2 know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>Working scientifically: Recording data and results. Using range of scientific equipment. Reporting and presenting findings from investigations. EM3 use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> |

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| | <p>Working scientifically: Observing closely using simple equipment. Performing a simple test. Identifying and classifying.</p> <p>EM4 compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> | | | <p>Working scientifically: Planning different types of scientific enquiry. Identifying scientific evidence that has been used to support ideas.</p> <p>EM4 give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p>Working scientifically: Recording data and results using a table. Using range of scientific equipment. Reporting and presenting findings from investigations.</p> <p>EM5 demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>Working scientifically: Recording data and results of increasing complexity using a table. Using range of scientific equipment. Use predictions. Reporting and presenting findings from investigations.</p> <p>EM6 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> | | |
| <p>Animals including Humans Y1-6</p> | <p>Year 1: Working scientifically: To identify and classify a variety of common animals using pictures or videos. AH1 identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> | <p>Year 2: Working scientifically: To observe closely, using simple equipment and use observations to answer simple questions. AH1 notice that animals including humans have offspring which grow into adults.</p> | <p>Year 3: Working scientifically: Report on findings from enquiries including oral and written explanations. AH1 Identify that animals including humans need the right types amount of nutrition.</p> | <p>Year 4: Working scientifically: Setting up simple practical enquires. Making systematic and careful observations. To use written explanations to present findings. AH1 describe the simple functions of the basic parts of the digestive system in humans.</p> | <p>Year 5: Working scientifically: Reporting and presenting findings from enquiries, including conclusions. AH1 describe the changes as humans develop to old age.</p> | <p>Year 6: Working scientifically: Using models to describe scientific ideas. AH1 Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> |

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| | <p>Working Scientifically: To identify and classify. To record data in a simple scaffolded table and use this to answer simple questions. AH2 Identify and name a variety of common animals that are carnivores, herbivores, and omnivores.</p> <p>Working scientifically: Use observations and ideas to suggest answers to questions. AH3 describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Working scientifically: Gathering and recording data in a simple scaffolded table. AH4 identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> | <p>Working scientifically: To use observations to answer simple questions. AH2 find out about and describe the basic needs of animals including humans for survival (water, food and air)</p> <p>Working scientifically: To identify and classify based on their own observations. To perform a simple test to answer a simple question. AH3 describe the importance for humans of exercising, eating the right amounts of different food and hygiene.</p> | <p>Working scientifically: Identifying differences, similarities or changes related to simple scientific ideas. AH2 Animals cannot make their own food and that they get the nutrition from what they eat.</p> <p>Working scientifically: Using straightforward scientific evidence to answer questions. AH3 identify that humans and some animals have skeletons and muscles for support, protection and movement.</p> | <p>Working scientifically: Identifying differences, similarities or changes related to simple scientific ideas and processes. Record findings using simple labelled diagrams. AH2 Identify the different types of teeth in humans and their simple functions.</p> <p>Working scientifically: Record findings using simple labelled diagrams. AH3 Construct and interpret a variety of food chains identifying producers, predators and prey.</p> | | <p>Working scientifically: Identifying scientific evidence that has been used to support or refute ideas or arguments. AIH2 recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Working scientifically: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. AIH3 describe the ways in which nutrients and water are transported within animals including humans. Provide children with the resources so that they can find out about the roles that water play in keeping us alive; especially in transporting blood and nutrients around the body.</p> |
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| <p>Living Things and Their Habitats Y2 Y4 Y5 Y6</p> | <p>Year 2: Working scientifically: identifying and classifying. LT1: Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Working scientifically: Using observations and ideas to suggest answers to questions. LT2: 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.</p> <p>Working scientifically: Observing closely using simple equipment. Gathering and recording data to help in answering questions. LT3: Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>Working scientifically: Identifying and classifying. LT4: 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</p> | <p>Year 4: Working scientifically: Gathering and classifying data to answer questions. LT1: recognise that living things can be grouped in a variety of ways.</p> <p>Working scientifically: Making systematic and careful observations using equipment. Gathering, recording and classifying data to answer questions. Recording findings using keys. LT2: explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>Working scientifically: Gathering and presenting data in a variety of ways to help in answering questions. Report on findings from enquiries using displays or presentations. LT3: recognise that environments can change and that this can sometimes pose dangers to living things.</p> | <p>Year 5: Working Scientifically Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations LT1: describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>Working scientifically Identifying scientific evidence that has been used to support or refute ideas or arguments. LT2: describe the life process of reproduction in some plants and animals.</p> | <p>Year 6: Working Scientifically Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. LT1: 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>Working Scientifically recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs LT2: give reasons for classifying plants and animals based on specific characteristics.</p> |
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| <p>Forces and Magnets Y3 Y5</p> | <p>Year 3: Working scientifically: Asking relevant questions using different types of scientific enquiries to answer them. Making systematic and careful observations and where appropriate taking accurate measurements using a range of equipment. Reporting on findings from enquiries using a simple conclusion. FM1: Compare how things move on different surfaces.</p> <p>Working scientifically: Setting up simple practical enquiries, comparative and fair tests. Identifying differences, similarities or changes related to simple scientific ideas. Using straightforward scientific evidence to answer questions or to support their findings. FM2: Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p>Working scientifically: Making systematic and careful observations. Using straightforward scientific evidence to answer questions or to support their findings. Using results to draw simple conclusions. FM3: Observe how magnets attract or repel each other and attract some materials and not others.</p> | <p>Year 5: Working Scientifically Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Recording data and results of increasing complexity using tables and bar graphs. FM1: Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Working Scientifically Using test results to make predictions to set up further comparative and fair tests Taking measurements, using a range of scientific equipment, with increasing accuracy and precision recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs identifying scientific evidence that has been used to support or refute ideas or arguments FM2: To be able to identify the effects of air resistance that act between moving surfaces.</p> <p>Working Scientifically Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Taking measurements, using a range of scientific equipment, with increasing accuracy and precision FM3: To be able to identify the effects of friction between moving surfaces.</p> |
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| | <p>Working scientifically: Asking relevant questions and using different types of scientific enquiries to answer them. Make a prediction. Setting up simple practical enquiries. Record findings using a table. FM4: 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.</p> <p>Working scientifically: To make a prediction. Using straightforward scientific evidence to answer questions. Recording findings using a labelled diagram. FM5: Describe magnets as having two poles. FM6: Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> | <p>Working Scientifically Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations. FM4: To be able to identify the effects of water resistance that act between moving surfaces.</p> <p>FM5 Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. (this objective will be taught over three individual lesson looking each element)</p> <p>FM6: Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. (this objective will be taught over three individual lessons looking each element)</p> <p>FM7: Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> |
| <p>Light Y3 Y6</p> | <p>Year 3: Working scientifically: Setting up simple practical enquiries. Recording findings using a labelled diagram. L1: recognise that they need light in order to see things and that dark is the absence of light.</p> <p>Working scientifically: Using straightforward evidence to answer questions or to support their findings. L2: notice that light is reflected from surfaces.</p> <p>Working Scientifically: Using straightforward scientific evidence to answer questions and support findings. L3: Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p> | <p>Year 6: Working scientifically: Using simple models to describe scientific ideas. L1: To understand that light appears to travel in straight lines.</p> <p>Working scientifically: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. L2: To be able to 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>Working scientifically: Recording data of increasing complexity using a labelled diagram. L3: To be able to 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> |

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| | <p>Working scientifically: To make a prediction. Asking relevant questions and using different types of scientific enquiry to answer them.</p> <p>L4: Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</p> <p>Working scientifically: Reporting on findings from enquiries. L5: Find patterns in the way that the size of shadows change.</p> | <p>Working scientifically: Using simple models to describe scientific ideas. L4: To be able to 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. Children make a periscope.</p> |
| <p>Electricity Y4 Y6</p> | <p>Year 4: Working scientifically: Gathering, recording, classifying and presenting data to answer questions. E1: Identify common appliances that run on electricity.</p> <p>Working scientifically: Setting up simple practical enquiries. Record findings using labelled diagrams. Using results to draw conclusions and make predictions for new values. E2: Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p> <p>Working scientifically: Setting up simple practical enquiries. Reporting on findings from enquiries, including oral or written explanations. Using straightforward scientific evidence to answer questions to support findings. E3: 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. E4: Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</p> <p>Working scientifically: Setting up simple practical enquiries. Using results draw simple conclusions. E5: Recognise some common conductors and insulators, and associate metals with being good conductors.</p> | <p>Year 6: E1: To be able to use recognised symbols when representing a simple circuit in a diagram.</p> <p>Working scientifically : Identifying scientific evidence that has been used to support or refute ideas or arguments. Using test results to make predictions to set up further comparative and fair tests . Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations E2: To be able to 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>Working Scientifically Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Taking measurements, using a range of scientific equipment, with increasing. Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations E4: To be able to 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>Working Scientifically Recording data and results of increasing complexity using scientific diagrams and labels. E4: To be able to use recognised symbols when representing a simple circuit in a diagram.</p> |

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| <p>Seasonal Change Y1</p> | <p>Working scientifically: Observing closely using simple equipment. Using their observations and ideas to suggest answers to simple questions as a class. SC1: observe changes across the 4 seasons</p> <p>Working scientifically: Asking simple questions and recognising that they can be answered in different ways. (pictures, simple sentence or verbal answer) Using their observations and ideas to suggest answers to simple questions as a class. SC2: observe and describe weather associated with the seasons and how day length varies.</p> | | | | | | |
| <p>Animals including Humans Vocabulary</p> | <p>EYFS</p> <p>Babies Adult Animal Farm Zoo</p> | <p>Year 1</p> <p>Animals including Humans: Fish, reptile, mammal, amphibian, birds, carnivore, herbivore, omnivore, gill, scales, wings, feathers, senses, smell, taste, touch, hear, see, human body, neck, head, elbows, arms, legs, knees, face, ears, toes.</p> | <p>Year 2</p> <p>Animals including Humans: Egg, chick, chicken, caterpillar, pupa, butterfly, tadpole, frog, lamb, sheep, baby, toddler, child, teenager, adult, elderly, exercise, offspring, hygiene, survival and shelter.</p> | <p>Year 3</p> <p>Animals including Humans: Nutrition, skeleton, balanced, muscles, support, protection, movement.</p> | <p>Year 4</p> <p>Animals including Humans: Predator, producer, consumer, prey, digestive system, mouth, tongue, teeth, stomach, small intestine, large intestine, rectum anus, carnivores, herbivores, decay, canines, molars.</p> | <p>Year 5</p> <p>Animals including Humans: Growth, Puberty, gestation period</p> | <p>Year 6</p> <p>Animals including Humans: Diet, exercise, drugs, muscular, digestive system, smoking, caffeine, lungs</p> |
| <p>Living things and their Habitats Vocabulary</p> | <p>Home Nest</p> | | <p>Living things and their Habitats: Dead Alive Habitat Micro-habitat Food chain Seashore Woodland Ocean Rainforest</p> | | <p>Living things and their Habitats: Classification Flowering plants Non-flowering plants Vertebrates Invertebrates Pollution</p> | <p>Living things and their Habitats: Reproduction, Pollination Stigma Ovary Anther Stamen carpel Mammal, Amphibian Insect Bird</p> | <p>Living things and their Habitats: Microorganism Classification Key Children will develop vocabulary through own research.</p> |

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| <p>Plants Vocabulary</p> | <p>Grow Plant</p> | <p>Plants: Leaves, flowers, blossom, petals, fruit, roots, bulb, seed, trunk, branches and stem. Deciduous trees Evergreen trees</p> | <p>Plants: Seeds, bulbs, temperature, mature plants, germination, growth and survival.</p> | <p>Plants: Flowering plants, nutrients, air, pollination, seed formation, seed dispersal, life cycle and transported</p> | | | |
| <p>Light Vocabulary</p> | <p>Light Dark Day Night Moon Sun</p> | | | <p>Light: Light source Opaque Translucent Transparent Shadow Reflect Protection</p> | | | <p>Light: Simple comparisons: dark, dull, bright, very bright Comparative vocabulary: brighter, duller, and darker Superlative vocabulary: brightest, dullest, and darkest Opaque, translucent, transparent Shadow – block, absence of light Reflect – bounce, mirror, reflection See – light source Sun – sunset, sunrise, position</p> |
| <p>Materials Vocabulary</p> | <p>Hard Soft Smooth Bumpy</p> | <p>Materials: Wood, plastic, glass, metal, water, rock, hard, soft, stretchy, stiff, dull, rough, smooth, bendy, not bendy, absorbent, transparent.</p> | <p>Materials: Squash, bend, stretch, twist, solid.</p> | | | <p>Materials: Hardness, solubility, transparency, conductivity, electrical, thermal, magnetic, filtering, sieving, evaporation, fair test, dissolving, mixing, reversible</p> | |

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| | | | | | | change, bicarbonate of soda. | |
| Forces and Magnets Vocabulary | Float Sink | | | Forces and Magnets: Magnetic Force Poles Repel Attract | | Forces and Magnets: gravity, friction, air resistance, upthrust, weight Measuring forces: Newton meter, Newtons (N) Particles Surface area Push, pull Balance Mass – grams and kilograms Mechanical devices – gears, levers, pulleys, springs | |
| Electricity Vocabulary | Switch Plug Button | | | | Electricity: Bulb Switch Battery Light Circuit Insulator Conductor Motor Electricity | | Electricity: Volts Series circuit Cell Bulb (lamp) holder Buzzer, crocodile clip, leads, wires, Component Resistance Voltage |
| Vocabulary | Cold Hot Freeze Melt Ice | Seasonal Change: Seasons Spring Summer Autumn Winter Weather Day | | Rocks: rock soil fossil sedimentary metamorphic igneous permeable | Sound: Pitch Sound vibrations Volume Medium Faint Insulator | Earth and Space: Day and night - Earth, axis, rotate Solar system – Star = Sun, Planets = Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, | Evolution and Inheritance: Evolution, inheritance, animals, nutrition, reproduce, excrete, respiration, sensitivity, environment, Mrs Nerg / |

Curriculum Progression for Science

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| | | Night Change | | impermeable appearance soft hard crystal rock formation mineral | States of Matter: States of matter Liquid Solid Gas Evaporation Condensation Water cycle Particles Freeze Melt | Neptune (Pluto was classified as Dwarf planet in 2006) Phases of the Moon - full moon, gibbous moon, half moon, crescent moon, new moon, waxing ,waning Moon's orbit: 29.5 days, lunar month Orbit, planets, revolve, sphere | Mrs Gren, adaptation, Charles Darwin. |
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