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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | | Summer 2 |
| Y1 | **Biology - Animals including humans**  (human body & senses)  **Biology - Living things and their habitat** Seasonal Changes | **Chemistry – Materials**  **Biology - Living things and their habitat** Seasonal Changes | **Biology - Animals including humans**  Types of animal  **Biology - Living things and their habitat** Seasonal Changes | **Chemistry – Materials**  **Biology - Living things and their habitat** Seasonal Changes | **Biology - Animals including humans**  Types of animal  **Biology - Living things and their habitat** Seasonal Changes | | **Biology – Plants**  **Biology - Living things and their habitat** Seasonal Changes |
| Y2 | **Biology Plants** | **Chemistry – Materials** | **Biology - Living things and their habitat**  **Biology Plants**  – daffodils and potatoes | **Chemistry – Materials** | **Biology - Living things and their habitat**  **Biology Plants**  – potatoes | | **Biology - Animals including humans** |
| Y3 | **Chemistry – Rocks and Soils** | **Physics – Forces and Magnets** | **Physics – Light** | **Biology Plants** | **Biology - Animals including humans -**nutrition | | **Biology - Animals including humans** skeletomuscular system |
| Y4 | **Physics –Electricity** | **Biology - Animals including humans**  Teeth and digestive system | **Chemistry –Materials and States of Matter** | **Chemistry –Materials and States of Matter**  Water Cycle | **Biology - Living things and their habitat** | | **Physics –Sound** |
| Y5 | **Chemistry – Properties of materials** | **Chemistry –Changes to materials** | **Physics – Forces** | **Physics – The solar system** | **Biology - Living things and their habitat** | | **Biology - Animals including humans** |
| Y6 | **Biology - Living things and their habitat** | **Biology – Animals including humans**  Circulatory and digestive systems | **Physics – Light** | **Physics – Electricity** |  | **Biology – Animals including humans**  Evolution and inheritance | |

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Y1 | **Biology - Animals including humans**  To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense  *Jumping enquiry –*  **WS -** To ask simple questions and recognising that they can be answered in different ways  **WS -** To observe closely, using simple equipment  **WS -** To perform simple tests  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To gather and recording data to help in answering questions.  **Biology - Living things and their habitat Seasonal Changes**  To observe changes across the four seasons  To observe and describe weather associated with the seasons and how day length varies.  To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  **WS -**To observe closely, use simple equipment   **WS -**To ask simple questions and recognising that they can be answered in different ways  **WS -**To observe closely, using simple equipment  **WS -**To use observations and ideas to suggest answers to questions  **WS -**To gather and recording data to help in answering questions | **Chemistry – Materials**  To distinguish between an object and the material from which it is made.  To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock  To describe the simple physical properties of a variety of everyday materials  To compare and group together a variety of everyday materials on the basis of their simple physical properties.  **WS -** To ask simple questions and recognising that they can be answered in different ways  **WS -** To observe closely, using simple equipment  **WS -** To perform simple tests  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To gather and recording data to help in answering questions.  **Biology - Living things and their habitat Seasonal Changes**  To observe changes across the four seasons  To observe and describe weather associated with the seasons and how day length varies.  To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  **WS - To observe closely, use simple equipment**  **WS -**To ask simple questions and recognising that they can be answered in different ways  **WS -**To observe closely, using simple equipment  **WS -**To use observations and ideas to suggest answers to questions  **WS -**To gather and recording data to help in answering questions | **Biology - Animals including humans**  To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  To identify and name a variety of common animals that are carnivores, herbivores and omnivores  To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)  **WS -** To identify and classify  **WS -**To ask simple questions and recognising that they can be answered in different ways  **Biology - Living things and their habitat Seasonal Changes**  To observe changes across the four seasons  To observe and describe weather associated with the seasons and how day length varies.  To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  **WS - To observe closely, use simple equipment**  **WS -**To ask simple questions and recognising that they can be answered in different ways  **WS -**To observe closely, using simple equipment  **WS -**To use observations and ideas to suggest answers to questions  **WS -**To gather and recording data to help in answering questions | **Chemistry – Materials**  To distinguish between an object and the material from which it is made.  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To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  **WS - To observe closely, use simple equipment**  **WS -**To ask simple questions and recognising that they can be answered in different ways  **WS -**To observe closely, using simple equipment  **WS -**To use observations and ideas to suggest answers to questions  **WS -**To gather and recording data to help in answering questions | **Biology - Animals including humans**  To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  To identify and name a variety of common animals that are carnivores, herbivores and omnivores  To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)  **Biology - Living things and their habitat Seasonal Changes**  To observe changes across the four seasons  To observe and describe weather associated with the seasons and how day length varies.  To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  **WS - To observe closely, use simple equipment**  **WS -**To ask simple questions and recognising that they can be answered in different ways  **WS -**To observe closely, using simple equipment  **WS -**To use observations and ideas to suggest answers to questions  **WS -**To gather and recording data to help in answering questions | **Biology – Plants**  To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  To identify and describe the basic structure of a variety of common flowering plants, including trees.  **WS**–To use classification keys to identify unknown plants  **WS -** To observe closely, using simple equipment  **WS -** To use observations and ideas to suggest answers to questions  **Biology - Living things and their habitat Seasonal Changes**  To observe changes across the four seasons  To observe and describe weather associated with the seasons and how day length varies.  To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  **WS - To observe closely, use simple equipment**  **WS -**To ask simple questions and recognising that they can be answered in different ways  **WS -**To observe closely, using simple equipment  **WS -**To use observations and ideas to suggest answers to questions  **WS -**To gather and recording data to help in answering questions |

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| Y2 | **Biology Plants**  To observe and describe how seeds and bulbs grow into mature plants  To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.  **WS -** To ask simple questions and recognising that they can be answered in different ways  **WS -** To use observations and ideas to suggest answers to questions | **Chemistry – Materials**  To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses  To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.  **WS -** To identify and classifying  **WS -** To perform simple tests  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To gather and recording data to help in answering questions. | **Biology - Living things and their habitat**  To 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  **WS -** To identify and classifying  **Biology Plants**  – daffodils and potatoes | **Chemistry – Materials**  To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses  To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.  **WS -** To identify and classifying  **WS -** To perform simple tests  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To gather and recording data to help in answering questions. | **Biology - Living things and their habitat**  To explore and compare the differences between things that are living, dead, and things that have never been alive  To identify and name a variety of plants and animals in their habitats, including microhabitats  To 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.  **WS -** To ask simple questions and recognising that they can be answered in different ways  **WS -** To observe closely, using simple equipment  **WS -** To perform simple tests  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To gather and recording data to help in answering questions.  **Biology Plants**  – potatoes | **Biology - Animals including humans**  To notice that animals, including humans, have offspring which grow into adults  To find out about and describe the basic needs of animals, including humans, for survival (water, food and air)  To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To ask simple questions and recognising that they can be answered in different ways  **WS -** To observe closely, using simple equipment  **WS -** To perform simple tests  **WS -** To use observations and ideas to suggest answers to questions  **WS -** To gather and recording data to help in answering questions. |

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| Y3 | **Chemistry – Rocks,**  To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties  To describe in simple terms how fossils are formed when things that have lived are trapped within rock  To recognise that soils are made from rocks and organic matter  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions  **WS -** To identify differences, similarities or changes related to simple scientific ideas and processes  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions | **Physics – Forces, Magnets**  To compare how things, move on different surfaces  To notice that some forces need contact between two objects, but magnetic forces can act at a distance  To observe how magnets, attract or repel each other and attract some materials and not others  To 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  To describe magnets as having two poles  To predict whether two magnets will attract or repel each other, depending on which poles are facing.  **WS -** To set up simple practical enquiries, comparative and fair tests  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions  **WS -** To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables  **WS -** To report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions  **WS -** To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions | **Physics – Light**  To recognise that they need light in order to see things and that dark is the absence of light  To notice that light is reflected from surfaces  To recognise that light from the sun can be dangerous and that there are ways to protect  their eyes  To recognise that shadows are formed when the light from a light source is blocked by  an opaque object  To find patterns in the way that the size of shadows changes.  **WS -** To ask relevant questions and use different types of scientific enquiries to answer them.  **WS -** To set up simple practical enquiries, comparative and fair tests  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions  **WS -** To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables  **WS -** To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions  **WS -** To identify differences, similarities or changes related to simple scientific ideas and processes  **WS -** To use straightforward scientific evidence to answer questions or to support their findings. | **Biology -Plants**  To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers  To 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  To investigate the way in which water is transported within plants  To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.  WS - To gather, record, classify and present data in a variety of ways to help in answering questions.  WS - To record findings using simple scientific language, drawings, labelled diagrams, keys  WS - To make systematic and careful observations  WS - To record findings using simple scientific language, drawings, labelled diagrams, keys | **Biology - Animals including humans**  To 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 | **Biology - Animals including humans**  To identify that humans and some other animals have skeletons and muscles for support, protection and movement.  WS- To ask relevant questions and using different types of scientific enquiries to answer them  WS- To set up simple practical enquiries, comparative and fair tests  WS - To make systematic and careful observations taking accurate measurements using standard units |

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| Y4 | **Physics –Sound**  To identify how sounds are made, associating some of them with something vibrating.  To recognise that vibrations from sounds, travel through a medium to the ear.  To find patterns between the pitch of a sound and features of the object that produced it.  To find patterns between the volume of a sound and the strength of the vibrations that produced it.  To recognise that sounds get fainter as the distance from the sound source increases.  **WS -** To ask relevant questions **WS -** To set up simple practical enquiries, comparative and fair tests  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions  **WS -** To record findings using simple scientific language, labelled diagrams, bar charts, and tables  **WS -** To report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions  **WS -** To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions  **WS -** To use straightforward scientific evidence to answer questions or to support their findings. | **Chemistry –Materials and States of Matter**  To compare and group materials together, according to whether they are solids, liquids or gases  To 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)  **WS -** To set up simple practical enquiries, comparative  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers | **Biology - Living things and their habitat**  To recognise that living things can be grouped in a variety of ways  To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment  To recognise that environments can change and that this can sometimes pose dangers to living things.  identifying producers, predators and prey. | **Biology - Animals including humans**  To describe the simple functions of the basic parts of the digestive system in humans  To identify the different types of teeth in humans and their simple functions  To construct and interpret a variety of food chains,  **WS -** To ask relevant questions and use different types of scientific enquiries to answer them  **WS -** To set up simple practical enquiries, comparative and fair tests  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers,  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions  **WS -** To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables  **WS -** To report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions  **WS -** To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions | **Chemistry –Materials and States of Matter**  **Water Cycle**  To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.  **WS -** To set up simple practical enquiries, comparative and fair tests  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers thermometer  **WS -** To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables  **WS -** To identify differences, similarities or changes related to simple scientific ideas and processes | **Physics –Electricity**  To identify common appliances that run on electricity  To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers  To 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  To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit  To recognise some common conductors and insulators, and associate metals with being good conductors.  **WS -** To ask relevant questions and using different types of scientific enquiries to answer them  **WS -** To set up simple practical enquiries, comparative and fair tests  **WS -** To make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers, ammeters  **WS -** To gather, record, classify and present data in a variety of ways to help in answering questions  **WS -** To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables  **WS -** To report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions  **WS -** To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions |

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| Y5 | **Chemistry – Properties of materials**  To 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  To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic  **WS** -To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary  **WS -** To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate  **WS -**To record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs  **WS -**To report 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. | **Chemistry –Changes to materials**  To know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution  To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating  To demonstrate that dissolving, mixing and changes of state are reversible changes  To 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.  **WS -**To use test results to make predictions to set up further comparative and fair tests  **WS -**To report and present 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 | **Physics – Space**  To describe the movement of the Earth, and other planets, relative to the Sun in the solar system  To describe the movement of the Moon relative to the Earth  To describe the Sun, Earth and Moon as approximately spherical bodies  To use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky. | **Physics – Forces**  To explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object  To identify the effects of air resistance, water resistance and friction, that act between moving surfaces  To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.  **WS** -To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary  **WS -** To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate  **WS -**To record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs  **WS -**To report 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. | **Biology - Living things and their habitat**  To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird  To describe the life process of reproduction in some plants and animals. | **Biology - Animals including humans**  To describe the changes as humans develop to old age. |

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| Y6 | **Biology - Living things and their habitat**  To 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  To give reasons for classifying plants and animals based on specific characteristics.  **Evolution and inheritance enquiry**  **(variations of) Does height affect how fast a person can run?**  **WS** -To plan different a fair test to answer questions, including recognising and controlling variables where necessary  **WS -** To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate  **WS -**To record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs  **WS -**To report and present 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 | **Biology – Animals including humans**  **Circulatory and digestive systems**  To identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood  To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function  To describe the ways in which nutrients and water are transported within animals, including humans.  **WS** -To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary  **WS -** To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate  **WS -**To record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs  **WS -**To use test results to make predictions to set up further comparative and fair tests  How does the type of exercise or the length of time your exercising change your results?   * **WS -**To report and present 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 | **Physics – Light**  To recognise that light appears to travel in straight lines  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  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  To use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.  **WS** -To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary  **WS -** To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate  **WS -**To record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs  **WS -**To use test results to make predictions to set up further comparative and fair tests  **WS -**To report and present 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  **WS -**To identifying scientific evidence that has been used to support or refute ideas or arguments. | **Physics – Electricity**  To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit  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 use recognised symbols when representing a simple circuit in a diagram.  **WS** -To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary  **WS -** To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate  **WS -**To record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs  **WS -**To use test results to make predictions to set up further comparative and fair tests  **WS -**To report and present 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  **WS -**To identifying scientific evidence that has been used to support or refute ideas or arguments. | **Biology – Animals including humans Evolution and inheritance**  To recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago  To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents  To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.  **WS -**To identify scientific evidence that has been used to support or refute ideas or arguments.   * Data from Galapagos wrens   Data from peppered moths or other more recent studies about adaptation wing length |