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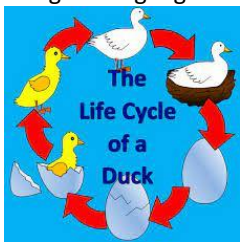
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	**My body**- Children will identify body parts. They will learn about which foods are healthy and unhealthy and why Children will learn why we need to eat healthy? 	**Seasons**-Children will begin to understand why the trees change throughout the year and why some stay green. Children will observe and draw leaves, conkers and pumpkins. 	**Space**- Children will learn about the importance of the sun in the solar system. Why is the sun important in space? How does it support us on Earth? 	**Life cycle**s- Observing changes including life cycles and seasonal changes, investigating and measuring using a rain gauge. 	**Minibeasts**- Looking at similarities and differences between minibeasts. Children will learn about the life cycle of a butterfly. 	**Sinking and floating**- Chn to investigate materials make own boats and talk about why their boat sank or floated using various resources 
Skills coverage	They make observations of animals and plants and explain why some things occur, and talk about changes.	To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.	Explore the natural world around them, making observations and drawing pictures of animals and plants.	Understand some important processes and changes in the natural world around them.	To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

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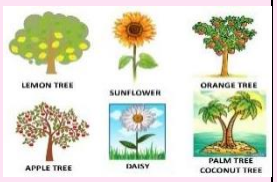
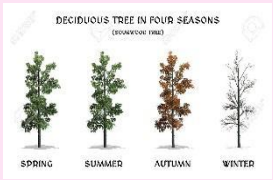
Year 1	**Everyday Materials: Part 1** This chemistry based unit of work introduces our children to a range of basic materials and their properties. They will learn to name and identify a variety of materials. 	**Everyday Materials: Part 2** During this chemistry based unit of work, our children will continue to review the properties of different materials. When working scientifically there is a strong emphasis throughout the unit on our children using their senses to observe closely. 	**Looking At Animals** In this unit, our children will identify and name, look closely at and compare and contrast many different animals. They name their body parts, describe their physical features and mimic how they move. They are reminded that animals need to eat in order to be healthy and that they eat lots of different types of foods. 	**Using Our Senses** Introducing our children to their senses and how they will help them explore and investigate the world that they live in. 	**Plant Detectives** During this unit, our children will be introduced to a wide variety of plants which can be found in their immediate environment. The emphasis will be the children exploring and investigating what is familiar and that they see every day around them. 	**Sensing Seasons** During this unit, our children will experience 'our changing world', as they observe the effects that changing seasons and weather have on them and on the world around them. They will use their senses as they consider what clothing they should wear in different weather conditions and during different seasons of the year. 
Skills coverage	Be able to compare the features of two objects. Identify, sort and group objects and living things in their own way. To use simple scientific language. With help begin to recognise links between	Be able to compare the features of two objects. Identify, sort and group objects and living things in their own way. To use simple scientific language. With help begin to recognise links between	With help, begin to notice what has changed when observing things or events Talk about what they found out or what they think might happen Understand the concept of 'a question' by demonstrating	Understand the concept of 'a question' by demonstrating curiosity of the world around them. Understand that observation involves all of the senses.	Begin to recognise that some observable features may change over time, e.g. the size of a plant. Use simple equipment provided, e.g. hand lenses, to make simple observations.	With help, they should record and communicate their findings in a range of ways (notes, tables and standard units) and begin to use simple scientific language. Use simple secondary sources, e.g. books, film, internet, to find information.

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	observations and answers to questions Use simple secondary sources, e.g. books, film, internet, to find information.	observations and answers to questions	curiosity of the world around them. Identify, sort and group objects and living things in their own way. With help, begin to notice what has changed when observing things or events With help begin to recognise links between observations and answers to questions.		Be able to compare the features of two objects. With help, begin to notice what has changed when observing things or events With help begin to recognise links between observations and answers to questions	With help, begin to notice what has changed when observing things or events

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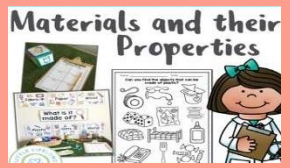
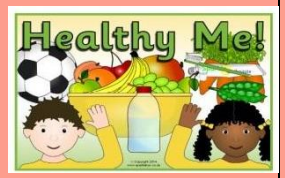
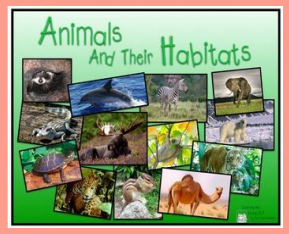
Year 2	**Materials: Shaping Up** Our children will investigate the different properties of materials and explore how these properties can be put to use. 	**Materials: Good Choices** Our children will build on learning from Year 1 about different materials and their properties. They will enhance their understanding that an object is made from different materials 	**Take Care** During this unit of work, our children will begin to learn about different ways to keep themselves healthy. They will then consider the importance of eating a range of different types of food. This is developed further in Year 3, unit of work: Amazing Bodies. 	**What's in Your Habitat?** In this unit, our children will begin to learn about different habitats, how the living things are suited to the habitat and the interactions between the living organisms within a habitat. They will also explore the habitat by identifying things that are living, once-lived and never-lived. 	**The Apprentice Gardener** In this unit, our children will build on their Year 1 that plants need water and sunlight; this unit revisits and extends that understanding. They will also grow plants from seeds, learning the sequence of germination to a healthy mature plant. 	**Growing Up** In this unit, our children will consider the basic human needs for survival (food, water, and air), the need for warmth and shelter, and additional needs for health and wellbeing. They will also identify the simple differences between living and non-living things and they will be introduced to the human life cycle. 
Skills coverage	Be able to ask a questions. Understand that some questions can be answered in different ways e.g. testing, observing, research Use a range of equipment provided, e.g. hand lenses, to make more accurate observations. Identify the two variables in an investigation.	Be able to ask a questions. Understand that some questions can be answered in different ways e.g. testing, observing, research Continue to use simple scientific language. Help to make decisions on how to record and analyse data in a range of ways.	Be able to ask a question. Understand that some questions can be answered in different ways e.g. testing, observing, research Identify and classify by recognising similarities and differences. Begin to use simple scientific language to talk about what they found out	Recognise that some observable features may change over time, and suggest reasons why they have occurred Use a range of equipment provided, e.g. hand lenses, to make more accurate observations. Identify and classify by recognising similarities and differences. Continue to use simple scientific language.	Recognise that some observable features may change over time, e.g. the size of a plant. Recognise that some observable features may change over time, and suggest reasons why they have occurred Use a range of equipment provided, e.g. hand lenses, to	Recognise that some observable features may change over time, e.g. the size of a plant. Be able to compare the features of two objects; identify and explain what has changed. Continue to use simple scientific language.

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	Start to recognise when a test is not fair and suggest improvements. Performing simple tests. Use evidence to suggest answers to their questions and begin to think about predictions Begin to use simple scientific language to talk about what they found out	Begin to identify relevant evidence used to draw conclusions. Use evidence to suggest answers to their questions and begin to think about predictions Begin to use simple scientific language to talk about what they found out			make more accurate observations. Identify and classify by recognising similarities and differences. Continue to use simple scientific language.	Help to make decisions on how to record and analyse data in a range of ways. Begin to identify relevant evidence used to draw conclusions. Use information from given secondary sources to help answer a question.

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Year 3	**Can You See Me?** In this unit, our children will learn how we see objects, the ways in which specific objects reflect different amounts of light and how these ideas can be applied to ensure we stay safe at night. They will explore what causes a shadow, as well as how the shape and size of a shadow can be affected by its position. 	**Rocks and Soils** During the chemistry topic our children will be working as 'Rock Detectives' establishing their core knowledge and understanding of rocks and soils and how fossils have formed over time. They will name rocks and comparing their observable properties. 	**The Power Of Forces** During this physics topic, our children will explore how forces can make objects start to move, speed up, slow down or change direction. 	**How Does Your Garden Grow?** During this unit, our children will learn about the absorption and transport of water and nutrients and the role of the leaf in making food for the plant. They will learn about the parts of the flower and the stages of the life cycle of a flowering plant. 	**Our Changing World** In this unit of work, our children will observe plants at different times of the year. They will observe how the leaves on trees change greatly through the year. They will observe the variety of flying insects and grow plants to produce seed heads as a  complete growth cycle.	**Amazing Bodies** A series of investigations that will examine what our bodies need to survive and how to incorporate a healthy lifestyle so we are the best we can be! 

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Skills coverage	Be able to ask relevant questions. Make increasingly careful observations. Make simple predictions Notice patterns and relationships Recognise links between observations and answers to questions Begin to draw simple conclusions from their observations Use simple scientific language, drawings, labelled diagrams and keys when recording findings Reporting on findings from enquiries including oral and written explanations of results and conclusions.	Be able to ask relevant questions. Make increasingly careful observations. Be able to select appropriate equipment to observe and measure. With others, help to set up a fair test which has two clear variables. Be able to group objects and living things in different ways and talk about criteria for grouping, sorting and classifying, e.g. criteria for sorting rocks physical appearance, hardness, texture etc. Make simple predictions Recognise links between observations and answers to questions Begin to draw simple conclusions from their observations Use simple scientific language, drawings, labelled diagrams and keys when recording findings. Reporting on findings from enquiries including oral and written explanations of results and conclusions.	Be able to ask relevant questions. With others, help to set up a fair test which has two clear variables. Make simple predictions Recognise links between observations and answers to questions Say whether what happened was what they expected and with support, identify new questions arising from their data Use simple scientific language, drawings, labelled diagrams and keys when recording findings Reporting on findings from enquiries including oral and written explanations of results and conclusions.	Be able to ask relevant questions. With support, make own decisions about which method of enquiry is best to answer a question. Make increasingly careful observations. Accurately use standard measures. Be able to group objects and living things in different ways and talk about criteria for grouping, sorting and classifying. Make simple predictions. With help, look for changes, patterns, similarities and differences in their data Notice patterns and relationships Begin to draw simple conclusions from their observations Say whether what happened was what they expected and with support, identify new questions arising from their data Use simple scientific language, drawings, labelled diagrams and keys when recording findings Reporting on findings from enquiries including oral and written explanations of results and conclusions.	Be able to ask relevant questions. Suggest and explain a practical way to find something out. Be able to group objects and living things in different ways and talk about criteria for grouping, sorting and classifying. With help, look for changes, patterns, similarities and differences in their data Notice patterns and relationships Begin to draw simple conclusions from their observations Use simple scientific language, drawings, labelled diagrams and keys when recording findings Use information from secondary sources to help answer a question	Be able to ask relevant questions. Suggest and explain a practical way to find something out. Be able to group objects and living things in different ways and talk about criteria for grouping, sorting and classifying. Use information from secondary sources to help answer a question.

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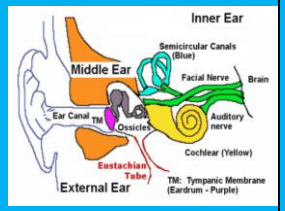
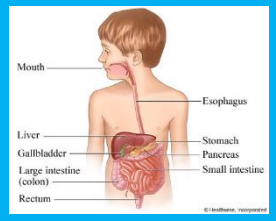
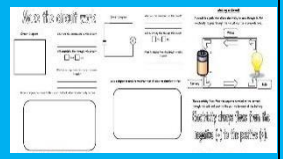
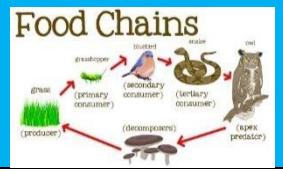
Year 4	**In a State!** Our children will investigate the states of matter of materials so that they have an understanding how it impacts the material and hence its use. 	**Who Am I?** In this biological unit, our children will further develop their understanding of keys gained in the Year 3 rocks unit, to identify animals from a range of habitats. They will construct keys, asking yes/no questions about the characteristic differences between the animals. 	Good **Vibrations** Our children will develop their vocabulary for describing sounds. They will learn that sounds are made by these vibrations that travel through a medium to the ear. 	**Where Does All The Food Go?** During this unit, our children will learn about the human digestive system and will be introduced to the organs associated with digestion. They will learn that the digestive system breaks down food so that the nutrients and energy is used by the body. 	**Switched On** In this unit, our children will identify electrical appliances, distinguishing between those which are powered by mains and battery. They will explore the production of light, sound and movement by making simple series circuits using single components. 	**Human Impact** During this unit, our children will learn about the ways that humans change the environment, focusing on how this affects other living things. They will consider how thoughtless behaviour damages local habitats and what happens if food chains are broken by habitat disruption or the removal of a species from an ecosystem. 
Skills coverage	Be able to ask relevant questions. Be able to suggest more than one way of finding an answer to a question, e.g. by research, by testing. Make own decisions about which method of enquiry is best to answer a question. Make systematic observations. Be able to select and use appropriate equipment and	Be able to ask relevant questions. Be able to suggest more than one way of finding an answer to a question, e.g. by research, by testing. Make own decisions about which method of enquiry is best to answer a question. Make systematic observations. Be able to select and use	Make systematic observations. Be able to select and use appropriate equipment and explain why particular equipment chosen is appropriate to the task. Use an increasing range of standard measures accurately. Be able to gather,	Be able to ask relevant questions. Be able to suggest one way of finding an answer to a question, e.g. by research, by testing With support, make own decisions about which method of enquiry is best to answer a question. Suggest and make decisions about which practical method is best to find something out.	Be able to ask relevant questions. Be able to suggest more than one way of finding an answer to a question, e.g. by research, by testing. Make own decisions about which method of enquiry is best to answer a question. Setting up simple practical enquiries,	Be able to ask relevant questions. Be able to suggest more than one way of finding an answer to a question, e.g. by research, by testing. Make own decisions about which method of enquiry is best to answer a question. Make systematic observations. Be able to select and use

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	explain why particular equipment chosen is appropriate to the task. Use an increasing range of standard measures accurately. Suggest and make decisions about which practical method is best to find something out. Reporting on findings from enquiries including oral and written explanations, displays and presentations of results and conclusions.	appropriate equipment and explain why particular equipment chosen is appropriate to the task. Use an increasing range of standard measures accurately. Suggest and make decisions about which practical method is best to find something out.	record, classify and present data in a variety of ways to help in answering questions Record findings using relevant scientific language, drawings, labelled diagrams, keys, bar charts and tables. Reporting on findings from enquiries including oral and written explanations, displays and presentations of results and conclusions.	Be able to gather, record, classify and present data in a variety of ways to help in answering questions	comparative and fair tests. Make systematic observations. Be able to select and use appropriate equipment and explain why particular equipment chosen is appropriate to the task. Use an increasing range of standard measures accurately.	appropriate equipment and explain why particular equipment chosen is appropriate to the task. Use an increasing range of standard measures accurately. Be able to gather, record, classify and present data in a variety of ways to help in answering questions

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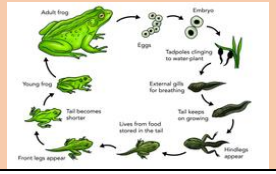
Year 5	**The Earth and Beyond** Introducing our children to the universe outside of our wonderful planet and to explore all the planets in our solar system. 	**Feel the Force** During this unit, our children will build on their knowledge of how forces; gravity and drag forces; friction, air resistance, water resistance, and up thrust in water; affect movement. They will learn how levers, pulleys and gears allow a small force to have a greater effect. 	**Get Sorted** In this chemistry based unit of work, our children will identify, compare and classify a variety of materials according to both their properties and their uses. They will begin to recognise that a single material name, like 'metal' or 'plastic' can describe a considerable number of different materials. 	**Marvellous Mixtures** In this unit, our children will further develop their conceptual knowledge of how different mixtures of solids and liquids might be separated. They learn that certain solids dissolve while others do not, and how these dissolved solids might be retrieved from a mixture. They explore how the rate at which solids dissolve can vary. 	**Reproduction In Plants** In this biological unit, our children will learn about reproduction in some types of plants and animals. When working scientifically, the children carry out observations of flowering plants. 	**Circle of Life** In this unit, our children will extend their understanding of what a life cycle is, and learn about the life cycles of mammals, amphibians, insects and birds. They will compare different life cycles, identifying common features and explain key differences. They will learn about incredible journeys that animals undertake to complete their life cycles. 
Skills coverage	Be able to ask appropriate questions that can be investigated/tested. Explore ideas to understand that a range of enquiries can be used together to answer a question. Identify patterns that might be found in the natural environment Identify and offer explanations for anomalous results	Make their own decisions about what observations to make, what measurements to use and for how long to make them, and whether to repeat them. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when	Recognise how to set up comparative and fair tests and explain which variables need to be controlled and why. Identify patterns that might be found in the natural environment To recognise when evidence supports an idea or not	Planning different types of scientific enquiries to answer questions. Identify and offer explanations for anomalous results Report findings from enquiries including conclusions, causal relationships in oral and written forms such as displays and other presentations.	Be able to independently use simple databases or keys to identify or classify living things, objects or events. Record findings using relevant scientific language, drawings, labelled diagrams, keys, bar charts and tables.	Be able to independently use simple databases or keys to identify or classify living things, objects or events. Record findings using relevant scientific language, drawings, labelled diagrams, keys, bar charts and tables. Report findings from enquiries including

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	To recognise when evidence supports an idea or not Use a range of secondary sources and recognise which source will be most useful to research their ideas and begin to separate opinion from fact.	appropriate. Report findings from enquiries including conclusions, causal relationships in oral and written forms such as displays and other presentations.	Report findings from enquiries including conclusions, causal relationships in oral and written forms such as displays and other presentations.			conclusions, causal relationships in oral and written forms such as displays and other presentations.

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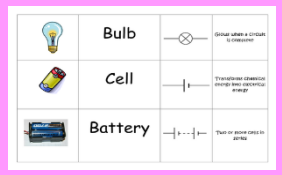
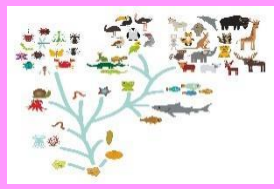
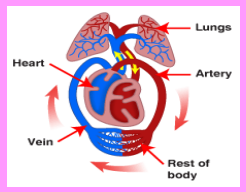
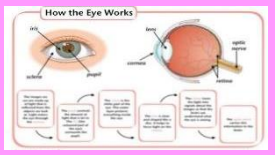
Year 6	**Danger! Low Voltage Electricity** During this unit, our children will build on their electricity work from Year 4. They will construct circuits with an increasing number of components and contrast the effects this has on their function They will review the flow of electricity through a basic circuit and through other components. 	**Everything Changes** In this challenging unit, our children build on their knowledge of living things and how they are adapted to particular environments. They will be introduced to the idea that variation in organisms results in the species becoming better adapted and that the process of natural selection. 	**Body Pump** Exploring the structure and hence the functions of the human body's internal circulatory systems to gain an understanding of how to keep them healthy. 	**Body Health** In this unit our children will learn how to keep their bodies healthy. The focus is on lifestyle choices that humans make, including diet and exercise. 	**The Nature Library** During this challenging unit, our children will build on their previous knowledge of living things to deepen their understanding of why and how organisms are classified. They will explore the process of classification in relation to the identification of living things. The structure, function and purpose of classification systems will be explored. 	**Light Up Your World** In this unit of work, our children will build on their learning from Year 3 about using light to see; to develop a detailed understanding of mirrors and the reflections that they form, and apply this understanding to make a periscope. 
Skills coverage	Refine a scientific question so that it can be investigated/tested. Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why. Find out how scientific ideas have changed and developed over time as new evidence is discovered	Find out how scientific ideas have changed and developed over time as new evidence is discovered. Recording findings using precise scientific language, drawings, labelled diagrams, keys, bar charts, line graphs and tables. Use secondary sources, e.g. internet links to research objects, events	Refine a scientific question so that it can be investigated/tested Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Recognise when and how to set up comparative and fair	Find out how scientific ideas have changed and developed over time as new evidence is discovered Recording findings using precise scientific language, drawings, labelled diagrams, keys, bar charts, line graphs and tables.	Be able to create more complex forms of classification tools, e.g. databases, branching keys. Understand that broad groupings, such as micro-organisms, plants and animals can be subdivided. Identify scientific evidence that has been used to support or	Systematically investigate the relationship between phenomena e.g light and shadows Look for causal relationships in their data and identify evidence that refutes or supports their ideas. Use secondary sources, e.g. internet links to research objects, events and phenomena that

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	Recording findings using precise scientific language, drawings, labelled diagrams, keys, bar charts, line graphs and tables. Report 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.	and phenomena that cannot be experienced in the classroom. Identify scientific evidence that has been used to support or refute ideas or arguments.	tests and explain which variables need to be controlled and why. Recording findings using precise scientific language, drawings, labelled diagrams, keys, bar charts, line graphs and tables. Report 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.	Use secondary sources, e.g. internet links to research objects, events and phenomena that cannot be experienced in the classroom	refute ideas or arguments.	cannot be experienced in the classroom Identify scientific evidence that has been used to support or refute ideas or arguments.