

Literacy	Science	History	Geography	Art	Design and Technology
	<p><u>Space</u></p> <p><u>To work scientifically</u></p> <ul style="list-style-type: none"> Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Plan enquiries, including recognising and controlling variables where necessary. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. Use test results to make predictions to set up further comparative and fair tests. <p><u>To understand the Earth's movement in space</u></p> <ul style="list-style-type: none"> Describe the movement of the Earth, and other planets, relative to the Sun in the solar system Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. 	<p><u>To build an overview of world history</u></p> <ul style="list-style-type: none"> Compare some of the times studied with those of the other areas of interest around the world 	<p><u>To investigate places</u></p> <ul style="list-style-type: none"> Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time Name and locate the countries of North and South America and identify their main physical and human characteristics <p><u>To investigate patterns</u></p> <ul style="list-style-type: none"> Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night) Understand some of the reasons for geographical similarities and differences between countries. Describe geographical diversity across the world. <p><u>To communicate geographically</u></p> <ul style="list-style-type: none"> Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle Human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world 	<p><u>To develop ideas</u></p> <ul style="list-style-type: none"> Develop and imaginatively extend ideas from starting points throughout the curriculum. Collect information, sketches and resources and present ideas imaginatively in a sketch book. Use the qualities of materials to enhance ideas. Spot the potential in unexpected results as work progresses. Comment on artworks with a fluent grasp of visual language. <p><u>To master techniques</u></p> <p><u>Paint</u></p> <ul style="list-style-type: none"> Develop a personal style of painting, drawing upon ideas from other artists. Combine colours, tones and tints to enhance the mood of a piece. <p><u>Drawing</u></p> <ul style="list-style-type: none"> Use a variety of techniques to add interesting effects (e.g. reflections, shadows, direction of sunlight). Use a choice of techniques to depict movement, perspective, shadows and reflection. Use lines to represent movement <p><u>Print</u></p> <ul style="list-style-type: none"> Build up layers of colours. Create an accurate pattern, showing fine detail. Use a range of visual elements to reflect the purpose of the work. <p><u>Digital media</u></p> <ul style="list-style-type: none"> Enhance digital media by editing (including sound, video, animation, still images and installations) <p><u>To take inspiration from the greats (classic and modern)</u></p> <ul style="list-style-type: none"> Give details (including own sketches) about the style of some notable artists, artisans and designers. Show how the work of those studied was influential in both society and to other artists. Create original pieces that show a range of influences and styles. 	<p><u>To master practical skills</u></p> <p><u>Construction</u></p> <ul style="list-style-type: none"> Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing and filing and sanding). Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape). <p><u>To design, make, evaluate and improve</u></p> <ul style="list-style-type: none"> Ensure products have a high-quality finish, using art skills where appropriate.

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<ul style="list-style-type: none"> Non-chronological 	<p><u>Circle of Life (Rainforests)</u></p> <p><u>To work scientifically</u></p> <ul style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Plan enquiries, including recognising and controlling variables where necessary. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Use test results to make predictions to set up further comparative and fair tests. Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. <p><u>To understand plants</u></p> <ul style="list-style-type: none"> Relate knowledge of plants to studies of all living things <p><u>To investigate living things</u></p> <ul style="list-style-type: none"> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. 	<p><u>To build an overview of world history</u></p> <ul style="list-style-type: none"> Compare some of the times studied with those of the other areas of interest around the world 	<p><u>To investigate places</u></p> <ul style="list-style-type: none"> Collect and analyse statistics and other information in order to draw clear conclusions about locations Identify and describe how the physical features affect the human activity within a location. Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time Name and locate the countries of North and South America and identify their main physical and human characteristics <p><u>To investigate patterns</u></p> <ul style="list-style-type: none"> Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night) Understand some of the reasons for geographical similarities and differences between countries. Describe how locations around the world are changing and explain some of the reasons for change Describe geographical diversity across the world Describe how countries and geographical regions are interconnected and interdependent <p><u>To communicate geographically</u></p> <ul style="list-style-type: none"> Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle Human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world Create maps of locations identifying patterns (such as: land use, climate zones, population densities, height of land). 	<p><u>To master techniques</u></p> <p><u>Painting</u></p> <ul style="list-style-type: none"> Sketch (lightly) before painting to combine line and colour. Create a colour palette based upon colours observed in the natural or built world. Use the qualities of watercolour and acrylic paints to create visually interesting pieces. Use brush techniques and qualities of paint to create texture. <p><u>Collage</u></p> <ul style="list-style-type: none"> Mix textures (rough, smooth, plain and patterned) Combine visual and tactile qualities. <p><u>Print</u></p> <ul style="list-style-type: none"> Build up layers of colours. Create an accurate pattern, showing fine detail. Use a range of visual elements to reflect the purpose of the work. 	

Year B Term 3

Topic – Primary Engineering

Literacy	Science	History	Geography	Art	Design and Technology
<ul style="list-style-type: none"> Instructions Explanation texts 	<p align="center"><u>Forces and Magnets – Let's Get moving</u></p> <p align="center"><u>To work scientifically</u></p> <ul style="list-style-type: none"> Plan enquiries, including recognising and controlling variables where necessary. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. Use test results to make predictions to set up further comparative and fair tests. Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. <p align="center"><u>To understand movement, forces and magnets</u></p> <p>Magnets</p> <ul style="list-style-type: none"> Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing. <p>Forces</p> <ul style="list-style-type: none"> Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces. <i>Describe, in terms of drag forces, why moving objects that are not driven tend to slow down.</i> <i>Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.</i> Understand that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect. 		<p align="center"><u>To investigate places</u></p> <ul style="list-style-type: none"> Collect and analyse statistics and other information in order to draw clear conclusions about locations 		<p align="center"><u>To master practical skills</u></p> <p align="center"><u>Mechanics</u></p> <ul style="list-style-type: none"> Convert rotary motion to linear using cams. Use innovative combinations of electronics (or computing) and mechanics in product designs. <p align="center"><u>To design, make, evaluate and improve</u></p> <ul style="list-style-type: none"> Design with the user in mind, motivated by the service a product will offer (rather than simply profit). Make products through stages of prototypes, making continual refinements. Ensure products have a high-quality finish, using art skills where appropriate. Use prototypes, cross-sectional diagrams and computer aided designs to represent designs. <p align="center"><u>Take inspiration from designs throughout history.</u></p> <ul style="list-style-type: none"> Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. Create innovative designs that improve upon existing products. Evaluate the design of products so as to suggest improvements to the user experience.

Year B Term 4

Topic – Greeks

Literacy	Science	History	Geography	Art	Design and Technology
<ul style="list-style-type: none"> Biography Discussion texts 	<p><u>Material World</u></p> <p><u>To work scientifically</u></p> <ul style="list-style-type: none"> Plan enquiries, including recognising and controlling variables where necessary. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. Use test results to make predictions to set up further comparative and fair tests. <p><u>Investigate Materials</u></p> <ul style="list-style-type: none"> Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic Understand how some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Demonstrate that dissolving, mixing and changes of state are reversible changes. 	<p><u>To investigate and interpret the past</u></p> <ul style="list-style-type: none"> Use sources of evidence to deduce information about the past. Select suitable sources of evidence, giving reasons for choices. Seek out and analyse a wide range of evidence in order to justify claims about the past. Refine lines of enquiry about the past. <p><u>To build an overview of world history</u></p> <ul style="list-style-type: none"> Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children <p><u>To understand chronology</u></p> <ul style="list-style-type: none"> Use dates and terms accurately in describing events <p><u>To communicate historically</u></p> <ul style="list-style-type: none"> Use appropriate historical vocabulary to communicate, including: <ul style="list-style-type: none"> • dates • time period • era • chronology • continuity • change • century • decade • legacy. Use literacy, numeracy and computing skills to an exceptional standard in order to communicate information about the past Use original ways to present information and ideas. 		<p><u>To master techniques</u></p> <p><u>Sculpture</u></p> <ul style="list-style-type: none"> Show life-like qualities and real-life proportions or, if more, abstract, provoke different interpretations Use tools to carve and add shapes, texture and patterns Combine visual and tactile qualities <p><u>Take inspiration from greats (classic and modern)</u></p> <ul style="list-style-type: none"> Give details (including own sketches) about the style of some notable artists, artisans and designers. Show how the work of those studied was influential in both society and to other artists. Create original pieces that show a range of influences and styles. 	<p><u>To master practical skills</u></p> <p><u>Computing</u></p> <ul style="list-style-type: none"> Write code to control and monitor models or products <p><u>Mechanics</u></p> <ul style="list-style-type: none"> Use innovative combinations of electronics (or computing) and mechanics in product designs.

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<ul style="list-style-type: none"> Street Child 	<p>Amazing Changes</p> <p><u>To work scientifically</u></p> <ul style="list-style-type: none"> Plan enquiries, including recognising and controlling variables where necessary. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. Use test results to make predictions to set up further comparative and fair tests. Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. <p><u>To investigate materials</u></p> <ul style="list-style-type: none"> 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, oxidation and the action of acid on bicarbonate of soda 	<p><u>To investigate and interpret the past</u></p> <ul style="list-style-type: none"> Use sources of evidence to deduce information about the past. Select suitable sources of evidence, giving reasons for choices. Use sources of information to form testable hypotheses about the past. Understand that no single source of evidence gives the full answer to questions about the past. Refine lines of enquiry as appropriate <p><u>To build an overview of world history</u></p> <ul style="list-style-type: none"> Identify continuity and change in the history of the locality of the school Give a broad overview of life in Britain from medieval until the Tudor and Stuarts times Describe the social, ethnic, cultural or religious diversity of past society Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children <p><u>To understand chronology</u></p> <ul style="list-style-type: none"> Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural) Understand the concepts of continuity and change over time, representing them, along with evidence, on a time line Use dates and terms accurately in describing events <p><u>To communicate historically</u></p> <ul style="list-style-type: none"> Use appropriate historical vocabulary to communicate, including: <ul style="list-style-type: none"> • dates • time period • era • chronology • continuity • change • century • decade • legacy. Use literacy, numeracy and computing skills to an exceptional standard in order to communicate information about the past. Use original ways to present information and ideas. 	<p><u>To investigate places</u></p> <ul style="list-style-type: none"> Collect and analyse statistics and other information in order to draw clear conclusions about locations Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map) Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time <p><u>To communicate Geographically</u></p> <ul style="list-style-type: none"> Human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies 	<p><u>To develop ideas</u></p> <ul style="list-style-type: none"> Use the qualities of materials to enhance ideas Comment on artworks with a fluent grasp of visual language <p><u>To master techniques</u></p> <p><u>Collage</u></p> <ul style="list-style-type: none"> Mix textures (rough and smooth, plain and patterned). Combine visual and tactile qualities. <p><u>Textiles</u></p> <ul style="list-style-type: none"> Show precision in techniques Choose from a range of stitching techniques. Combine previously learned techniques to create pieces. 	<p><u>To master skills</u></p> <p><u>Textiles</u></p> <ul style="list-style-type: none"> Create objects (such as a cushion) that allow a seam allowance. Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration). Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as soft decoration for comfort in a cushion).

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	<p><u>Growing Up and Growing Old</u></p> <p><u>To work scientifically</u></p> <ul style="list-style-type: none"> Plan enquiries, including recognising and controlling variables where necessary. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. <p><u>To understand animals and humans</u></p> <ul style="list-style-type: none"> Describe the changes as humans develop to old age. <p><u>To understand plants</u></p> <ul style="list-style-type: none"> Relate knowledge of plants to studies of evolution and inheritance. Relate knowledge of plants to studies of all living things 	<p><u>To investigate and interpret the past</u></p> <ul style="list-style-type: none"> Use sources of evidence to deduce information about the past. Select suitable sources of evidence, giving reasons for choices. Use sources of information to form testable hypotheses about the past. Understand that no single source of evidence gives the full answer to questions about the past. Refine lines of enquiry as appropriate <p><u>To build an overview of world history</u></p> <ul style="list-style-type: none"> Identify continuity and change in the history of the locality of the school Give a broad overview of life in Britain from medieval until the Tudor and Stuarts times Describe the social, ethnic, cultural or religious diversity of past society Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children <p><u>To understand chronology</u></p> <ul style="list-style-type: none"> Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural) Understand the concepts of continuity and change over time, representing them, along with evidence, on a time line Use dates and terms accurately in describing event <p><u>To communicate historically</u></p> <ul style="list-style-type: none"> Use appropriate historical vocabulary to communicate, including: <ul style="list-style-type: none"> • dates • time period • era • chronology • continuity • change • century • decade • legacy. Use literacy, numeracy and computing skills to an exceptional standard in order to communicate information about the past. Use original ways to present information and ideas 	<p><u>To investigate places</u></p> <ul style="list-style-type: none"> Collect and analyse statistics and other information in order to draw clear conclusions about locations Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map) Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time <p><u>To communicate geographically</u></p> <ul style="list-style-type: none"> Human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies 	<p><u>To master techniques</u></p> <p><u>Sculpture</u></p> <ul style="list-style-type: none"> Show life-like qualities and real-life proportions, or if more abstract, provoke different interpretations. Use tools to carve and add shapes, texture and pattern. Combine visual and tactile qualities. Use frameworks (such as wire or moulds) to provide stability and form. 	<p><u>To master practical skills</u></p> <p><u>Food</u></p> <ul style="list-style-type: none"> Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. Demonstrate a range of baking and cooking techniques. Create and refine recipes, including ingredients, methods, cooking time and temperatures.