

	Science	Art, Design & Technology	History	Geography
Programme of Study	<p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Use test results to make predictions to set up further comparative and fair tests.</p> <p>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.</p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p>	<p>Gain historical perspective by placing their growing knowledge into different contexts: understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales.</p>	<p>Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p>Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.</p>

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Year 5 Learning Intention (skills)	<p>Classify living things, including microorganisms, animals and plants, into groups according to common observable characteristics and based on similarities and differences.</p> <p>Gather and record data and results of increasing complexity, selecting from a range of methods (scientific diagrams, labels, classification keys, tables, graphs and models).</p> <p>Plan and carry out a range of enquiries, including writing methods, identifying variables and making predictions based on prior knowledge and understanding.</p> <p>Ask a wide range of relevant scientific questions that broaden their understanding of the world around them and identify how they can answer them.</p> <p>Take increasingly accurate measurements in standard units, using a range of chosen equipment.</p> <p>Use relevant scientific vocabulary to report on their findings, answer questions and justify their conclusions based on evidence collected, identify improvements, further questions and predictions.</p> <p>Within a group, decide which observations to make, when and for how long, and make systematic and careful observations, using them to make comparisons, identify changes, classify and make links between cause and effect.</p>	<p>Explore and create expression in portraiture</p> <p>Select and combine materials with precision.</p> <p>Use pattern pieces and computer-aided design packages to design a product.</p> <p>Make and use paper to explore traditional crafting techniques.</p>	<p>Explore and explain how the religious, political, scientific or personal beliefs of a significant individual caused them to behave in a particular way.</p>	<p>Identify elevated areas, depressions and river basins on a relief map.</p> <p>Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.</p>

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Year 5 Knowledge	<p>Scientists classify living organisms into broad groups according to their characteristics. Vertebrates are an example of a classification group. There are a number of ranks, or levels, within the biological classification system. The first rank is called a kingdom, the second a phylum, then class, order, family, genus and species.</p> <p>Data can be recorded and displayed in different ways, including tables, bar and line charts, classification keys and labelled diagrams.</p> <p>A method is a set of clear instructions for how to carry out a scientific investigation. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding.</p> <p>Questions can help us find out about the world and can be answered using a range of scientific enquiries.</p> <p>Specialised equipment is used to take measurements in standard units. Examples include data loggers plus sensors, such as light (lux), sound (dB) and temperature (°C); timers (seconds, minutes and hours); thermometers (°C), and measuring tapes (millimetres, centimetres, metres).</p> <p>The results are information, such as measurements or observations, that have been collected during an investigation. A conclusion is an explanation of what has been discovered using evidence collected.</p> <p>An observation involves looking closely at objects, materials and living things. Accurate observations can be made repeatedly or at regular intervals to identify changes over time.</p>	<p>A portrait is a picture of a person that can be created through drawing, painting and photography. Artistic movements or artists that communicate feelings through portraiture include the Expressionists.</p> <p>Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.</p> <p>A pattern piece is a drawing or shape used to guide how to make something. There are many different computer-aided design packages for designing products.</p> <p>Traditional crafting techniques using paper include, casting, decoupage, collage, marbling, origami and paper making.</p>	<p>Beliefs can prompt an individual to take action, such as to fight for change, fight wars, oppress or free individuals or groups of people, create temples and tombs or protest against injustice.</p>	<p>The geographical term 'relief' describes the difference between the highest and lowest elevations of an area. Relief maps show the contours of land based on shape and height. Contour lines show the elevation of the land, joining places of the same height above sea level. They are usually an orange or brown colour. Contour lines that are close together represent ground that is steep. Contour lines that are far apart show ground that is gently sloping or flat.</p> <p>Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features.</p>