

	Geography	Science	Computing	Design and technology	Art and design
Programme of Study	<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> <p>Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS); communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.</p> <p>Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</p> <p>Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</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>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</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>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Describe the life process of reproduction in some plants and animals.</p> <p>Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.</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>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</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>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p>Create sketchbooks to record their observations and use them to review and revisit ideas.</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>

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Year 6 Learning Intention (skills)	<p>Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques.</p> <p>Describe the distribution of natural resources in an area or country.</p> <p>Analyse and present increasingly complex data, comparing data from different sources and suggesting why data may vary.</p> <p>Describe the physical processes, including weather, that affect two different locations.</p>	<p>Plan and carry out a range of enquiries, including writing methods, identifying and controlling variables, deciding on equipment and data to collect and making predictions based on prior knowledge and understanding.</p> <p>Choose an appropriate approach to recording accurate results, including scientific diagrams, labels, timelines, classification keys, tables, models and graphs (bar, line and scatter), linking to mathematical knowledge.</p> <p>Independently 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>Compare the living things in two contrasting areas of a habitat (top vs bottom of a hill, full sun vs shade, exposed location vs sheltered location or well-trodden path vs unused area).</p>	<p>Identify how a new piece of software or an app can increase creativity.</p>	<p>Follow a recipe that requires a variety of techniques and source the necessary ingredients independently.</p> <p>Choose the best materials for a task, showing an understanding of their working characteristics.</p> <p>Explain how organic produce is grown.</p>	<p>Gather, record and develop information from a range of sources to create a mood board or montage to inform their thinking about a piece of art.</p> <p>Use colour palettes and characteristics of an artistic movement or artist in artwork.</p>

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Year 6 Knowledge	<p>Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions.</p> <p>Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water</p> <p>Data helps us to understand patterns and trends but sometimes there can be variations due to numerous factors (human error, incorrect equipment, different time frames, different sites, environmental conditions and unexplained anomalies).</p> <p>Physical processes that can affect a landscape include erosion by wind, water or ice; the deposition of stone and silt by water and ice; land movement, such as landslides and tectonic activity, such as earthquakes or volcanic eruptions.</p>	<p>A method is a set of clear instructions for how to carry out a scientific investigation, including what equipment to use and observations to make. A variable is something that can be changed during a fair test. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding.</p> <p>Data can be recorded and displayed in different ways, including tables, bar and line charts, scatter graphs, classification keys and labelled diagrams.</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, identify processes and make comparisons.</p> <p>Environmental factors can affect the distribution of living things within a habitat. These factors include light (intensity and duration), weather, altitude, soil type and humans, such as when we mow or trample grass.</p>	<p>Some software or apps are designed to help increase creativity by saving time or making tasks easier, such as being able to combine text, images, audio or video content into one place.</p>	<p>Ingredients can usually be bought at supermarkets, but specialist shops may stock different items. Greengrocers sell fruit and vegetables, butchers sell meat, fishmongers sell fresh fish and delicatessens usually sell some unusual prepared foods, as well as cold meats and cheeses.</p> <p>It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability.</p> <p>Organic produce is food that has been grown without the use of man-made fertilisers, pesticides, growth regulators or animal feed additives. Organic farmers use crop rotation, animal and plant manures, hand-weeding and biological pest control.</p>	<p>A mood board is an arrangement of images, materials, text and pictures that can show ideas or concepts. A montage is a set of separate images that are related to each other and placed together to create a single image.</p> <p>Different artistic movements often use colour in a distinctive way. Expressionist artists use intense, non-naturalistic colours. Impressionist artists use complementary colours. Fauvist artists use flat areas or patches of colour. Naturalist artists use realistic colours.</p>