

	Science	Design and technology	Art and design	Computing	History	Geography
Programme of Study	<p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Recognise that living things can be grouped in a variety of ways.</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>Understand how key events and individuals in design and technology have helped shape the world.</p> <p>Investigate and analyse a range of existing products.</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>Create sketchbooks to record their observations and use them to review and revisit ideas.</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>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>PSED Health education: Know that for most people the internet is an integral part of life and has many benefits.</p> <p>PSED Relationships education: Know how information and data is shared and used online.</p>	<p>Understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically valid questions and create their own structured accounts, including written narratives and analyses.</p>	<p>Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).</p> <p>Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</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>

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Year 4 Learning Intention (skills)	<p>Gather, record, classify and present observations and measurements in a variety of ways (pictorial representations, timelines, diagrams, keys, tables, charts and graphs).</p> <p>Compare, sort and group living things from a range of environments, in a variety of ways, based on observable features and behaviour.</p> <p>Ask relevant scientific questions, independently, about the world around them and begin to identify how they can answer them.</p> <p>Construct and interpret a variety of food chains and webs to show interdependence and how energy is passed on over time.</p> <p>Explain how adaptations help living things to survive in their habitat.</p> <p>Take accurate measurements in standard units, using a range of equipment.</p> <p>Explain how unfamiliar habitats, such as a mountain or ocean, can change over time and what influences these changes.</p>	<p>Explain how and why a significant designer or inventor shaped the world.</p> <p>Investigate and identify the design features of a familiar product.</p>	<p>Develop techniques through experimentation to create different types of art.</p> <p>Use clay to create a detailed 3-D form.</p> <p>Explore and develop art that uses the human form to create a narrative, using ideas from contemporary or historical starting points.</p> <p>Create a series of sketches over time to develop ideas on a theme or mastery of a technique.</p> <p>Represent the detailed patterns found in natural phenomena, such as water and weather.</p>	<p>Apply computing skills to use new computing software.</p> <p>Use digital technology in different ways in the classroom, home and community to achieve a set goal.</p>	<p>Present a thoughtful selection of relevant information in a historical report, fictional narrative, in-depth study or by answering a range of historical questions.</p>	<p>Identify the location of the Tropics of Cancer and Capricorn on a world map.</p> <p>Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping.</p> <p>Investigate a geographical hypothesis using a range of fieldwork techniques.</p>

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Year 4 Knowledge	<p>Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams.</p> <p>Scientists classify living things according to shared characteristics. Animals can be divided into six main groups: mammals, reptiles, amphibians, birds, fish and invertebrates. These groups can be further subdivided. Classification keys are scientific tools that aid the identification of living things.</p> <p>Questions can help us find out about the world and can be answered using scientific enquiry.</p> <p>Food chains show what animals eat within a habitat and how energy is passed on over time. All food chains start with a producer, which is typically a green plant. The producer is eaten by a primary consumer (prey), which is eaten by a secondary consumer (prey), which is eaten by a tertiary consumer. All food chains end with a top or apex predator. Changes within a food chain, such as an abundance or lack of one food type, have an impact on the entire food chain.</p> <p>An adaptation helps an animal or plant survive in its habitat. If living things are unable to adapt to changes within their habitat, they are at risk of becoming extinct.</p> <p>Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C), and metre sticks, rulers or trundle wheels (millimetres, centimetres, metres).</p> <p>Habitats change over time, either due to natural or human influences. Natural influences include extreme or unseasonable weather. Human influences include habitat destruction or pollution. These changes can pose a risk to animals and plants that live in the habitat.</p>	<p>Significant designers and inventors can shape the world.</p> <p>Design features are the aspects of a product's design that the designer would like to emphasise, such as the use of a particular material or feature that makes the product easier to use or more durable.</p>	<p>Materials, techniques and visual elements, such as line, tone, shape, pattern, colour and form, can be combined to create a range of effects.</p> <p>Techniques used to create a 3-D form from clay include coiling, pinching, slab construction and sculpting. Carving, slip and scoring can be used to attach extra pieces of clay. Mark making can be used to add detail to 3-D forms.</p> <p>Art can be developed that depicts the human form to create a narrative.</p> <p>Artists use sketching to develop an idea over time.</p> <p>Natural patterns from weather and water are often used as a subject matter.</p>	<p>New computing software commonly has features that should be familiar to users, such as icons or terminology.</p> <p>Digital technology can be used in different ways and settings to achieve a specific goal, such as using data collection in the community and home to answer a classroom based question.</p>	<p>Relevant historical information can be presented as written texts, tables, diagrams, captions and lists.</p>	<p>The Tropic of Cancer is 23.4 degrees north of the equator and Tropic of Capricorn is 23.4 degrees south of the equator.</p> <p>An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area.</p> <p>Fieldwork techniques, such as sketch maps, data collection and digital technologies, can provide evidence to support and answer a geographical hypothesis.</p>