

Long Term Overview - Year 5

	Science	Geography	History	Art/DT	Computing
<p>AUT 1</p> <p>Scream Machine</p>	<p>Theme park rides</p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>Identify the effects of air resistance, water resistance and friction that act between moving surfaces.</p>	<p>Locations of theme parks</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>Understand geographical similarities and differences through the study of human and physical geography of a region of the UK, a region in a European country, and a region within North or South America.</p>		<p>Theme park drop ride</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>Understand and use mechanical systems in their products [e.g. gears, pulleys, cams, levers and linkages].</p>	<p>Using keys to identify features</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>Searching online</p> <p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>
<p>AUT 2</p> <p>Stargazers</p>	<p>Space</p> <p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.</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>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p>		<p>Galileo</p> <p>Explain why Galileo's discovery was so significant and controversial at the time. Study an aspect or theme in British history that extends pupils' chronological knowledge beyond.</p> <p>Study an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066. Discuss why Americans in 1960s were so determined to succeed in the moon race.</p>		<p>Exploring programming</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>

<p>SPR 1</p> <p>Allotment</p>	<p>Germination / reproduction</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Follow a simple scientific investigation method to explore the germination rate of seeds in four different conditions.</p> <p>Describe the life process of reproduction in some plants and animals.</p>	<p>Orienteering</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 UK and the wider world.</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>Food tech</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Art</p> <p>Make observational drawings in sketch books of plants, fruits, vegetables, leaves, flowers, seeds and bulbs using coloured and soft writing pencils. Look at a selection of botanical drawings for inspiration and explore how the artist captures the plant's form.</p>	
<p>SPR 2</p> <p>Off with her head!</p>	<p>Changing state</p> <p>Compare and group together every day materials based on their properties</p> <p>Know some materials will dissolve to form a solution</p> <p>Use knowledge to decide how mixtures may be separated through filtering, sieving and evaporating</p> <p>Carry out comparative and fair tests of particular uses of everyday materials</p> <p>Demonstrate dissolving, mixing and changes of states are reversible</p> <p>Explain that some changes result in new materials and this kind of state is not usually reversible, e.g. burning, vinegar on bicarbonate of soda and rusting</p>	<p>Tudor and modern day London</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>Use historical sources to find out where Henry VIII lived during his lifetime and locate these places on a UK map.</p>	<p>Tudors</p> <p>Study an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066.</p> <p>Use portraits to create a family tree for the Tudor dynasty.</p>	<p>Hans Holbein</p> <p>Find out about great artists, architects and designers in history.</p> <p>Research and talk about the significance of particular symbols or colours used.</p> <p>Create sketch books to record their observations and use them to review and revisit ideas.</p>	<p>Timelines</p> <p>Create individual illustrated timelines using appropriate software.</p> <p>Use the web to find out where Henry VIII lived during his lifetime and locate these places on a UK map online (google Earth)</p>
<p>SUM 1</p> <p>Beast creator</p>	<p>Habitats</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>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>Tudors continued</p> <p>Find out about Tudor crimes and punishments, creating illustrated mind maps to record their findings.</p> <p>Use research to find out why Henry VIII broke away from the Catholic Church and explain his 'Great Matter'.</p>	<p>Minibeast sketches</p> <p>Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay).</p> <p>Add scientific detail and value to their drawings by labelling them. Use a range of equipment such as hand lenses and microscopes to look carefully at their</p>	<p>Revisit searching</p> <p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p>

	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.			morphology. Minibeast hotel Select from and use a wider range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing) accurately	
SUM 2 Time traveller	Puberty / changes Identify, and present in an appropriate way, the key stages in human growth and development from birth to old age. Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas. Describe the key physical changes in the male and female human body during puberty. Compare key facts about mammalian gestation and birth and suggest reasons for variation within a species.		Mayan civilization - AD 900 Study a non-European society that provides contrasts with British history Study a range of images that illustrate aspects of ancient Maya civilisation. Find out about great artists, architects and designers in history.	Digital photography Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay). Food technology – fruit punch and Mayan feast Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	Digital collage Using a digital photograph of themselves, make a digital montage in the style of Andy Warhol’s ‘Marilyn Monroe’ prints. Create an electronic time capsule that reflects the present day. Use internet search engines to find relevant examples of images and music and download them. Capture images of everyday objects and familiar places.
Longitudinal Study Ongoing learning	Observing seasons / measuring temperature through the year Identifying and explaining changes in plants				

We have used the Cornerstone curriculum checker, the cornerstone gap analysis and the National Curriculum to ensure correct coverage.

Each half term we will focus on two main areas with Art/DT and science running alongside other areas for most of the year.