



## Year 6 Long Term Objective Plan 2016-17



### Objectives covered through-out the year

#### Science-

##### Sc5/1 Working Scientifically

Sc5/1.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Sc5/1.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision

Sc5/1.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs

Sc5/1.4 using test results to make predictions to set up further comparative and fair tests

Sc5/1.5 reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations

Sc5/1.6 identifying scientific evidence that has been used to support or refute ideas or arguments.

Ar2/1.1 to create sketch books to record their observations and use them to review and revisit ideas

Ar2/1.2 to improve their mastery of art and design techniques, including drawing, painting and sculpture with [a range of materials](#)

Ar2/1.3 about great artists, architects and designers in history

#### DT2/1.1 Design

DT2/1.1a 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

DT2/1.1b generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

#### DT2/1.2 Make

DT2/1.2a select from and use a wider range of tools and equipment to perform [practical tasks](#) accurately

DT2/1.2b 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

#### DT2/1.3 Evaluate

DT2/1.3a investigate and analyse a range of existing products

DT2/1.3b evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

DT2/1.3c understand how key events and individuals in design and technology have helped shape the world



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### DT2/1.4 Technological Knowledge

- DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- DT2/1.4b understand and use **mechanical systems** in their products
- DT2/1.4c understand and use **electrical systems** in their products
- DT2/1.4d apply their understanding of computing to programme, monitor and control their products

Autumn 1 <b>The Vile Victorians</b> <b>Performance</b>	Spring 1 <b>Extreme Earth</b> <b>Global Dimension</b>	Summer 1 <b>All Change!</b> <b>Enterprise</b>
<p>Hi2/2.2 Extended chronological study Pupils should be taught a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066</p> <p><b>Sc6/2.3 Evolution</b> Sc6/2.3a recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago Sc6/3.2b recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents Sc6/2.3c identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p>Ar2/1.3 about great artists, architects and</p>	<p><b>Sc6/4.1 Light</b> Sc6/4.1a recognise that light appears to travel in straight lines Sc6/4.1b use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye Sc6/4.1c explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes Sc6/4.1d use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</p> <p>Ge2/1.1 Locational Knowledge Ge2/1.1a locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their</p>	<p>DT2/1.4 Technological Knowledge DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures DT2/1.4b understand and use <b>mechanical systems</b> in their products DT2/1.4c understand and use <b>electrical systems</b> in their products DT2/1.4d apply their understanding of computing to programme, monitor and control their products.</p>



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<p>designers in history.</p> <p>Co2/1.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <p>Co2/1.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	<p>environmental regions, key physical and human characteristics, countries, and major cities</p> <p>Ge2/1.1b name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time</p> <p>Ge2/1.1c 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>DT2/1.1 Design</p> <p>DT2/1.1a 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>DT2/1.1b 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>DT2/1.2 Make</p> <p>DT2/1.2a select from and use a wider range of tools and equipment to perform <b>practical tasks</b> accurately</p> <p>DT2/1.2b select from and use a wider range</p>	
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	<p>of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>DT2/1.3 Evaluate</p> <p>DT2/1.3a investigate and analyse a range of existing products</p> <p>DT2/1.3b evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>DT2/1.3c understand how key events and individuals in design and technology have helped shape the world</p> <p>Mu2/1.3 listen with attention to detail and recall sounds with increasing aural memory</p> <p>Mu2/1.5 appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians</p> <p>Co2/1.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Co2/1.6 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>	
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Autumn 2 Who was Anne Community and Sustainability	Spring 2 Superheroes Leadership	Summer 2 Lakeland Lairs (Local Study) The world of work
<p><b>Sc6/2.1 Living Things and their habitats</b>            Sc6/2.1a 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            Sc6/2.1b give reasons for classifying plants and animals based on specific characteristics.</p> <p>Co2/1.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration</p>	<p><b>Sc6/4.2 Electricity</b>            Sc6/4.2a associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit            Sc6/4.2b compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches            Sc6/4.2c use recognised symbols when representing a simple circuit in a diagram.</p> <p>Co2/1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output            Co2/1.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p>.Hi2/2.1 Local History            Pupils should be taught about an aspect of local history</p> <p>Ge2/1.2 Place Knowledge            Ge2/1.2a understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region in North or South America            Ge2/1.3 Human and Physical Geography            Ge2/1.3a describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle            Ge2/1.3b 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            Ge2/1.4 Geographical Skills and Fieldwork            Ge2/1.4a use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied            Ge2/1.4b use the 8 points of a compass, 4 and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United</p>



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