

Objectives

Creative curriculum activity

**Maths**

Pupils should be taught to:

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

**Science**

**Working scientifically**

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting 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
- identifying scientific evidence that has been used to support or refute ideas or arguments.

**Year 5**

**Living things and their habitats**

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- describe the life process of reproduction in some plants and animals.

**Properties and changes of materials**

- compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- demonstrate that dissolving, mixing and changes of state are reversible changes

**Year 6**

**Living things and their habitats**

Pupils should be taught to:

Launch  
 Show clips from Cast Away film  
 Questions KWL  
 Island ID cards – 3 essential items

Information sheets about different uninhabited islands. A3 ‘thought showers’ – ideas about what they will see hear feel, smell etc on the they are deserted on.

Descriptive poem about The Island (senses)  
 Use a model that includes all senses in the descriptions

Observational drawings of things they might see on their Island (Galapagos as inspiration). Animals, vegetation etc  
 LEAD BY HE/HJ

Create a fact-file about their island  
 Animals  
 Vegetation  
 Climate/weather  
 Terrain  
 Water sources  
 Hazards  
 LEAD BY AK/STAYLOR

Create a map of the island (in the style of a treasure map). Including references.  
 LEAD BY RA/GS

Show clip of Madagascar (the part where they are on the beach)  
 What is survival?  
 Maps and atlases to find Madagascar and other islands  
 In class debate – four elements (fire, food, shelter, water)

<p>humans</p> <p><b>Evolution &amp; Inheritance</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</li> <li>• recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</li> <li>• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</li> </ul>	<p>Water investigations (turning salt water into drinking water) (collecting water from leaves)</p>
<p><b>Geography</b></p> <p>Locational knowledge</p> <ul style="list-style-type: none"> <li>• locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities</li> <li>• 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</li> <li>• 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)</li> </ul>	<p>Plastic recycling Litter picking Designing and making survival tools from plastic waste</p>
<p>Place knowledge</p> <ul style="list-style-type: none"> <li>• 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 within North or South America Human and physical geography</li> <li>• describe and understand key aspects of:</li> <li>• physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle</li> <li>• 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</li> </ul>	<p>Trip to Hardwick park (Den building/fire making etc)</p>
<p>Geographical skills and fieldwork</p> <ul style="list-style-type: none"> <li>• use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</li> <li>• 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 Geography 187</li> <li>• 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.</li> </ul>	<p>Steve Backshall Top trumps cards for animals on the island</p>

<p>discerning in evaluating digital content</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> </ul>	<p>Non-fiction text about the animals on the island</p>
<p><b>Design &amp; Technology</b></p>	
<p>Design</p>	
<ul style="list-style-type: none"> <li>• 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</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>	<p>Moana Message in a bottle</p>
<p>Make</p>	<p>Advert for a companion – Wilson from castaway</p>
<ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</li> <li>• 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</li> </ul>	<p>Ways of communicating</p>
<p>Evaluate</p>	
<ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul>	<p>Plant investigation – conditions for growing plants</p>
<p>Technical knowledge</p>	
<ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>• understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>• understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>• apply their understanding of computing to program, monitor and control their products</li> </ul>	<p>Making plastic instruments to for mental stimulation</p>
<p><b>Music</b></p>	
<ul style="list-style-type: none"> <li>• perform, listen to, review and evaluate music across a range of historical periods, genres, styles and traditions, including the works of the great composers and musicians</li> <li>• learn to sing and to use their voices, to create and compose music on their own and with others, have the opportunity to learn a musical instrument, use technology appropriately and have the opportunity to progress to the next level of musical excellence</li> </ul>	