



## Year 5 and 6 Curriculum Objectives Overview



	Year 5	Year 6
Autumn Community and Inheritance	<p><b>Local History:</b> A study of how Launceston was connected to the rest of the United Kingdom through the railway network. The history of the railway in Launceston and Cornwall. The Beeching report Launceston's subsequent removal from the network. How is the land used now?</p> <p><b>Geography:</b> Look at all the counties of England, the county capitals, what major land use each had and what they produced and shipped by rail to other parts of the country.</p> <p>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><b>Biology: Living things and their habitats.</b> 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. (Rosemoor Visit for life cycle of plants).</p> <p><b>Physics: Forces</b> Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p><b>DT: Construction/mechanisms.</b></p>	<p><b>Local History – Cornwall at War:</b> Study of aspect/ themes of British History- WW2 When and why did WW2 start? Which countries were involved? Who were the main leaders? What was the Blitz and how did this enable the Battle of Britain to become a significant turning point? How did people protect themselves during the war- including evacuation? How was Cornwall affected by the war? What role did it play? - locations across Cornwall (TRIP to Cornwall at war museum – Davidstow)</p> <p><b>Geography fieldwork:</b> Study of rivers, Boscastle and flood. Study, locate and name world and local rivers, including identifying human use and impact upon them. Features of a river – source to mouth (build on previous learning of the water cycle) Use fieldwork (Trips to Boscastle and town) to observe, measure and record the human and physical features of the river and surrounding local area using a range of methods, including sketch maps, plans and graphs and digital technologies.</p> <p><b>Biology: Living things and their habitats</b> Learn how to classify living things by different criteria, how animals adapt to their environment and their diet. We will further develop our learning through the use of classification keys, based on the work of the scientist Carl Linneus. We will also learn how to plan and evaluate Scientific investigations when learning about good and bad micro-organisms.</p> <p><b>Biology: Evolution and inheritance.</b> We will learn how certain characteristics are inherited and others are learnt.</p>

	<p>To know how mechanical system such as cams, pulleys or gears create movement.</p> <p>To know how to reinforce and strengthen a 3D framework.</p> <p>Generate a range of ideas after collating relevant information</p> <p>Produce a detailed plan with step-by-step instructions, cross sectional diagrams and prototypes.</p> <p>Suggest alternative plans, considering the positive aspects and drawbacks of each. Use a range of tools and equipment expertly. Use sheet materials and construction tools with appropriate supervision.</p> <p>Consider the aesthetic qualities and functionality of my work when making.</p> <p>Evaluate the appearance and function of a product against the original criteria, saying whether it is fit for purpose.</p> <p>Suggest improvements that could be made, considering materials and methods that have been used.</p> <p>Art: Drawing. Learn to:</p> <p>Use a pencil to create line, tone, texture and pattern,</p> <p>Create a collage of pencil drawings,</p> <p>Use chalk on black and charcoal on white paper to create observational drawings,</p> <p>Use water soluble fine liners to make observational drawings &amp; wash techniques,</p> <p>Design a label appropriate for an item – clear and eye-catching,</p> <p>Create a still life in the style of a well-known artist,</p>	<p>DT Cooking: Bread-making, hob savoury dipping options. Bread played an important role as a staple food during the war –</p> <p>Use a range of information to inform design (e.g. origins, market research using surveys, interviews, questionnaires or web-based resources).</p> <p>Produce a detailed plan, with cross-sectional diagrams. Use a range of tools and equipment precisely. Consider the aesthetic qualities and functionality of product as making it, refining details as necessary. Evaluate the appearance and test the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. Suggest improvements that could be made, considering materials, methods, sustainability of the product. Know that a recipe can be adapted by adding or substituting one or more ingredients and how food is processed into ingredients that can be eaten or used in cooking. Recognise that recipes can be adapted to change the appearance, taste, texture and aroma. Cut, mix, mould and use hobs safely to heat food.</p> <p>Art: Drawing: Learn to: Observe &amp; record human bodies through a range of experiences:</p> <ul style="list-style-type: none"> <li>-Line, shape, form and texture of a hand</li> <li>- Complete a half portrait using charcoal and chalk creating texture</li> <li>- Quick-figure drawings from observation in fine and bold media</li> <li>-Produce a distorted portrait in the style of a well-known artist</li> </ul>
<p>Innovation and Sources</p>	<p>Ancient Greece- Myths and Legends – a study of Greek life and achievements and their influence on the western world.</p> <p>What is the legacy of the Ancient Greek civilisation? Study the lives of significant individuals who contributed to national and international achievements. Sequence with independence the key events, objects, themes, societies and people covered using dates, period labels and terms.</p> <p>Study a region of the Americas: West Indies.</p> <p>Locate the world's countries.</p>	<p>A non-European Society that provides contrast with British History – The Mayan Civilisation</p> <p>When was the Mayan Civilisation established? How did their way of life, culture and traditions compare to Britain at that time- c AD900? How did they communicate and trade between tribes. What factors influenced the way they lived? Exploration and trade links.</p> <p>Sequencing the Past- Sequence with independence the key events, objects, themes, societies and people using dates, period labels and terms. Make comparisons between different times in the past.</p> <p>Change and Development - then/now (link human geog)</p>

Identify the position and significance of lines of longitude & latitude. equator, hemisphere, biomes, vegetation, land use. Understand geographical similarities and differences through the study of human and physical geography of a region within North America.

Describe and understand key aspects of:

physical geography, including: climate zones, biomes and vegetation belts.

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.

**Physics: Earth and Space.**

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

**Biology: Animals including humans.**

Describe the changes as humans develop to old age.

**Food technology: Cooking savoury dishes from Jamaica.**

Healthy diet – Compare the Eatwell plates for Jamaica and the United Kingdom. (Link to Geography biomes, vegetation, climate and land use).

Cut, mix, mould and use ovens to heat food (with appropriate supervision) and know how to use an oven safely.

- To know that seasons may affect the food available.
- To know that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

**Art: Painting.**

Mix paint to match the colours in real objects

Make a realistic collage using paint

Use thick paint, applying with a spatula in the style of a well-known artist

Design a class alphabet showing a variety of paint techniques

Ask and answer historically valid questions about change, similarity and difference between Mayan and British society at that time noting connections, contrasts and trends over time.

Study a region of the Americas – 'Mesoamerica' (**Mexico**, Guatemala, El Salvador, western Honduras and Belize. Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region within the Americas. 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, food, minerals and water. Study the physical geography and land use of the region in comparison to the UK including key topographical features (e.g hills, mountains, coasts and rivers), land-use patterns and understand how some of these aspects have changed over time. Use maps, atlases, globes and digital/computer mapping to locate countries, find out data. Locate major cities of the region and make economic comparisons based on human features.

**Physics: Electricity – investigating circuits**

Learn about how to associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. 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 Use recognised symbols when representing a simple circuit in a diagram.

**Physics: Light/ Science week.**

A study of Light and Shadows and the Eye. Learn that light appears to travel in straight lines. 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, 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. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

	<p>Design a logo which represents the name, colour &amp; products of a given shop.</p>	<p><b>DT – Construction and mechanisms</b>          Use electrical systems in own products. Use a range of information to inform design (e.g. origins, examine existing products, analyse how products move or are structured or how to strengthen structures and systems). Produce a detailed plan, with cross-sectional diagrams. Use a range of tools and equipment precisely. Consider the aesthetic qualities and functionality of product as making it, refining details as necessary. Evaluate the appearance and test the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. Suggest improvements that could be made, considering materials, methods, sustainability of the product. Explore how mechanical system such as cams, pulleys or gears create movement. Know that mechanical and electrical systems have an input, process and output. Understand how simple electrical circuits and components can be used to create functional products. Know how to use saws, hammers, drills, nails and screws safely. Use simple electrical circuits and components in the product.</p> <p><b>Art: Painting Learn to:</b>          -Product a portrait using tones of grey which emphasise the dark and light of the head          - Use a spatula or different brush thicknesses to apply paint &amp; create texture          - Mix colours to match the subtle colour of someone or something          - Produce a painting that captures the colour, tone and texture of an object          - Design and paint an object, creating humour in the design.</p>
<p>Trade and Exploration</p>	<p>British Settlements- The Viking and Anglo-Saxon Struggle for the Kingdom of England to the time of Edward the Confessor          Why did the Vikings invade Britain? How did people resist Viking invasion? How and when did the invaders become Christians? What can archaeology tell us about the invaders? How are we to interpret the historical sources, including surviving primary sources? Chronologically secure knowledge and understanding of British, local and world history. Can sequence with independence the key events, objects, themes, societies and people covered using date,</p>	<p>A study of an aspect or theme in British History that extends pupil chronological knowledge beyond 1066 –the turbulent Tudors.          Who was Henry VIII and how did he become King? What factors lead to his divorce from Catherine of Aragon? What impact did decisions made by Henry have on the people of Britain? What can different sources tell us about the past and how trustworthy are they? Why was Edward known as a 'Puppet King'? How did Mary I's beliefs contrast to those of her predecessors? How did she become so unpopular? Why was Elizabeth's reign referred to as The Golden Age in comparison to her sister?</p>

period labels and terms. Make comparisons between different times in the past.

Use 4 digit and 6 figure grid references on OS maps.

Use 8 figure compasses, begin to use 6 figure grid references.

Compare maps with aerial photographs.

Follow a short route on an OS map. Describe the features shown on an OS map. Draw a sketch map using symbols and a key. Use and recognise OS map symbols regularly.

**Chemistry: 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. Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

**Textiles: Viking product sewing. Create a Viking style purse.**

To know how to use a fabric pattern.

To understand the importance of pinning and tacking fabrics.

Generate a range of ideas after collating relevant information

Suggest alternative plans, considering the positive aspects and drawbacks of each.

Use a range of tools and equipment expertly. Pin and tack fabrics, use patterns and seam allowances and join fabrics to make products.

Consider the aesthetic qualities and functionality of my work when making.

Know key dates characters and events of time studied. Provide overviews and examine causes of events in history for individuals and societies. Use Sources as Evidence.

Human geography of the UK and local area, including land use, economic activity, distribution of natural resources including energy. A study of Windfarms as a sustainable source of energy.

Name and locate counties and cities of the United Kingdom. Study geographical regions and their identifying human and physical characteristics, including key topographical features (e.g. hills, mountains, coasts and rivers), land-use patterns and understand how some of these aspects have changed over time. How do these aspects influence the possible emergence of renewable energy sources? Use maps and digital imaging to locate the distribution of windfarms across the country – identifying links to physical geography of regions.

**Biology: Animals including humans.**

Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

Recognise the impact of diet, exercise, drugs and lifestyle on the way their body's function

Describe the ways in which nutrients and water are transported within animals, including humans

**DT - Textiles: Combination of fabric shapes. To know that a 3D textiles product can be made from a combination of fabric shapes.**

Use a range of information to inform design (e.g. magazines, digital media, examine existing products, analyse how products are structured or how to create effects – add pockets, poppers, a zip). Produce a detailed plan, with cross-sectional diagrams and annotations. Use a range of sewing tools and equipment safely and precisely. Consider the aesthetic qualities and functionality of product as making it, refining details as necessary. Evaluate the appearance and test the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. Suggest improvements that could be made, considering materials, methods, sustainability of the product.

	<p>Evaluate the appearance and function of a product against the original criteria, saying whether it is fit for purpose. Suggest improvements that could be made, considering materials and methods that have been used.</p> <p>Art: Printing. Creating a Viking style rune of own design and creating a printing block for the DT textile.</p> <p>Learn to:</p> <ul style="list-style-type: none"><li>- Create mood with a transfer print using line and colour</li><li>- Create a press print from observational drawing, enhancing mood with line and colour</li><li>- Create a successful mono-print from an observation line drawing</li><li>- Use plastic to make an interesting print block with various textures</li><li>- Use plastic print block to create a distorted image</li></ul>	<p>Pin and tack fabrics, use patterns and seam allowances and join fabrics to make quality products. Based upon WW2 'Mend and make do', design and make new products from old. Generate, develop, model and communicate ideas through discussion, annotated sketches and cross-sectional diagrams.</p> <p>Art: 3D</p> <p>Learn to:</p> <ul style="list-style-type: none"><li>- Design objects using paintings as inspiration</li><li>- Form curved &amp; straight sided blocks out of clay</li><li>- Blend shapes of clay carefully &amp; effectively to make a larger object</li><li>- Cut and model clay to required shape &amp; texture</li><li>- Combine cardboard &amp; papier mache to create a carefully made sculpture creating mood through colour</li></ul>
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