



Neroche Community Primary School Year 5 Topic and Science Programmes 2020-2021



Topics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic Title	Marvellous Maps (All Around the World)	Majestic Mayans	Fantastic Fairgrounds	Vicious Vikings	Rivers	Japanese Art – Kensuke’s Kingdom
Curriculum Area	Geography	History	DT	History	Geography	Art
Objectives	<ul style="list-style-type: none"> ♣ 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) ♣ use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied ♣ 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 	<ul style="list-style-type: none"> ♣ a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300. 	<p>Design</p> <ul style="list-style-type: none"> ♣ 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 ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p>Make</p> <ul style="list-style-type: none"> ♣ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ♣ 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 <p>Evaluate</p> <ul style="list-style-type: none"> ♣ investigate and analyse a range of existing products ♣ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <p>Technical knowledge</p> <ul style="list-style-type: none"> ♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures 	<ul style="list-style-type: none"> ♣ the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor <p>Examples (non-statutory) This could include: Viking raids and invasion resistance by Alfred the Great and Athelstan, first king of England further Viking invasions and Danegeld Anglo-Saxon laws and justice</p>	<ul style="list-style-type: none"> ♣ 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 ♣ 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>Pupils should be taught:</p> <ul style="list-style-type: none"> ♣ to create sketch books to record their observations and use them to review and revisit ideas ♣ to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] ♣ about great artists, architects and designers in history.

Science

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Scientific Enquiry Skills	Properties and changes of materials	Animals including humans	Living things and their habitats	Earth and Space	Forces
<p>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:</p> <ul style="list-style-type: none"> - 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. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> - 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. 	<p>Pupils should be taught to:</p> <p>describe the changes as humans develop to old age.</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • 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. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> - 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. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> - 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.

