



SCIENCE	
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.
Animals (Including Humans)	Describe the changes as humans develop to old age.
Forces	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.
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 of Changing 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.
Working Scientifically	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.
	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
	Use test results to make predictions to set up further comparative and fair tests.
	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.
	Identify scientific evidence that has been used to support or refute ideas and arguments.
COMPUTING	
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	
Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	
Use logical reasoning to explain how simple algorithms work and to detect and correct errors in algorithms and programs.	
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.	
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	
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.	
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	
MUSIC	
Play and perform in sole and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression.	
Improvise and compose music for a range of purposes using the interrelated dimensions of music.	
Listen with attention to detail and recall sounds with increasing aural memory.	
Use and understand staff and other musical notation.	
Appreciate and understand a range of high quality live and recorded music drawn from different traditions and from great composers and musicians.	
Develop and understand of the history of music.	
ART & DESIGN	
Create sketch books to record their observations and use them to review and revisit ideas.	
Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (eg pencil, charcoal, paint, clay).	
Find about great artists, architects and designers in history.	
+RELIGIOUS EDUCATION THEMES	
Life after death, World Action, Beliefs, Christmas, Easter, Community	

GEOGRAPHY	
Human and Physical Knowledge	Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.
	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.
Locational Knowledge	Locate the world's countries, using maps to focus on Europe (including Russia) and North and South America, concentrating of their environmental regions, key physical and human characteristics, countries and major cities.
	Name and locate countries and cities of the UK, 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.
	Identify the position and significance of latitude, longitude, Equator, Northern and Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).
Place Knowledge	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.
Geographical Skills and Fieldwork	Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
	Use eight points of the 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.
	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.
HISTORY	
Learn about the achievements of the earliest civilisations: an overview of where and when the first civilisations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China.	
DESIGN & TECHNOLOGY	
Cooking and Nutrition	Understand and apply principles of a healthy and varied diet.
	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Design	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.
Evaluate	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.
	Understand how key events and individuals in design and technology have helped shaped the world.
Make	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.
Technical Knowledge	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
	Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].
	Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
	Apply their understanding of computing to program, monitor and control their products.
PE	
Use running, jumping, throwing and catching in isolation and in combination.	
Play competitive games, modified where appropriate and apply basic principles suitable for attacking and defending.	
Develop flexibility, strength, technique, control and balance.	
Perform dances using a range of movement patterns.	
Take part in outdoor and adventurous activity challenges both individually and within a team.	
Compare their performance with previous ones and demonstrate improvement to achieve their personal best.	