



# Year 4 Overview Curriculum Objectives

## Science

- Living things & their habitats - recognise that living things can be grouped in a variety of ways
- Living things & their habitats - explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Living things & their habitats - recognise that environments can change and that this can sometimes pose dangers to living things.
- Animals, inc humans - describe the simple functions of the basic parts of the digestive system in humans
- Animals, inc humans - identify the different types of teeth in humans and their simple functions
- Animals, inc humans - construct and interpret a variety of food chains, identifying producers, predators and prey.
- States of matter - compare and group materials together, according to whether they are solids, liquids or gases
- States of matter - observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
- States of matter - identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
- Sounds - identify how sounds are made, associating some of them with something vibrating
- Sounds - recognise that vibrations from sounds travel through a medium to the ear
- Sounds - find patterns between the pitch of a sound and features of the object that produced it
- Sounds - find patterns between the volume of a sound and the strength of the vibrations that produced it.
- Sounds - recognise that sounds get fainter as the distance from the sound source increases
- Electricity - identify common appliances that run on electricity
- Electricity - construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- Electricity - identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- Electricity - recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- Electricity - recognise some common conductors and insulators, and associate metals with being good conductors.

## Working scientifically:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings.

## Music

- play and perform in solo 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 inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- develop an understanding of the history of music.

## History - *Romans, Egyptians and Mayans*

Pupils should be taught about the Roman Empire and its impact on Britain

*This could include:*

- Julius Caesar's attempted invasion in 55-54 BC*
- the Roman Empire by AD 42 and the power of its army*
- successful invasion by Claudius and conquest, including Hadrian's Wall*
- British resistance, for example, Boudica*
- "Romanisation" of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity*

Pupils should be taught about the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of Ancient Egypt.

Pupils should be taught about a non-European society that provides contrasts with British history - one study chosen from:

DT – design a - 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  
DT – design b - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design  
DT – make a - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately  
DT – make b - 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  
DT – evaluate a - investigate and analyse a range of existing products  
DT – evaluate b - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work  
DT – evaluate c - understand how key events and individuals in design and technology have helped shape the world  
DT – technical a - apply their understanding of how to strengthen, stiffen and reinforce more complex structures  
DT – technical b - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]  
DT – technical c - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]  
DT – technical d - apply their understanding of computing to program, monitor and control their products.  
DT – cooking a - understand and apply the principles of a healthy and varied diet  
DT – cooking b - prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  
DT – cooking c - understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

## 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 performances with previous ones and demonstrate

## Geography - *Earthquakes, jungles and mega cities*

Locational Knowledge:

- Locate the main countries of Europe incl. Russia. Identify capital cities of Europe.
- On a world map, locate areas of similar environmental regions, either desert, rainforest or temperate regions.
- Identify the largest deserts and cities in the world and compare with the UK.
- Identify the position and significance of Equator, N. and S. Hemisphere, Tropics of Cancer and Capricorn.

Place Knowledge:

- Compare a region of the UK with a region in Europe, e.g. Local, hilly area with a flat one or under sea level.

Human & Physical:

- Describe and understand key aspects of: Physical geography, including: climate zones, biomes and vegetation belts (link to work on Rainforest) and earthquakes, looking at plate tectonics and the ring of fire.
- Types of settlements in Celtic/Roman Britain linked to History.
- Human geography including trade links in the Pre-roman and Roman era.

Geographical skills & field work:

- Use maps, atlases, globes and digital/computer mapping (Google Earth) to locate countries and describe features studied.
- Learn the eight points of a compass, four-figure grid references.
- Use fieldwork to observe and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

## Computing

Programming 1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  
Programming 2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output  
Programming 3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs  
Networks 1 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  
Networks 2 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content  
Multimedia 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.  
Online safety use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

## Art

- 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
- about great artists, architects and designers in history.