



Year 3 Overview Curriculum Objectives

Science

- Plants - identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- Plants - explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- Plants investigate the way in which water is transported within plants
- Plants - explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
- Animals, inc humans - identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- Animals, inc humans - identify that humans and some other animals have skeletons and muscles for support, protection and movement.
- Rocks - compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- Rocks - describe in simple terms how fossils are formed when things that have lived are trapped within rock
- Rocks - recognise that soils are made from rocks and organic matter.
- Light - recognise that they need light in order to see things and that dark is the absence of light
- Light - notice that light is reflected from surfaces
- Light - recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- Light - recognise that shadows are formed when the light from a light source is blocked by a solid object
- Light - find patterns in the way that the size of shadows change.
- Forces & magnets - compare how things move on different surfaces
- Forces & magnets - notice that some forces need contact between 2 objects, but magnetic forces can act at a distance
- Forces & magnets - observe how magnets attract or repel each other and attract some materials and not others
- Forces & magnets - compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- Forces & magnets - describe magnets as having 2 poles
- Forces & magnets - predict whether 2 magnets will attract or repel each other, depending on which poles are facing.

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 - *Stone Age, Bronze Age and Iron Age and the Victorians.*

Pupils should be taught about changes in Britain from the Stone Age to the Iron Age

This could include:

- late Neolithic hunter-gatherers and early farmers, for example, Skara Brae
- Bronze Age religion, technology and travel, for example, Stonehenge
- Iron Age hill forts: tribal kingdoms, farming, art and culture

Pupils should be taught about an aspect of local history

- a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.

Pupils should be taught a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066

DT

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 improvement to achieve their personal best.

Geography - *local area, sustainability, magic kingdom.*

Locational Knowledge:

- Locate the main countries in Europe and North or South America. Identify their main environmental regions, key physical and human characteristics, and major cities.
- Compare two different regions in UK rural/urban.
- Linking with local History, map how land use has changed in local area over time.
- Identify the position and significance of Equator, N. and S. Hemisphere, Tropics of Cancer and Capricorn

Place Knowledge:

- 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 & Physical:

- Describe and understand key aspects of: Physical geography including Rivers and the water cycle, excluding transpiration, brief introduction to Volcanoes and earthquakes linking to Science: rock types.
- Types of settlements in Early Britain linked to History. Why did early people choose to settle there?

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, 2 figure grid reference (maths coordinates), some basic symbols and key (including the use of a simplified Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- 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.