

Science

Biology

Plants

Look at the function of parts of flowering plants, requirements of growth, water transportation in plants, life cycles and seed dispersal.

Evolution and inheritance

Animals and humans

Look at nutrition, transportation of water and nutrients in the body, and the muscle and skeleton system of humans and animals.

All living things

Identify and name plants and animals'

Look at the life cycle of animals and plants.

Look at reproduction in plants and animals, and human growth and changes.

Chemistry

States of matter

Look at solids, liquids and gases, changes of state, evaporation, condensation and the water cycle.

Materials

Examine the properties of materials using various tests.

Look at solubility and recovering dissolved substances.

Separate mixtures.

Examine changes to materials that create new materials that are usually not reversible.

Physics

Forces and magnets

Look at the effect of gravity and drag forces.

Look at transference of forces in gears, pulleys, levers and springs.

Earth and space

Look at the movement of the Earth and the Moon.

Explain day and night.

Working Scientifically

Across all year groups scientific knowledge and skills should be learned by working scientifically. (This is documented in the Essentials for progress section.)

Art & Design

Use experiences, other subjects across the curriculum and ideas as inspiration for artwork.

Develop and share ideas in a sketchbook and in finished products.

Improve mastery of techniques.

Design & Technology

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.

Make

Select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately.

Technical knowledge

Apply their understanding of computing to programme, monitor and control their products.

Cooking and nutrition

Understand and apply the principles of a healthy and varied diet.

Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

Geography

Locate the world's countries, with a focus on Europe and countries of particular interest to pupils.

Locate the world's countries, with focus on North and South America and countries of particular interest to pupils.

Identify key geographical features of the countries of the United Kingdom, and show an understanding of how some of these aspects have changed over time.

Locate the geographic zones of the world.

Understand geographical similarities and differences through the study of human and physical geography of a region or area of the United Kingdom (different from that taught at Key Stage 1).

Understand geographical similarities and differences through the study of human and physical geography of a region or area in a European country.

Describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle

- human geography, including: settlements, land use, economic activity including trade links and the distribution of natural resources including energy, food, minerals and water supplies.

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

Use the eight points of a compass, four-figure grid references, symbols and keys (including the use of Ordnance Survey maps) to build knowledge of the United Kingdom and the world.

Use a wide range of geographical sources in order to investigate places and patterns.

Use fieldwork to observe, measure 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.

History

The Viking and Anglo Saxon struggle for the Kingdom of England.

Ancient Greece.

Language

In the chosen modern language:

- Speak
- Read
- Write.

Look at the culture of the countries where the language is spoken.

Music

Play and perform in solo and ensemble contexts, using voice and playing instruments with increasing accuracy, control and expression.

Improvise and compose music using the inter-related dimensions of music separately and in combination.

Personal Development

Discuss and learn techniques to improve in the eight areas of 'success'.

Study role models who have achieved success.

Study those who have lost success and relate this to the eight areas of 'success'.

Physical Education

Play competitive games, modified where appropriate, such as football, netball, rounders, cricket, hockey, basketball, badminton and tennis and apply basic principles suitable for attacking and defending.

Take part in gymnastics activities.

Take part in athletics activities.

Perform dances.

Take part in outdoor and adventurous activity challenges both individually and within a team.
