

Science

Biology

Animals and humans

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

Look at the human circulatory system.

Evolution and inheritance

Look at resemblance in offspring.

Look at changes in animals over time.

Look at adaptation to environments.

Look at differences in offspring.

Look at adaptation and evolution.

Look at changes to the human skeleton over time.

All living things

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

Look at the effect of diet, exercise and drugs.

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.)

Physics

Electricity

Look at appliances, circuits, lamps, switches, insulators and conductors.

Look at circuits, the effect of the voltage in cells and the resistance and conductivity of materials.

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.

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.

Make

Select from and use a wider range of tools and equipment to perform practical tasks, such as 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.

Evaluate

Investigate and analyse a range of existing products.

Technical knowledge

Understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages.

Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors.

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

Understand geographical similarities and differences through the study of the human and physical geography of a region or area within North or South America.

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 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

A local history study.

A non-European society that contrasts with British history chosen from:

- Early Islamic Civilization
- Mayan Civilization
- Benin.

History of interest to pupils.

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.

Use and understand the basics of the stave and other musical notations.

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.