

Geography

Study at a range of scales: Local, regional and national.

Study a range of places beyond immediate locality (e.g. UK, Europe).

Carry out fieldwork investigations outside the classroom.

History

How an aspect in the local area has changed over time, or how the locality was changed by a significant event, or development or a significant individual.

Art & Design

Working independently and collaborating with others on projects in 2d and 3d and on different scales.

Using a range of materials and processes, including ICT (E.g. painting, collage, print making, digital media, textiles, sculpture).

Investigating different kinds of art, craft and design (E.g. in the locality, in original and reproduction form, during visits to museums, galleries and sites, on the internet).

Music

A range of musical activities that integrate performing, composing and appraising.

Responding to a range of musical and non-musical starting points.

Working independently and in groups of different sizes and as a class.

A range of live and recorded music from different times and cultures.

Design & Technology

Investigating and evaluating a range of familiar products, thinking about how they work, how they are used and the views of people who use them.

Focused Practical Tasks that develop a range of techniques, skills, processes and knowledge.

Designing and make products involving electrical and mechanical components.

Designing and make products involving mouldable materials.

Designing and make products involving stiff and flexible sheet materials.

Science*Life processes*

That the life processes common to humans and other animals include nutrition, movement, growth and reproduction.

That the life processes common to plants include growth, nutrition and reproduction.

To make links between life processes in familiar animals and plants and the environments in which they are found.

Nutrition

About the functions and care of teeth.

About the need for food for activity and growth, and about the importance of an adequate and varied diet for health.

Growth and reproduction

About the main stages of the human life cycle.

Health

About the effects on the human body of tobacco, alcohol and other drugs, and how these relate to their personal health.

About the importance of exercise for good health.

Variation and classification

To make and use keys.

How locally occurring animals and plants can be identified and assigned to groups.

That the variety of plants and animals makes it important to identify them and assign them to groups.

Living things in their environment

About ways in which living things and the environment need protection.

Adaptation

About the different plants and animals found in different habitats.

How animals and plants in two different habitats are suited to their environment.

Feeding relationships

To use food chains to show feeding relationships in a habitat.

About how nearly all food chains start with a green plant.

Micro-organisms

That microorganisms are living organisms that are often too small to be seen, and that they may be beneficial [for example, in the breakdown of waste, in making bread] or harmful [for example, in causing disease, in causing food to go mouldy].

Separating mixtures of materials

How to separate solid particles of different sizes by sieving [for example, those in soil]

That some solids [for example, salt, sugar] dissolve in water to give solutions but some [for example, sand, chalk] do not.

How to separate insoluble solids from liquids by filtering.

How to recover dissolved solids by evaporating the liquid from the solution.

To use knowledge of solids, liquids and gases to decide how mixtures might be separated.

Electricity

To construct circuits, incorporating a battery or power supply and a range of switches, to make electrical devices work [for example, buzzers, motors].

How changing the number or type of components [for example, batteries, bulbs, wires] in a series circuit can make bulbs brighter or dimmer.

How to represent series circuits by drawings and conventional symbols, and how to construct series circuits on the basis of drawings and diagrams using conventional symbols.

Forces and motion

About the forces of attraction and repulsion between magnets, and about the forces of attraction between magnets and magnetic materials.

That objects are pulled downwards because of the gravitational attraction between them and the Earth.

About friction, including air resistance, as a force that slows moving objects and may prevent objects from starting to move.

That when objects [for example, a spring, a table] are pushed or pulled, an opposing pull or push can be felt.

How to measure forces and identify the direction in which they act.

Light

That light travels from a source.

That light cannot pass through some materials, and how this leads to the formation of shadows.

That light is reflected from surfaces [for example, mirrors, polished metals].

Seeing

That we see things only when light from them enters our eyes.

Vibration and sound

That sounds are made when objects [for example, strings on musical instruments] vibrate but that vibrations are not always directly visible.

How to change the pitch and loudness of sounds produced by some vibrating objects [for example, a drum skin, a plucked string]

That vibrations from sound sources require a medium [for example, metal, wood, glass, air through which to travel to the ear.

Ideas and evidence in science

That it is important to test ideas using evidence from observation and measurement.

Planning

Ask questions that can be investigated scientifically and decide how to find answers.

Think about what might happen or try things out when deciding what to do, what kind of evidence to collect, and what equipment and materials to use.

Make a fair test or comparison by changing one factor and observing or measuring the effect while keeping other factors the same.

Obtaining and presenting evidence

Use simple equipment and materials appropriately and take action to control risks.

Make systematic observations and measurements, including the use of ICT for data logging.

Check observations and measurements by repeating them where appropriate.

Use a wide range of methods, including diagrams, drawings, tables, bar charts, line graphs and ICT, to communicate data in an appropriate and systematic manner.

Considering evidence and evaluating

Make comparisons and identify simple patterns or associations in their own observations and measurements or other data.

Use observations, measurements or other data to draw conclusions.

Decide whether these conclusions agree with any prediction made and/or whether they enable further predictions to be made.

Use scientific knowledge and understanding to explain observations, measurements or other data conclusions.

Physical Education

Dance activities

Create and perform dances using a range of movement patterns, including those from different times, places and cultures.

Respond to a range of stimuli and accompaniment.

Games activities

Use skills and tactics and apply basic principles suitable for attacking and defending.

Work with others to organise and keep the games going.

Gymnastics activities

Create and perform fluent sequences on the floor and using apparatus.

Include variations in level, speed and direction in their sequences.

Swimming activities and water safety

Pace themselves in floating and swimming challenges related to speed, distance and personal survival.

Swim unaided for a sustained period of time over a distance of at least 25m.

Use recognised arm and leg actions, lying on their front and back.

Use a range of recognised strokes and personal survival skills [for example, front crawl, back crawl, breaststroke, sculling, floating and surface diving].

Athletics activities

Take part in and design challenges and competitions that call for precision, speed, power or stamina.

Use running, jumping and throwing skills both singly and in combination.

Pace themselves in these challenges and competitions.

Outdoor and adventurous activities

Take part in outdoor activity challenges, including following trails, in familiar, unfamiliar and changing environments.

Work with others to meet the challenges.

ICT

Exploring information

Work with others to explore a variety of information sources and ICT (e.g. searching the internet, using variety of software, using a digital camera).

The use of ICT

Investigating and comparing the uses of ICT inside and outside school.

Finding things out:

Talk about what information they need and how they can find and use it.

Prepare information for development using ICT, including selecting suitable sources, finding information, classifying and checking.

Interpret information, to check it is relevant and reasonable and to think about what might happen if there were any errors or omissions.

Developing ideas and making things happen:

How to develop and refine ideas by bringing together, organising and reorganising, text tables, images and sound.

To create, test, improve and refine sequences of instructions to make things happen and to monitor events and respond to them.

Exchanging and sharing information:

To share and exchange information in various forms including email.

To be sensitive to the needs of the audience and think carefully about content and quality when communicating information.

Reviewing and evaluating work as it progresses:

Review what they and others have done to help them develop ideas.

Describe and talk about the effectiveness of their work with ICT, comparing it with other methods and considering the effect it has on others.

Talk about how they could improve future work.

PHSE & Citizenship

Developing confidence and responsibility and making the most of their abilities

To talk and write about their opinions, and explain their views, on issues that affect themselves and society.

To recognise their worth as individuals by identifying positive things about themselves and their achievements, seeing their mistakes, making amends and setting personal goals.

To face new challenges positively by collecting information, looking for help, making responsible choices, and taking action.

About the range of jobs carried out by people they know, and to understand how they can develop skills to make their own contribution in the future.

To look after their money and realise that future wants and needs may be met through saving.

Preparing to play an active role as citizens

To research, discuss and debate topical issues, problems and events.

Why and how rules and laws are made and enforced, why different rules are needed in different situations and how to take part in making and changing rules.

That there are different kinds of responsibilities, rights and duties at home, at school and in the community, and that these can sometimes conflict with each other.

To resolve differences by looking at alternatives, making decisions and explaining choices.

What democracy is, and about the basic institutions that support it locally and nationally.

To recognise the role of voluntary, community and pressure groups.

Where individuals, families and groups can get help and support.

To appreciate the range of national, regional, religious and ethnic identities in the United Kingdom.

That resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment.

To explore how the media present information.

Developing a healthier, safer lifestyle

What makes a healthy lifestyle, including the benefits of exercise and healthy eating, what affects mental health, and how to make informed choices.

That bacteria and viruses can affect health and that following simple, safe routines can reduce their spread.

About how the body changes as they approach puberty.

Which commonly available substances and drugs are legal and illegal, their effects and risks.

To recognise the different risks in different situations and then decide how to behave responsibly, including sensible road use, and judging what kind of physical contact is acceptable or unacceptable.

That pressure to behave in an unacceptable or risky way can come from a variety of sources, including people they know, and how to ask for help and use basic techniques for resisting pressure to do wrong.

School rules about health and safety, basic emergency aid procedures and where to get help.

Developing good relationships and respecting the differences between people

To think about the lives of people living in other places and times, and people with different values and customs.

To be aware of different types of relationship, including marriage and those between friends and families, and to develop the skills to be effective in relationships.

To realise the nature and consequences of racism, teasing, bullying and aggressive behaviours, and how to respond to them and ask for help.

To recognise and challenge stereotypes.

That differences and similarities between people arise from a number of factors, including cultural, ethnic, racial and religious diversity, gender and disability.