

Year 5 Coverage

SCIENCE

Living Things and their Habitats

describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

describe the life process of reproduction in some plants and animals. Plants

- observe and describe how seeds and bulbs grow into mature plants.
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Animals, including humans

- describe the changes as humans develop to old age.

Properties and changes of materials

- compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- demonstrate that dissolving, mixing and changes of state are reversible changes
- explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Earth and Space

- describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

Forces

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

HISTORY

Topics

Ancient Egyptians
Vikings and Anglo
Saxons to Edward the
Confessor
Whole School Topic

NC Links...

- The achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study into Ancient Egyptians.
- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor

GEOGRAPHY

Topics

Locating countries
around the World -
recognising flags/
Rainforest regions of
the World.
REGIONAL
COMPARISON

NC Links

Locational knowledge

- locate the world's countries, (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities

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 South America

Human and physical geography

<p>Compare and contrast a region in the UK to a region in South America</p> <p>Types of settlements and land use.</p>	<ul style="list-style-type: none"> • describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes • human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water <p><u>Geographical skills and fieldwork</u></p> <ul style="list-style-type: none"> • use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
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<u>RE</u>	
<p><u>Topics</u></p> <p>Why are some places and journeys special?</p> <p>What do Muslims believe about a good life?</p> <p>Should we forgive others?</p> <p>What matters most to believers?</p>	<p><u>NC Links...</u></p>

<u>ART</u>	
<p><u>Topics</u></p> <p>Painting</p> <p><i>Cubism – Pablo Picasso</i></p> <p>Digital Media</p> <p><i>Advertising - Peter Jaworowski</i></p> <p>Printing Textiles - Henry Matisse</p>	<p><u>NC Links</u></p> <ul style="list-style-type: none"> • 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 (e.g. pencil, charcoal, paint, clay) • about great artists, architects and designers in history.

DT

<u>Topics</u> Electrical systems Cooking - herby bread Mechanisms (levers and linkages) - an interactive exhibition Build structures	<u>NC Links</u> <u>Design</u> <ul style="list-style-type: none">• 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 <u>Make</u> <ul style="list-style-type: none">• 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 <u>Evaluate</u> <ul style="list-style-type: none">• investigate and analyse a range of existing products• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work• understand how key events and individuals in design and technology have helped shape the world Technical knowledge• apply their understanding of how to strengthen, stiffen and reinforce more complex structures• 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• apply their understanding of computing to programme, monitor and control their products
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COMPUTING

<u>Topics</u> Email/Blogging Creating a web page E-Safety	<u>NC Links</u> <ul style="list-style-type: none">• 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• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in
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	<p>evaluating digital content</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour • select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
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<u>PE</u>	
<p><u>Topics</u></p> <p>Volleyball Athletics Rounders Gymnastics Hockey Swimming</p>	<p><u>NC Links...</u></p> <ul style="list-style-type: none"> • 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. swim competently, confidently and proficiently over a distance of at least 25 metres • use a range of strokes effectively • perform safe self-rescue in different water-based situations.