

NATIONAL CURRICULUM CONTENT

TEACHING & LEARNING OUTCOMES

OTHER POINTS TO NOTE

Gateway to Europe

To include:

- **Science:** Living Things & Their Habitats
- **Science:** Animals, Including Humans
- **Geography:** Europe (Including Russia)
- **Design & Technology:** Moving Animals (Mechanisms)
- **Music:** International Composers and Ballet

Science

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.

Living Things & Their Habitats

- ✓ Recognise that living things can be grouped in a variety of ways
- ✓ Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- ✓ Recognise that environments can change and that this can sometimes pose dangers to living things.

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Animals, Including Humans

- ✓ Describe the simple functions of the basic parts of the digestive system in humans
- ✓ Identify the different types of teeth in humans and their simple functions
- ✓ Construct and interpret a variety of food chains, identifying producers, predators and prey.

Locational knowledge

- Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Human and physical geography

- 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: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world

- Use observations and keys to classify and identify a variety of natural objects found within a selection of habitats, for example, ponds, the seashore and woodlands.
- Ask yes/no questions to distinguish between different living things.
- Explore different types of trees, including deciduous, and plants; considering their similarities and differences and identifying possible patterns.
- Explore plants and animals within their habitats; understanding how habitats change throughout the year which can result in migration or hibernation.
- Collect and observe creatures found within the local environment.
- Devise a variety of simple classification keys to help group, identify and name a selection of living things.
- Know the main characteristics used to classify animals, flowering plants and non-flowering plants.
- Identify the characteristics of the five vertebrate groups; using to explain why an animal is a fish, amphibian, reptile, bird or mammal.
- Classify common land invertebrates; recognising the characteristics of snails and slugs, worms, spiders, and insects.
- Consider the impact that humans have upon their local and wider environment (Europe); identifying some positive (nature reserves, ecologically planned parks or garden ponds) and negative (population, development, litter or deforestation) ways that humans change their surroundings.
- Understand why it is important to dispose of waste responsibly and the impact different types of litter can have on wildlife.
- Consider and discuss the pros and cons of keeping animals within zoos.

- Know that animals, including humans, get nutrition from the food they eat.
- Identify the parts of the human digestive system, for example, mouth, tongue, teeth, oesophagus, stomach and small and large intestine; understanding the route food takes through the body.
- Understand that food can be broken down mechanically and chemically and then absorbed into the body, at different stages of the digestive process.
- Identify the organs in which food is broken down and what is removed.
- Explore the function of the different types of teeth that humans have, including incisors for cutting, canines for tearing and molars for grinding.
- Know how and why teeth differ in children and adults, carnivores and herbivores.
- Examine a range of ways to look after their teeth and explain why it is important to do so.
- Know that a food chain shows what different animals eat in a habitat and that the arrows show the flow of energy.
- Understand and identify which living thing are producers and consumers, predators and prey.
- Devise and interpret food chains for different habitats
- Recognise the impact humans can have on food chains stability.

- Know and locate the countries, capitals and flags of the United Kingdom.
- Know the location of different human and physical characteristics, including key topographical features, within and around the United Kingdom and Europe (including Russia), e.g. seas, mountains, deserts, rainforests, rivers, cities, language, religion, political system and landmarks.
- Explore how and why land-use may change over time.
- Identify the position of the Northern and Southern Hemispheres, the Equator, the topics of Cancer and Capricorn, and the Arctic and Antarctic circles; linking these to differences in climate.
- Understand how localities within the UK and Europe relate to each other, for example, distance and travel method.
- Know and locate countries within Europe (including Russia); identifying their renowned places, landmarks and flags.
- Understand some of the geographical similarities and differences of a variety of different European countries, including climate, biomes, nature (animals and plants) and time zones.
- Explore the environmental issues which affect the UK as well as Europe, and how catastrophic events (i.e. volcanic eruptions) can have global repercussions.
- Obtain information from atlases and maps.
- Use a compass to determine direction.

See Collins Connect 'Snap Science' Teaching Framework and Online Platform - <http://connect.collins.co.uk>

UNIT: *Our Changing World*
UNIT: *Who Am I?*
UNIT: *Human Impact*

See Collins Connect 'Snap Science' Teaching Framework and Online Platform - <http://connect.collins.co.uk>

UNIT: *Where Does All That Food Go?*

Possible Educational Visits:

- Barnet Countryside Centre
- Local Parks/Woodlands
- London Zoo
- Hampstead Heath
 - Heath Beasts & Heath Homes
 - Orienteering
 - Great Green Plant Adventure
 - Following Our Footprints

Geography

- Golders Hill Park
 - A Bird's Eye View
 - Heath Safari
 - The Plant Detectives
- Civic Amenity and Recycling Centre
- Dentist
- The Royal Ballet

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 [for example, 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
 - ✓ 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 [for example, gears, pulleys, cams, levers and linkages]

- Observe, research and investigate how animals move.
- Analyse a range of existing products (for example, toys) which use different mechanisms; identifying the materials and methods used during assembly.
- Apply what they have learnt through investigation to the design process.
- Present ideas clearly; using a variety of appropriate methods.
- Assemble and use a wide range of different materials, tools and equipment for cutting, shaping, joining and finishing a product which incorporates movement with the use of a mechanical system (e.g. cam, lever or pulley).
- Measure and mark out accurately; using sharp tools for cutting safely and effectively.
- Evaluate work and identify possible areas for improvement.

Resources:

- Selection of Construction Supplies [e.g. Wood, Wooden Wheels, Cams, Dowel, Hinges, Paint, Varnish]
- Tools [e.g. Scissors, Saw, Glue Gun, Bench Hook, Goggles, Hand Drill, Hammer]

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

- Listen to a wide range of high-quality music which is produced by international composers, from Europe including Russia, specifically for Ballet.
- Watch a professional ballet performance (recorded and/or live); evaluating the link between the emotion of the music and the dancer's movements.
- Develop an understanding of the historical link between famous composers and ballet.
- Understand and follow simple staff notation.

Composers:

- Pyotr Tchaikovsky
- Adolphe Adam
- Sergei Prokofiev

The British Game of Thrones

To include:

- **History:** Changing Power of British Monarchs
- **Art & Design:** Family Portraits – Sketching, Painting and Photography

History

- ✓ A local history study
- ✓ A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066

- Explore how the past shapes the present; developing an understanding of chronology.
- Identify a range of significant British kings and queens beyond 1066, including William the conquer, King Henry VIII, Queen Elizabeth I, James I, Queen Victoria and Queen Elizabeth II.
- Explore the important events that took place before, during and after their reign.
- Evaluate the decisions made by different British monarchs and linked historical characters.
- Understand the concept of 'primogeniture' (the system of succession by the firstborn, usually the eldest son).
- Examine the overall role of the British monarchy throughout history; explaining how and why changes occurred over time.
- Know why the monarchy moved from an absolute ruler to a constitutional monarch.
- Recognise the qualities required to be a successful monarch and how these have altered and changed.

Possible Educational Visits:

- Windsor Castle
- Buckingham Palace
- Tower of London
- National Portrait Gallery

Art & Design

- ✓ 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 [for example, pencil, charcoal, paint, clay]
- ✓ About great artists, architects and designers in history

- Investigate a range of prominent portrait artists including photographers; identifying the qualities and characteristics of different works of art.
- Explore and use the techniques associated with portrait drawing and painting; sketching and recording appropriate observations into sketch books.
- Experiment with different art techniques (e.g. charcoal and water colour).
- Know how to use digital technology to capture and manipulate portrait photographs.
- Evaluate work and identify possible areas for improvement.

Artists:

- Pablo Picasso
- Leonardo Da Vinci
- Andy Warhol

Photographers:

- Steve McCurry
- Lee Jeffries
- Lisa Kristine

Suggested Equipment & Software:

- Digital Cameras / Tablets
- Adobe Photoshop
- 2Simple Software: 2Photo

Incorporate across all topics

To include:

- **Computing:** E-Safety and Digital Literacy
- **Computing:** Programming and Computer Science

Computing

- ✓ 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 evaluating digital content
- ✓ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

- ✓ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- ✓ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- ✓ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

- ✓ 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 – *Word Processing, Presentation, Graphics, Digital Media (capturing video & sound footage, photography, animation) and Data Handling*

- **Computing:** Creative use of ICT
- **PHSE:** Health and Wellbeing
- **PHSE:** Relationships
- **PHSE:** Living in the Wider World

Suggested Software:

- World Wide Web (www) – Search Engine
- CEOP – www.thinkuknow.co.uk
- LGFL: E-Safety Framework
- LGFL London Mail
- 2Simple Software (& Purple Mash)

Suggested Software:

- 2Simple Software (& Purple Mash): 2Go, 2Logo, 2DIY, 2DIY 3D, 2Simulate
- Roamer World (with 2Paint A Picture)
- Purple Mash 2Code: Gibbon Lessons, Debug Challenges Gibbon
- J2Code www.j2e.com/j2code
- Scratch www.scratch.mit.edu
- Flowol3

Suggested Equipment:

- Floor Robots - BeeBot, Pro-Bot, Roamer
- Floor Mats/Grids
- FlowGo Interface
- FlowGo Mimics
- Electrical Circuit Components [e.g. Wire, Light Switches, Proximity Switches, Small Pressure Pad Switches, 6V Light Bulbs & Holders, 6V Square Buzzers, Motors]
- K’NEX & Lego Construction Sets

Suggested Software:

- 2Simple Software (& Purple Mash): 2Paint A Picture, 2Design and Make, 2Type, 2Create a Story, 2Create, 2Publish, 2Connect, 2Photo, 2Animate, 2Count, 2Graph, 2Question, 2Investigate, 2Calculate, 2Music – Explore, Beat & Sequence
- Purple Mash Topics www.purplemash.com
- Clicker 6
- Microsoft Office: Word, PowerPoint, Excel

Suggested Equipment:

- Tablets
- Digital Cameras
- Tuff Cams
- Recordable Microphones
- Film Production Equipment, e.g. lighting, green screen, tripod
- Data Loggers

PHSE

Pupil should have the opportunity to learn:

- ✓ what positively and negatively affects their physical, mental and emotional health (including the media)
- ✓ how to make informed choices (including recognising that choices can have positive, neutral and negative consequences) and to begin to understand the concept of a ‘balanced lifestyle’
- ✓ to recognise opportunities to make their own choices about food, what might influence their choices and the benefits of eating a balanced diet
- ✓ to recognise how images in the media do not always reflect reality and can affect how people feel about themselves
- ✓ to reflect on and celebrate their achievements, identify their strengths, areas for improvement, set high aspirations and goals
- ✓ to deepen their understanding of good and not so good feelings, to extend their vocabulary to enable them to explain both the range and intensity of their feelings to others
- ✓ to recognise that they may experience conflicting emotions and when they might need to listen to their emotions or overcome them
- ✓ about change, including transitions (between Key Stages and schools), loss, separation, divorce and bereavement
- ✓ to differentiate between the terms, ‘risk’, ‘danger’ and ‘hazard’
- ✓ to deepen their understanding of risk by recognising, predicting and assessing risks in different situations and deciding how to manage them responsibly (including sensible road use and risks in their local environment) and to use this as an opportunity to build resilience
- ✓ to recognise their increasing independence brings increased responsibility to keep themselves and others safe
- ✓ that bacteria and viruses can affect health and that following simple routines can reduce their spread
- ✓ that pressure to behave in an unacceptable, unhealthy or risky way can come from a variety of sources, including people they know and the media
- ✓ to recognise when and how to ask for help and use basic techniques for resisting pressure to do something dangerous, unhealthy, that makes them uncomfortable, anxious or that they believe to be wrong
- ✓ school rules about health and safety, basic emergency aid procedures, where and how to get help
- ✓ what is meant by the term ‘habit’ and why habits can be hard to change
- ✓ which, why and how, commonly available substances and drugs (including alcohol and tobacco) could damage their immediate and future health and safety, that some are legal, some are restricted and some are illegal to own, use and supply to others
- ✓ how their body will, and emotions may, change as they approach and move through puberty
- ✓ about human reproduction
- ✓ about taking care of their body, understanding that they have autonomy and the right to protect their body from inappropriate and unwanted contact their body autonomy and rights; understanding that actions such as female genital mutilation (FGM) constitute abuse, are a crime and how to get support if they have fears for themselves or their peers
- ✓ strategies for keeping physically and emotionally safe including road safety (including cycle safety- the Bikeability programme), safety in the environment (including rail, water and fire safety), and safety online (including social media, the responsible use of ICT and mobile phones)
- ✓ the importance of protecting personal information, including passwords, addresses and the distribution of images of themselves and others
- ✓ about people who are responsible for helping them stay healthy and safe and ways that they can help these people

Pupil should have the opportunity to learn:

- ✓ to recognise and respond appropriately to a wider range of feelings in others
- ✓ to recognise what constitutes a positive, healthy relationship and develop the skills to form and maintain positive and healthy relationships
- ✓ to recognise ways in which a relationship can be unhealthy and who to talk to if they need support
- ✓ to be aware of different types of relationship, including those between acquaintances, friends, relatives and families,
- ✓ that civil partnerships and marriage are examples of stable, loving relationships and a public demonstration of the commitment made between two people who love and care for each other and want to spend their lives together and who are of the legal age to make that commitment
- ✓ to be aware that marriage is a commitment freely entered into by both people, that no one should enter into a marriage if they don’t absolutely want to do so
- ✓ that their actions affect themselves and others
- ✓ to judge what kind of physical contact is acceptable or unacceptable and how to respond
- ✓ the concept of ‘keeping something confidential or secret’, when we should or should not agree to this and when it is right to ‘break a confidence’ or ‘share a secret’
- ✓ to listen and respond respectfully to a wide range of people, to feel confident to raise their own concerns, to recognise and care about other people’s feelings and to try to see, respect and if necessary constructively challenge their points of view
- ✓ to work collaboratively towards shared goals
- ✓ to develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves
- ✓ that differences and similarities between people arise from a number of factors, including family, cultural, ethnic, racial and religious diversity, age, sex, gender identity, sexual orientation, and disability (see ‘protected characteristics’ in the Equality Act 2010)
- ✓ to realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, how to respond and ask for help)
- ✓ to recognise and manage ‘dares’
- ✓ to recognise and challenge stereotypes

Pupil should have the opportunity to learn:

- ✓ to research, discuss and debate topical issues, problems and events concerning health and wellbeing and offer their recommendations to appropriate people
- ✓ why and how rules and laws that protect themselves and others are made and enforced, why different rules are needed in different situations and how to take part in making and changing rules
- ✓ to understand that everyone has human rights, all peoples and all societies and that children have their own special rights set out in the United Nations Declaration of the Rights of the Child
- ✓ that these universal rights are there to protect everyone and have primacy both over national law and family and community practices
- ✓ to know that there are some cultural practices which are against British law and universal human rights, such as female genital mutilation
- ✓ to realise the consequences of anti-social and aggressive behaviours such as bullying and discrimination of individuals and communities
- ✓ that there are different kinds of responsibilities, rights and duties at home, at school, in the community and towards the environment
- ✓ to resolve differences by looking at alternatives, seeing and respecting others’ points of view, making decisions and explaining choices
- ✓ what being part of a community means, and about the varied institutions that support communities locally and nationally
- ✓ to recognise the role of voluntary, community and pressure groups, especially in relation to health and wellbeing
- ✓ to appreciate the range of national, regional, religious and ethnic identities in the United Kingdom
- ✓ to think about the lives of people living in other places, and people with different values and customs
- ✓ about the role money plays in their own and others’ lives, including how to manage their money and about being a critical consumer
- ✓ to develop an initial understanding of the concepts of ‘interest’, ‘loan’, ‘debt’, and ‘tax’ (e.g. their contribution to society through the payment of VAT)
- ✓ that resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment
- ✓ about enterprise and the skills that make someone ‘enterprising’
- ✓ to explore and critique how the media present information

<p>Also to cover:</p> <ul style="list-style-type: none"> • Music: African Drumming • PE: Ball Skills – Rugby/Football • PE: Athletics • Languages: Spanish • Religious Education (RE): Religion, Family and the Community <p>Possible Educational Visits:</p> <ul style="list-style-type: none"> • African Drumming Worksop • Wembley Stadium • Saracens Stadium • Queen Elizabeth Olympic Park • Local Place of Worship • School Visit by a Local Religious Leader or Inspirational Person 	<p>Music</p> <ul style="list-style-type: none"> • 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 	<p>Musical Instruments:</p> <ul style="list-style-type: none"> • African Drums
	<p>PE</p> <ul style="list-style-type: none"> ✓ Use running, jumping, throwing and catching in isolation and in combination ✓ Play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending ✓ Compare their performances with previous ones and demonstrate improvement to achieve their personal best 	
	<p>PE</p> <ul style="list-style-type: none"> • Use running, jumping, throwing and catching in isolation and in combination • Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] • Compare their performances with previous ones and demonstrate improvement to achieve their personal best 	
	<p>Languages</p> <ul style="list-style-type: none"> ✓ Listen attentively to spoken language and show understanding by joining in and responding ✓ Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words ✓ Engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help ✓ Speak in sentences, using familiar vocabulary, phrases and basic language structures ✓ Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases ✓ Present ideas and information orally to a range of audiences ✓ Read carefully and show understanding of words, phrases and simple writing ✓ Appreciate stories, songs, poems and rhymes in the language ✓ Broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary ✓ Write phrases from memory, and adapt these to create new sentences, to express ideas clearly ✓ Describe people, places, things and actions orally and in writing ✓ Understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English 	
<p>RE</p>	<ul style="list-style-type: none"> • Understand that religion plays an important role in local, national and international day to day life. • Know that religious beliefs are expressed using a variety of forms and symbols. • Understand the links between faith and the key aspects of the places of worship. • Know the variety of activities that happen in places of worship. 	<p>Resources:</p> <ul style="list-style-type: none"> • Religious stories/books. • Artefacts from a variety of religions.