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| Ancient Greece | **STEM Unit Overview**I’m a Survivor! - How living things are affected by and adapt to their physical environmentWhat are the world’s major biomes and what are the physical conditions like in each?How does the temperature and precipitation of an environment affect the growth of plants in different biomes?How do the physical conditions of an environment affect the growth of fungi, such as yeast?How do the physical conditions in a rainforest affect plant and animal life?How do the physical conditions in extremely cold environments, such as the Arctic tundra, affect plant and animal life?How do the physical conditions in hot and dry environments, such as deserts and grasslands, affect plant and animal life?**STEM Group Project**Claymation - Pupils design and create a Claymation for young children, telling a short story of a squirrel on its perilous journey through a coniferous forest in the harsh winter conditions, to find its stored acorns.  |  |
| Autumn/Spring – Cycle BYear 5/6 |

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| Maths | English |
| White Rose Scheme**Number - Fractions (including Decimals and Percentages)**Year 5 * *Compare and order fractions whose denominators are all multiples of the same number*
* *Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths,*
* *Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.*
* *Add and subtract fractions with the same denominator and denominators that are multiples of the same number.*
* *Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.*
* *Read and write decimal numbers as fractions.*
* *Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.*
* *Round decimals with two decimal places to the nearest whole number and to one decimal place.*
* *Read, write, order and compare numbers with up to three decimal places.*
* *Solve problems involving number up to three decimal places.*
* *Recognise the per cent symbol (%) and understand that percent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal.*
* *Solve problems which require knowing percentage and decimal equivalents of half, quarter, fifth, two fifths and four fifths and those fractions with a denominator of a multiple of 10 or 25.*

Year 6* *Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.*
* *Compare and order fractions, including fractions > 1.*
* *Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.*
* *Multiply simple pairs of proper fractions, writing the answer in its simplest form.*
* *Divide proper fractions by whole numbers.*
* *Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.*
* *Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.*
* *Multiply one-digit numbers with up to two decimal places by whole numbers.*
* *Use written division methods in cases where the answer has up to two decimal places.*
* *Solve problems which require answers to be rounded to specified degrees of accuracy.*
* *Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.*
 | **Reading - Word Reading*** *Apply their growing knowledge of root words, prefixes and suffixes both to read aloud and to understand the meaning of new words that they meet.*

**Reading - Comprehension*** *Maintain positive attitudes to reading and understanding of what they read by: continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks, reading books that are structured in different ways and reading for a range of purposes, increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions, recommending books that they have read to their peers, giving reasons for their choices, identifying and discussing themes and conventions in and across a wide range of writing, making comparisons within and across books, learning a wider range of poetry by heart and preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience.*
* *Understand what they read by: checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context, asking questions to improve their understanding, drawing inferences such as inferring characters’ feelings, thoughts and motives from their actions, and justifying inferences with evidence, predicting what might happen from details stated and implied, summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas and identifying how language, structure and presentation contribute to meaning.*
* *Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.*
* *Distinguish between statements of fact and opinion.*
* *Retrieve, record and present information from non-fiction.*
* *Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others’ ideas and challenging views courteously.*
* *Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary.*
* *Provide reasoned justifications for their views.*

**Writing - Transcription*** *Use further prefixes and suffixes and understand the guidance for adding them.*
* *Spell some words with ‘silent’ letters.*
* *Continue to distinguish between homophones and other words which are often confused.*
* *Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically.*
* *Use dictionaries to check the spelling and meaning of words.*
* *Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary.*
* *Use a thesaurus.*

**Writing - Composition*** *Plan their writing.*
* *Draft and write.*
* *Evaluate and edit.*
* *Proof-read for spelling and punctuation errors.*
* *Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.*

**Writing - Vocabulary, Grammar & Punctuation*** *Develop their understanding of the concepts set out in English Appendix 2 by: recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms, using passive verbs to affect the presentation of information in a sentence, using the perfect form of verbs to mark relationships of time and cause, using expanded noun phrases to convey complicated information concisely, using modal verbs or adverbs to indicate degrees of possibility, using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun*
* *Indicate grammatical and other features by: using commas to clarify meaning or avoid ambiguity in writing, using hyphens to avoid ambiguity, using brackets, dashes or commas to indicate parenthesis, using semi-colons, colons or dashes to mark boundaries between independent clauses, using a colon to introduce a list, punctuating bullet points consistently*
* *Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.*
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| Science | Geography | History |
| **Living Things and their Habitats**Year 6* *Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.*
* *Give reasons for classifying plants and animals based on specific characteristics.*

Year 5* *Describe the life process of reproduction in some plants and animals.*
* *Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.*

Vocabulary* Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings.

Working Scientifically* Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
* Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
* Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
* Using test results to make predictions to set up further comparative and fair tests.
* Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.
* Identifying scientific evidence that has been used to support or refute ideas or arguments.
 | KS2Locational 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. .*
* *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).*

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 a European country, and a region within North or South America.*

Human and physical geography * *Describe and understand key aspects of 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.*
 | KS2* *Ancient Greece – a study of Greek life and achievements and their influence on the western world.*

History of the Olympic Games |

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| Art and Design | Design and Technology | Music |
| KS2* *Create sketch books to record their observations and use them to review and revisit ideas*
* *Improve mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]*
* *Learn about great artists, architects and designers in history.*
 | KS2Design* *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 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 structure.*
* *Understand and use mechanical systems in their products.*
* *Understand and use electrical systems in their products.*
* *Apply their understanding of computing to program, monitor and control their products.*
 | Charanga Music Scheme**Classroom Jazz 2 - Year 6 Unit**History of music - Jazz in its historical context.KS2* *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.*
* *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.*
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| Languages | Physical Education | Outdoor Learning |
| French**Bastille Day - Year 6 Unit** | **Monday:**Basketball* *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.*

**Friday:**Swimming* *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.*

Fitness* *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.*
 | Outdoor learning as and when throughout the topic.Forest School sessions when timetabled. |

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| PSHE/RSE | Religious Education | Computing/E-Safety |
| Derbyshire Scheme of Work: PSHE Matters**Relationships**Core theme: Relationships* R1 - Recognising that there are different types of relationships.
* R3 - Understanding what marriage and civil partnership means.
* R4 - Understanding that forced marriage is a crime.
* R5 - Recognising different types of loving, caring and committed relationships.
* R6 - Identifying the difference between healthy/ unhealthy relationships.
* R7 - Recognising and respecting that there are different family structures.
* R8 - Recognising the characteristics of healthy family life.
* R9 - Recognising how to seek advice if family relationships make them unhappy.
* R10 - Identifying the strategies to build positive friendships and how friendship can support wellbeing.
* R11 - Identifying what constitutes a positive healthy friendship.
* R14 - Comparing the difference between healthy/ unhealthy friendships.
* R16 - Exploring how friendships can change and the benefits of having different types of friends.

**Exploring Emotions**Core theme: Health and Wellbeing* H18 - Identifying the everyday things that affect feelings and the importance of expressing how we feel.
* H19 - Using a varied vocabulary when talking about feelings and how we can express feelings in different ways.
* H20 - Identifying strategies that they could use to respond to feelings.
* H21 - Recognising when someone may be struggling with their mental health and understand how to seek support for themselves and others.
* H22 - Recognising that anyone can experience mental ill health.
* H24 - Identifying strategies for dealing with emotions, challenges and change.
* H29 - Identifying how to reframe unhelpful thinking.
 | Derbyshire Agreed Syllabus 2020 onwards**Unit U2.7: Living (Practices and ways of living; questions of values and commitments) - Christians & Humanists**What matters most to Christians and Humanists?* Describe what Christians mean about humans being made in the image of God and being ‘fallen’, giving examples. (A2)
* Describe some Christian and Humanist values simply. (B3)
* Express their own ideas about some big moral concepts, such as fairness or honesty comparing them with the ideas of others they have studied. (C3)
* Suggest reasons why it might be helpful to follow a moral code and why it might be difficult, offering different points of view. (B2)
 | Teach Computing**Creating Media: Vector Drawing**Information Technology* *Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, system and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. (F)*
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