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| Spinning in CirclesSpace | **STEM Unit Overview**We are all spinning in circles - Earth and spaceWhat is our solar system and what features does it have?How big are the planets in our solar system and how far apart are they?Do all planets rotate and revolve around the sun at the same speed?What are terrestrial planets?What are Jovian planets?How do scientists explore the planets in our solar system?**STEM Group Project**Solar System Documentary - Pupils create scale models of each planet in our solar system, showing colours and features. These models are then used to produce a documentary, explaining each planet’s size, position, surface features and atmospheric conditions, as understood by scientists.  |  |
| Autumn/Spring – Cycle AYear 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 |
| **Earth and Space**Year 5* *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.*

Vocabulary* Earth, Sun, Moon, Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune, spherical, solar system, rotates, star, orbit, axis, planets.

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.
* 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.
 | No specific Geography objectives to be covered during this topic. | KS2* *A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066*

Britain’s involvement in the ‘Space Race’ and beyondBritish astronauts eg. Tim PeakeAnniversary of the Moon landing (July 1989) |

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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.*
 | 3D models of the planetsKS2Design* *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 1 - Year 5 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**All in a day - Year 6 Unit*** Say and write a sentence to tell the time (o'clock and half past).
* Understand and use the terms used for a.m. and p.m. - *du matin, de l’après-midi and du soir*.
* Tell the time in 24-hour time - o'clock and half past.
* Read and interpret timetables in 24-hour times - o'clock and half past.
 | **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**Being Me**Core themes: Living in the Wider World/Relationships/Health and Wellbeing* L6 - Identifying the different groups that make up their community. L7. Describing the different contributions that people/groups make to the community.
* L8 - Discussing diversity: what it means; the benefits of living in a diverse community; and how we value diversity within our communities.
* L10 - Recognising behaviours/actions which discriminate against others and ways of responding to it if witnessed/experienced.
* L25 - Recognising positive things about themselves/achievements and can set goals.
* H25 - Identifying what contributes to who we are.
* R30 - Recognising that our own behaviour can affect other people.
* R32 - Respecting and recognising the differences and similarities between people.
* R33 - Listening to and responding respectfully to a wide range of people.

**Money Matters**Core theme: Living in the Wider World* L21 - Understanding different ways to keep track of money.
* L22 - Understanding the risks associated with money and ways of keeping money safe.
* L23 - Identifying the risks involved in gambling activities.
* L24 - Identifying the ways that money can impact on people’s emotions.
* L25 - Recognising positive things about themselves and can set goals.
* L26 - Identifying there is a broad range of different jobs/careers.
* L27 - Exploring what is meant by stereotypes.
* L28/29 - Recognising that there are many factors which may influence a person’s job or career choice.
* L30 - Recognising some of the skills that will help them in their future careers.
* L31 - Identifying the kind of job that they might like to do when they are older.
* L32 - Recognising a variety of routes into careers.

Christmas Fair Enterprise  | Derbyshire Agreed Syllabus 2020 onwards**Unit U2.1: Believing (Religious beliefs, teachings, sources; questions of meaning purpose and truth) - Christians & Humanists**Why do some people think God exists?* Outline clearly a Christian understanding of what God is like, using examples and evidence. (A2)
* Give examples of ways in which believing in God is valuable in the lives of Christians, and ways in which it can be challenging. (B2)
* Express thoughtful ideas about the impact of believing or not believing in God on someone’s life. (B1)
* Present different views on why people believe in God or not, including their own ideas. (C1)
 | Teach Computing**Creating Media: Video Editing**Computer Science* *Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. (E)*

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)*

Digital Literacy* *Use technology safely, respectfully and responsibly, recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. (G)*
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