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| Harry PotterTransport | **STEM Unit Overview**It’s a Matter of State - Solids, liquids and gasesWhat are the common properties of each state of matter - solid, liquid and gas?Can liquids stack on top of each other like solids?Can solids flow from one container to another like liquids?Does a gas have mass like liquids and solids?How does matter change states?Can all matter be classified as either a solid, a liquid or a gas?**STEM Group Project**Model Vehicle with an Alternative ‘Fuel’ Source - Pupils plan and create a vehicle powered by a ‘fuel’ that is made by combining a household solid and a liquid to produce a gas.  |  |
| Spring – Cycle BYear 5/6 |

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| Maths | English |
| White Rose Scheme**Statistics**Year 5* *Solve comparison, sum and difference problems using information presented in a line graph*
* *Complete, read and interpret information in tables, including timetables.*

Year 6* *Interpret and construct pie charts and line graphs and use these to solve problems*
* *Calculate and interpret the mean as an average*

Consolidate number (place value, four operations and fractions) to make sure learning is secure ready for the next year. | **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 |
| **Properties and Changes of Materials**Year 5* *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.*
* *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.*

Vocabulary* Thermal / electrical insulator / conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, new material.

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 * *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.*
 | KS2* *A study of an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066*

The first railwaysIndustrial RevolutionGeorge Stephenson’s impact |

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| Art and Design | Design and Technology | Music |
| School shield/crest design using the houses in Harry Potter for inspiration.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.*
 | Create Harry Potter wands using natural materials as the starting point.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**Dancing in the Street - Year 5 Unit**The history of Motown and its importance in the development of Popular music. Civil rights.**Reﬂect, Rewind and Replay - Year 6 Unit**Think about the history of music in context, listen to some Western Classical music and place the music from the units you have worked through, in their correct time and space. Consolidate the foundations of the language of music.Learning songs to perform at the end of year performance. 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**Time travelling - Year 5 Unit**• Name some parts of the body.• Respond appropriately when asked a simplequestion.• Give a simple description of their eyes and hair.• Place the adjective correctly in a simplesentence.• Use a small number of everyday verbs in simpledialogues.• Make simple statements in the third person.• Match emotion/health words with their pictures. | **Monday:**Tri-Golf* *Take part in outdoor and adventurous activity challenges both individually and within a team.*
* *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.*

Cricket/Rounders* *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.*
 | 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**Bullying Matters**Core theme: Relationships* R13 - Recognising the importance of seeking support if feeling lonely or excluded.
* R17 - Identifying positive strategies that may help to resolve disputes in friendships.
* R18 - Recognising if a friendship (online or offline) is making them feel unsafe or uncomfortable.
* R19 - Recognising the impact of bullying and the consequences of hurtful behaviour.
* R20 - Suggesting strategies to respond to hurtful behaviour.
* R21 - Discussing what discrimination means and how to challenge it.
* R25 - Identifying strategies to respond to unwanted touch.
* R30 - Recognising that our own behaviour can affect other people.
 | Derbyshire Agreed Syllabus 2020 onwards**Unit U2.3: Believing (Religious beliefs, teachings, sources; questions of meaning purpose and truth) - Christians, Hindus & Humanists**What do religions say to us when life gets hard?* Express ideas about how and why religion can help believers when times are hard, giving examples. (B2)
* Outline Christian, Hindu and/or nonreligious beliefs about life after death. (A1)
* Explain some similarities and differences between beliefs about life after death. (B2)
* Explain some reasons why Christians and Humanists have different ideas about an afterlife. (B3)
 | Teach Computing**Creating Media: 3D Modelling**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)*

**Programming B: Selection in Quizzes**Computer Science* *Design, write and debug programs that accomplish specific goals, including controlling or stimulating physical systems. (A)*
* *Solve problems by decomposing them into smaller parts. (A)*
* *Use sequence, selection and repetition in programs. (B)*
* *Work with variables and various forms of input and output. (B)*
* *Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (C)*

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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