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| Up There, Down Here! | **STEM OVERVIEW**: Environmental Sciences- weather, seasons, night and day Changes in the sky and on the landscape during the day and at night. When do we see the stars and the Moon, only at night? How the weather affects the appearance of the sky. How the seasons affect the appearance of the landscape. Natural, managed and constructed features of a landscape. How natural, managed and constructed features change.**TOPIC VOCABULARY: sun, moon, star, day, night, weather, season, spring, summer, autumn, winter, landscape, natural feature, managed feature, constructed feature.** |
| Spring 4/Summer 5Cycle AYear 2/3 |

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| Maths | English |
| **Y2****Geometry-shape, position and direction**Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.Identify 2D shapes on the surface of 3D shapes e.g. a circle on a cylinder and triangle on a pyramid.Compare and sort common 2D shapes and everyday objects.Recognise and name common 3D shapes including cuboids, cubes, pyramids and spheres.Compare and sort common 3D shapes and everyday objectsOrder and arrange combinations of mathematical objects in patterns and sequences.Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for a quarter, half and three-quarter turns (clockwise and anticlockwise).**Fractions and consolidation of number**Recognise, find, name and write fractions ⅓¼½ and ¾ of a length, shape, set of objects or a quantity.Recognise the equivalence of two quarters and one half.Write simple fractions, e.g. ½ of 6 = 3.**Measurement-time**Compare and sequence intervals of time.Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.Know the number of minutes in an hour and the number of hours in a day.**Problem Solving** using the 4 operations**Y3****Geometry-shape and perimeter**Draw 2D shapesMake 3D shapes using modelling materials.Recognise 3D shapes in different orientations and describe them.Measure the perimeter of simple 2D shapes.**Fractions**Count up and down in tenths, recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10.Recognise, find and write fractions of a discrete set of objects: unit and non-unit fractions with small denominators.Recognise and use fractions as numbers: unit and non-unit fractions with small denominators.Recognise and show, using diagrams, equivalent fractions with small denominators.Compare and order unit fractions, and fractions with the same denominator.Add and subtract fractions with the same denominator within one whole.Solve problems that involve all of the above.**Measurement-time**Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12 and 24 hour clocks.Estimate and read time with increasing accuracy to the nearest minute.Record and compare time in terms of seconds, minutes and hours.Use vocabulary such as o’clock, a.m. p.m., morning, afternoon, noon and midnight.Know the number of seconds in a minute and the number of days in each month, year and leap year.Compare durations of events and calculate the time taken by particular events.**Problem Solving-**the four operations | **Phonics** in RWI and literacy lessons:continue to apply phonic knowledge and skills as the route to decode words, until automatic decoding has become embedded and reading is fluent read accurately by blending the sounds in words that contain the graphemes taught so far, especially recognising alternative sounds for graphemes read accurately words of two or more syllables that contain the same graphemes as above read words containing common suffixes read further common exception words, noting unusual correspondences between spelling and sound and where these occur in the word read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation re-read these books to build up their fluency and confidence in word reading.**Reading** comprehension in RWI, guided reading, 'Read to Succeed', class reading:develop pleasure in reading, motivation to read, vocabulary and understanding by:listening to, discussing and expressing views about a wide range of contemporary and classic poetry, stories and non-fiction at a level beyond that at which they can read independently discussing the sequence of events in books and how items of information are related becoming increasingly familiar with and retelling a wider range of stories, fairy stories and traditional tales being introduced to non-fiction books that are structured in different ways recognising simple recurring literary language in stories and poetry discussing and clarifying the meanings of words, linking new meanings to known vocabulary discussing their favourite words and phrases. **Spelling** in RWI, Spellzoo, Hammer Grammar, literacy and cross curricula writing:segmenting spoken words into phonemes and representing these by graphemes, spelling many correctly learning new ways of spelling phonemes for which one or more spellings are already known, and learn some words with each spelling, including a few common homophones learning to spell common exception words learning to spell more words with contracted forms learning the possessive apostrophe (singular) distinguishing between homophones and near-homophones add suffixes to spell longer words, including –ment, –ness, –ful, –less, –ly write from memory simple sentences dictated by the teacher that include words using the GPCs, common exception words and punctuation taught so far.**Grammar and Punctuation** in RWI, Hammer Grammar, literacy and cross curricula writing:use both familiar and new punctuation correctly including full stops, capital letters, exclamation marks, question marks, commas for lists and apostrophes for contracted forms and the possessive (singular)use sentences with different forms: statement, question, exclamation, commanduse expanded noun phrases to describe and specifyuse the present and past tenses correctly and consistently including the progressive formuse subordination (when, if, that, or because) and co-ordination (using or, and, but)use some features of written Standard Englishuse and understand the grammatical terminology when discussing our writing.**Writing** composition in RWI, literacy and cross curricula writing:writing narratives about personal experiences and those of others related to weather, seasons and celebrations. writing about real events, Stephenson's Rocket and rails.writing poetry about the landscape, weather or the seasons. writing for different purposes, biography of Stephenson/Van Gogh/Turner; reports about the Morton coal pit, Five Pits Trail; fairy and fantasy stories where day, night, seasons and weather play a significant part. |

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| Science | Geography | History |
| **Uses of everyday materials:** Year 2 objectivesIdentify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses;find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching;when finding out about Stephenson's Rocket and the rails he developed to carry heavier engines.Observe changes across the four seasons.Observe and describe weather associated with the seasons and how day length varies through keeping a class weather diary.**Plants**Year 3 Objectives:Identify and describe the functions of different parts of flowering plants; roots, stem, trunk, leaves, flowers.Explore the requirements of plants for life and growth-air, light, water, room to grow-and how they vary from plant to plant.Investigate the way in which water is transported within plants.Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.Ongoing: working scientifically-asking simple questions and recognising that they can be answered in different ways; observing closely, using simple equipment; performing simple tests; identifying and classifying; using their observations and ideas to suggest answers to questions; gathering and recording data to help in answering questions. | As part of STEM and keeping a class weather diary: study seasonal and daily weather patterns in the UK.Use fieldwork and observational skills to study the human and physical features of the environment in and around Morton e.g., school field, play park and Five Pits Trail.Explain some of the advantages and disadvantages of living in a village or a city.Use aerial photographs and plans to recognise landmarks and basic human and physical features in and around Morton.Use compass directions (N,S,E,W) and locational and directional language to describe features and routes on a map of Morton and the local environment.Name and locate the world's 7 continents and 5 oceans.Name, locate and identify the 4 countries and capital cities of the UK and the surrounding seas.Use a world map, atlases, globes to identify places studied. | Be aware of changes within living memory that reveal aspects of change in national life by finding out about the coal pit, that is now closed, in Morton.Study significant historical people who have contributed to national and international achievements as we find out about George Stephenson who lived, worked and is buried in, Chesterfield. |

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| Art and Design | Design and Technology | Music |
| Artsmark Award: continue to use a range of materials as we develop techniques of colour, pattern, texture, line, shape, form and space to create a painting on the theme of light.Learn about a range of artists- Van Gogh and Turner and how night and day in different landscapes are represented in their paintings. | Design a purposeful, functional, appealing product for themselves and other users based on design criteria: a model of a railway engine.Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.Explore and use mechanisms-wheels and axles-in their engine.Evaluate their ideas and engine against design criteria. | **Charanga 4**: **through the Reggae song Zoo Time and Dragon Song we shall:*** use our voices expressively and creatively by singing songs and speaking chants and rhymes
* play tuned and untuned instruments musically
* experiment with, create, select and combine sounds using the inter-related dimensions of music.
* listen with concentration and understanding to a range of high-quality live and recorded music:

Dance of the Cygnets from Swan Lake by Tchaikovsky; Mars from the Planet Suite by Holst; Wedding March by Mendelssohn; Plink Plank Plunk and Syncopated Clock by Leroy Anderson; William Tell Overture Finale by Rossini.**Charanga 5: through the Friendship song and the Bringing Us Together disco song we shall:*** use our voices expressively and creatively by singing songs and speaking chants and rhymes
* play tuned and untuned instruments musically
* experiment with, create, select and combine sounds using the inter-related dimensions of music.
* listen with concentration and understanding to a range of high-quality live and recorded music:

Zarathustra by Richard Strauss; Fantasia on Greensleeves by Vaughan Williams; Blue Danube by Johan Strauss; Zadok the Priest by Handel; Thunder and Blazes by Julius Fucik; Surprise from Symphony 94 by Haydn; Land of Hope and Glory by Elgar. |

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| Languages | Physical Education | Outdoor Learning |
| French* Listen attentively to spoken language and show understanding by joining in and responding.
* Explore the patterns and sounds of language through songs and rhymes.
* Engage in conversations; ask and answer questions.
* Speak in sentences, using familiar vocabulary, phrases and basic language structures.
 | BSP CoachBasketballmaster basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activitiesparticipate in team games, developing simple tactics for attacking and defending.School StaffGymnasticsmaster basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities.Bat workStriking and fieldingparticipate in team games, developing simple tactics for attacking and defendingmaster basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activitiesAthleticsmaster basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities. | Class excursion to identify the natural, managed and constructed features of the local landscape: walk around our local environment to find examples of these places: the coal pit, former pit houses, pit tip, park, canal, stream, woodland and Five Pits Trail.Continue to use the available outdoor spaces for any lesson, whenever we are able. |

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| PSHE/RSE | Religious Education | Computing/E-Safety |
| **The fourth topic is Growing Up**Core themes: Health and Wellbeing/Relationships. H5. Identifying simple hygiene routines that can stop germs from spreading. H20. Identifying feelings associated with change/loss.H21. Recognising what makes them special. H22. Talking about the ways in which we are all unique. H25. Naming the main parts of the body including external genitalia. H26. Explaining how people’s needs change as they grow from young to old. R13. Recognising and understanding the importance of respecting privacy. R16. Identifying how to respond if physical contact makes them feel uncomfortable/unsafe. R17. Understanding that there are situations when they should ask for permission. R18. Recognising the importance of not keeping adults’ secrets. R20. Identifying what to do if they feel unsafe/worried for themselves or others. R23. Recognising the ways in which they are the same as/different from others.**The fifth topic is Money Matters**Core themes: Living in the Wider World L10. Understanding what money is. L11. Recognising that people make different choices about how to save/spend money. L12. Recognising the difference between needs and wants. L13. Understanding how money can be looked after. L14. Identifying that everyone has different strengths. L15. Understanding that jobs help people to earn money to pay for things. L16. Identifying different jobs that people do. L17. Identifying the strengths/interests someone might need to do different jobs. | Based on the Derbyshire Agreed Syllabus 2020 onwards.**Unit 1.8 Living: Christian, Jewish People and Humanists.****How should we care for the world and for others, and why does it matter?**Re‐tell Bible stories and stories from another faith about caring for others and the world (A2).Identify ways that some people make a response to God by caring for others and the world (B1).Talk about issues of good and bad, right and wrong arising from the stories (C3).Talk about some texts from different religions that promote the ‘Golden Rule’, and think about what would happen if people followed this idea more(C2) Use creative ways to express their own ideas about the creation story and what it says about what God is like (C1). | **TOPIC 4**Creating Media-Making MusicInformation technology:* use technology purposefully to create, organise, store, manipulate and retrieve digital content

Digital literacy:* recognise common uses of information technology beyond school; use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online te**chnologies.**

**TOPIC 5**Programming A-Robot AlgorithmsComputer science: * create and debug simple programs
* use logical reasoning to predict the behaviour of simple programs
* understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Information technology:* use technology purposefully to create, organise, store, manipulate and retrieve digital content

Ongoing through PSHE and assembly: To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.STEM: use a QR code to find information about weather forecasting, recognising common uses of information technology beyond school. |