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| Topic Title We will rock you! | STEM –Surface Changes – Rocks and Soils  **How does a geologist use rocks and fossils to understand how Earth’s surface has changed over time?** -Pupils explore what a geologist is and how they examine rocks to understand what changes Earth’s surface has gone through. Children conduct their own dig in the school playground and photograph and examine rocks in an attempt to classify them.  **What is in soil?** - Is soil the same everywhere? – Children explore what soil is made up of and the three types – sand, silt and clay. Pupils investigate actual soil samples to record information about colour, texture, grain size and ability to absorb water, as well as conduct an experiment to separate soil into its components.  **What is weathering?** -How does weathering make soil? – Children conduct online research to determine what weathering is and represent the information in a graphic organiser of their choice. Pupils then demonstrate the weathering process of freeze-thaw by creating a rock from modelling clay, filling the inside with water, freezing it and photographing the results.  **What is erosion?** -How is it different from weathering – Children look at examples of landforms and predict how these were formed. Children then conduct online research by watching a video that explains the difference between weathering and erosion. Children then demonstrate erosion by wind, water and ice (glaciers) and compare their demonstrations to videos online.  **How does extreme weather change Earth’s coastlines?** -How can storm erosion be slowed down? – Children explore the effects of extreme weather, such as floods and storms, on coastlines or areas surrounding natural waterways. Children conduct an experiment to test the effects of erosion when only sand is present, when there are plants in the sand and one there is other variable of their choice that is added to the sand. Children create storm waves film the results, in order to offer the best solution to protect the coastline from erosion.  **How does human activity contribute to erosion?**- How can humans help reduce erosion? – children use internet research to understand how humans contribute to erosion through deforestation, mining, construction and agriculture practices. Children create a presentation to demonstrate the four types of erosion caused by humans.  **STEM project based on learning – design, make, evaluate, technical knowledge**  **Vocabulary -** glacier, erosion, weathering, chemical weathering, physical weathering, freeze-thaw, biological weathering, sand, silt, clay, soil, rock, fossil, geology, landform, extreme weather, deforestation, construction, mining, agricultural practice |
| Autumn  Cycle B Topic 1  Year 3/4 |

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| Maths | English |
| |  |  | | --- | --- | | **White Rose Maths Scheme**   |  | | --- | | Place Value not bold –Y3 bold – Y4  Read and write numbers up to 1000 in numerals and in words.  Identify, represent and estimate numbers up to 1000 using different representations.  **Identify, represent and estimate numbers using different representations.**  Find 10 or 100 more or less than a given number.  **Find 1000 more or less than a given number.**  Recognise the place value of each digit in a 3 digit number.  **Recognise the place value of each digit in a 4 digit number.**  Order and compare numbers to 1000.  **Order and compare numbers beyond 1000.**  Count from 0 in multiples of 4, 8, 50 and 100  **Count in multiples of 6, 7, 9. 25 and 1000**  Solve number problems and practical problems involving these ideas.  **Solve number and practical problems that involve all of the above and with increasingly large positive numbers.**  **Count backwards through zero to include negative numbers.**  **Round any number to the nearest 10, 100 or 1000**  **Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.**  Number: Addition and Subtraction  Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.  Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction  **Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.**  Estimate the answer to a calculation and use inverse operations to check answers.  **Estimate and use inverse operations to check answers to a calculation.**  Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.  **Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.**  Add and subtract amounts of money to give change using both £ and p in practical contexts.  **Estimate, compare and calculate different measures, including money in pounds and pence**  **Regular times table practise**  **X3, x4, x8, x6,**  **Counting in 25s, 50s and 100s** | | | **Spelling** –use further prefixes and suffixes and understand how to add them, spell further homophones, spell words that are often misspelt, place the possessive apostrophe accurately in words with regular plurals, and in words with irregular plurals  spell zoo scheme Y3 Set 1: Words with ‘ph’ and ‘wh’ Set 2: Plurals of words ending in ‘y’ (change ‘y’ to ‘i’ and add ‘es’) Set 3: Adding ‘ing’, ‘er’, ‘est’ and ‘y’ to words ending in ‘e’ Set 4: Word List 1 Set 5: Word List 2 Set 6: Word List 3 Set 7: Adding vowel suffixes to words with more than one syllable Set 8: Adding vowel suffixes for words with more than one syllable with unstressed vowels Set 9: Words with ‘y’ as /i/ Set 10: Revision  Y4 Set 1: Homophone revision Set 2: Revision from previous years 1 Set 3: Revision from previous years 2 Set 4: Revision from previous years 3 Set 5: Words containing ‘ch’ as /sh/ Set 6: Words ending in 'gue' and 'que' Set 7: Words with ‘sc’ as /s/ Set 8: Words with ‘ei’, ‘eigh’ and ‘ey’ as /ay/ Set 9: Possessive apostrophes Set 10: Revision  **Reading** develop positive attitudes to reading and understanding of what they read by: listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books  , showing understanding through intonation, tone, volume and action, discussing words and phrases that capture the reader’s interest and imagination, recognising some different forms of poetry [for example, free verse, narrative poetry] understand what they read, in books they can read independently, by: checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context, asking questions to improve their understanding of a text 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, identifying main ideas drawn from more than one paragraph and summarising these, identifying how language, structure, and presentation contribute to meaning, retrieve and record information from non-fiction, participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say  Twice weekly guided reading, once weekly individual reading,  Silent sustained reading daily. Links to topic if appropriate.  **Writing** plan their writing by: discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar, discussing and recording ideas, draft and write by: composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures, organising paragraphs around a theme, in narratives, creating settings, characters and plot, in non-narrative material, using simple organisational devices, evaluate and edit by: assessing the effectiveness of their own and others’ writing and suggesting improvements, proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences, proof-read for spelling and punctuation errors, read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.  River Nile – non chronological report  Job descriptions – Egyptian jobs  Diary entries for Howard Carter’s discovery of Tutankhamun’s tomb  Sequence and annotate embalming and mummification process  Egyptian Gods and Goddesses research and write a report about one  Secret codes and hieroglyphics  **Grammar** extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although, using the present perfect form of verbs in contrast to the past tense, choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition, using conjunctions, adverbs and prepositions to express time and cause, using fronted adverbials  Recap nouns, verbs, adjectives, adverbs  Using conjunctions  Using adverbs  Accurate speech marks – write about what the characters are saying in a given picture  **Handwriting** – use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined, increase the legibility, consistency and quality of their handwriting  Y4 practise joined handwriting linked to spelling list  Y3 – learn all joins |

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| Science | Geography | History |
| **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.   1. Types of Rocks Compare different kinds of rocks based on their appearance in the context of understanding the difference between natural and man-made rocks. • I can compare different types of rocks  2. Grouping Rocks Making systematic and careful observations by examining different types of rocks. • I can make systematic and careful observations. Group together different kinds of rocks on the basis of their simple physical properties in the context of natural rocks. • I can group rocks based on their properties  3. Fantastic Fossils Describe in simple terms how fossils are formed when things that have lived are trapped within rock by explaining the fossilisation process and by comparing fossils to the animals they belong to. • I can explain how fossils are formed.  **Vocabulary –** *rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil* | **Locational Knowledge**  Locate the World’s countries – where in the World is Egypt?  Continents and countries  **Human and Physical Geography**  Physical geography of the River Nile  Human geography – types of settlement and land use, trading and natural resources | **Ancient Ancients**  Broader History Study  Ancient Egypt  Who were the Ancient Egyptians?  Why was the River Nile so important to Ancient Egyptians?  Why was farming so important to Ancient Egyptians?  What jobs did the Ancient Egyptians do?  What artefacts did the Ancient Egyptians leave behind?  Who was Howard Carter?  The discovery of Tutankhamun’s tomb  What did the Ancient Egyptian’s believe about the after- life?  Which Gods did they believe in?  Who built the pyramids?  How did the Ancient Egyptians write? |

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| Art and Design | Design and Technology | Music |
| **Using Sketchbooks**  Create sketches of pyramids and The River Nile  **Drawing, Painting and sculpture**  Draw and Paint a Pharaoh head  Make Canopic jar stoppers from clay or other materials  Make 3-D Mummies and a sarcophagus  3-d nets of pyramids  Make paper compare this to papyrus  **Study of great artists**  Hieroglyphics - what these symbolised and how important they are for historical evidence, write name in hieroglyphs. |  | Charanga – Let Your Spirit Fly  **Listen and Appraise** the song Let Your Spirit Fly and other songs: ● Let Your Spirit Fly by Joanna Mangona ● There is currently no listening resource for this part of the lesson, please choose your own ● Colonel Bogey March by Kenneth Alford ● Consider Yourself from the musical ‘Oliver!’ ● Ain’t No Mountain High Enough by Marvin Gaye● You’re The First, The Last, My Everything by Barry White  **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 around the town / Going shopping**  **Speaking and listening**   * listen and respond to simple instructions * listen and respond verbally to every day phrases * name and describe people, a place and an object * have a short conversation, saying 3 to 4 things * give response using a short phrase * start to speak, using a full sentence * listen to and join in with a simple song   **Reading**   * read and understand a short passage using familiar language * explain the main points in a short passage * read a passage independently * use a bilingual dictionary or glossary to look up new words   **Writing**   * write phrases from memory * write 2-3 short sentences on a familiar topic * write what they like/dislike about a familiar topic | **Paceball**   * 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   **Football**   * 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   **Tag Rugby**   * 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 | Lea Green residential trip for outdoor and adventurous learning.  Geography – **Skills and Field work** |

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| PSHE/RSE | Religious Education | Computing |
| Classroom rules and routines  Establishing a class identity with new Y3s and current Y4s  **Being Me**  Core themes: Living in the Wider World/Relationships/Health and Wellbeing.    L6. Identifying the different groups that make up their community. L7. Identifying the different contributions that people/groups make to the community.  L8. Explore diversity: what it means; the benefits of living in a diverse community.  L10. Recognising behaviours/actions which discriminate against others.  L25. Recognising positive things about themselves/achievements.  H25. Identifying what contributes to who we are.  R30. Recognising that our own behaviour can affect other people.  R32. Recognising the differences and similarities between people.  R33. Listening to and responding respectfully to a wide range of people.  **Difference and Diversity**  Core themes: Relationships/Living in the Wider World/Health and Wellbeing.    R31. Recognising the importance of self-respect and how to respect others.  R32. Respecting and recognising the differences and similarities between people.  R34. Debating topical issues, respecting other people’s points of view/constructively challenging those they disagree with.  L9. Understanding and challenging stereotypes.  L10. Recognising behaviours/actions which discriminate against others.  H25. Identifying what contributes to who we are.  H27. Recognising their individuality and personal qualities. | **Unit L2.2**:  Why is the Bible so important  for Christians today?   |  | | --- | | Make connections between stories in the Bible and what Christians believe about creation, the Fall and salvation (A2).  Give examples of how and suggest reasons why Christians use the Bible today (B1).  Describe some ways Christians say God is like,with examples from the Bible, using different forms of expression (A1).  Discuss their own and others’ ideas about why humans do bad things and how people try to put things right (C3). | | **Computer Systems and networks:**  The Internet   * use sequence, selection, and repetition in programs; work with variables and various forms of input and output * 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 * 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 * use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact   **Online safety** – ongoing  In assemblies, PSHE etc |