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| Materialistic | STEMWhat are natural and processed materials?What are the properties and uses of natural material like wool?What are the properties and uses of synthetic materials like polyester? How does this compare to the properties and uses of a natural material like cotton?What are the properties and uses of other common materials?What is biodegradable material and why is it important to waste management?How does plastic contribute to ocean pollution?What properties make plastic harmful? **STEM projects** – make an item from a recycled plastic bottle, build a bridge 40cm long to hold the weight of a toy car for 20 seconds **Design, Make, Evaluate, Technical Knowledge****Vocabulary –**natural, processed, synthetic, material, fibre, polyester, wool, cotton, plastic, biodegradable, decompose, landfill, recyclable, elasticity, durability, waterproof, gyre, garbage patch, bioplastic |
| Autumn/SpringCycle A Topic 2Year 3/4 |

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| Maths | English |
|  **White Rose Maths Scheme**

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| Number: Multiplication and Division Y3 not bold Y4 boldSolve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context. **Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.** Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which *n* objects are connected to *m* objectives. **Solve simple measure and money problems involving fractions and decimals to two decimal places** Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. **Multiply two digit and three digit numbers by a one digit number using formal written layout.**  |

Regular times table practiseX3, x4, x8, x6, (Y3) x7, x9, x12 (Y4) 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 **Year 3** Set 1: Words with ‘ou’ as /u/ Set 2: Prefixes ‘dis’, ‘in’ and ‘mis’ Set 3: Prefixes ‘ir’ , ‘il’ and ‘im’ Set 4: Prefixes ‘re’ and ‘sub’ Set 5: Prefixes ‘super’ and ‘inter’ Set 6: Prefix ‘auto’ Set 7: Prefix ‘anti’ Set 8: Words ending in ‘ation’ Set 9: Words ending in ‘etion’, ‘ition’, ‘otion’ and ‘ution’ Set 10: RevisionYear 4 Set 1: Homophones 1,Set 2: Prefixes ‘mis’, ‘in’ and ‘dis’ Set 3: Prefixes ‘im’, ‘il’ and ‘ir’ Set 4: Homophones 2 Set 5: Word list 1 Set 6: Word list 2 Set 7: Word list 3 Set 8: Word list 4 Set 9: Word list 5, 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 will be made 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 clearDescriptive setting of an Anglo Saxon settlementRiddles (linked to topic) working out riddles, writing our own riddles, using description with similes and metaphorsInstructions (linked to How to Train your Dragon – class story) How to catch a dragonWrite a description of a dragonNewspaper report of a Viking invasionViking Quest story based on the animation of ‘The Dragon Slayer’Diary entries – Anglo Saxon army marching to the Battle of Stamford Bridge and then The Battle of Hastings**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 adverbialsTime connectives. Prefixes changing the meaning of words. Recap punctuation |

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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.

(One week block to cover all Science objectives over 2 year cycle)**Animals, including humans*** Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
* describe the simple functions of the basic parts of the digestive system in humans

**Vocabulary –** *digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus* |  |  **to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study.**Anglo Saxons and VikingsRoman withdrawal from BritainWhere the Anglo Saxons came fromAnglo Saxon settlements, clothing, jobs and leisureViking raiders, Viking long ships, Viking Gods, Viking quest/saga, Danelaw and DanegeldThe end of the era – The Battle of Stamford Bridge and the Battle of Hastings. |

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| Art and Design | Design and Technology | Music |
|  **great artists, architects and designers in history**Continue to study Famous UK artist – Lowry concentrating on his portraits**to create sketch books to record their observations and use them to review and revisit ideas**Skills and techniques to draw a portrait of themselves and their friendDraw portraits of Vikings (look at cartoon influences eg How to Train Your Dragon)**to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design**Weaving techniques – paper weavingChristmas cards and calendars | STEM project links |  |

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| Languages | Physical Education | Outdoor Learning |
| French**Family and Friends****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
 | **Netball*** 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

 **BSP – George****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

**Dance*** perform dances using a range of movement patterns

compare their performances with previous ones and demonstrate improvement to achieve their personal best | Forest Schools (from January) |

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| PSHE/RSE | Religious Education | Computing |
| **Bullying Matters**Core themes: 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. R30. Recognising that our own behaviour can affect other people.**Being Responsible**Core themes: Living in the Wider World L1. Recognising reasons for rules and laws; consequences of not adhering to rules and laws. L2. Recognising there are human rights, that are there to protect everyone. L3. Understanding the relationship between rights and responsibilities. L4. Identifying the importance of having compassion towards others. Explaining how to show care/concern. L5. Identifying ways of protecting the environment in school and at home. Understanding how everyday choices can affect the environment.Linked to STEM – plastic pollutionEnterprise for the Christmas Fayre | **What do different people believe about God?** Describe some of the ways in which Christians Hindus and/orMuslims describe God (A1). Ask questions and suggest some of their own responses to ideasabout God (C1). Suggest why having a faith or belief in something can be hard(B2). Identify how and say why it makes a difference in people’slives to believe in God (B1).**What does it mean to be a Christian in Britain today?**Describe some examples of what Christians do to show their faith, and make connections with some Christian beliefs and teachings (A1).Describe some ways in which Christian express their faith through hymns and modern worship songs (A2).Suggest at least two reasons why being a Christian is a good thing in Britain today, and two reasons why it might be hard sometimes(B2).Discuss links between the actions of Christians in helping others and ways in which people of other faiths and beliefs, including pupils themselves, help others (C2). | **Creating Media - unit 1**Stop – Frame Animation* 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

**Creating Media – unit 2**Desktop publishing* 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. Assemblies, PSHE, Safer Internet Day etc |