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| Everything’s Changing | STEM – A matter of change  **What do you know about solids, liquids and gases?** **Can a liquid become a solid? Can** **a solid become a liquid? -**This lesson is to establish children’s prior knowledge about the three states of matter – solid, liquid and gas. Children discuss what they think makes a solid become a liquid and vice versa.  **What makes solid ice change into liquid? What causes melting? Does the amount of heat affect the time it takes for ice to melt? –**Children conduct an experiment to explore how solid ice changes to a liquid and how the amount of heat added affects the ability to melt a solid.  **What other solids melt? Does the size of the solid affect the time it takes to melt? -**Children conduct an experiment to determine if the size of a solid chocolate piece affects its ability to melt when heated.  **What makes a liquid change to a solid? What effect does freezing have on a liquid? -**Children explore how a liquid becomes a solid by conducting an experiment to create ice cream. Children discuss liquids that become solids through freezing.  **Can a solid change to a liquid and then back to a solid? What is a reversible change?-** Children explore multiple reversible changes by conducting an experiment using solid wax crayon pieces, melted to a liquid and cooled to form a solid crayon again.  **How is changing between a solid and liquid useful for recycling? –**Children explore the aluminium recycling process and relate it to the melting and cooling of solids and liquids. Children then research glass and plastic recycling and present their findings in a flow chart with accompanying audio using presentation software. |
| Year 3/4  Topic 2  Cycle B |



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| Maths | English |
| |  |  | | --- | --- | | |  | | --- | | Number: Multiplication and Division Y3 not bold Y4 bold  Solve 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 practise  X3, 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: Revision  Year 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 clear  Write a descriptive setting for a visual film clip  Write a weather report for the Antarctic  Write biographies about famous Polar explorers  Write a job description for being a crew member with Shackleton on board the Endurance  Write diary entries about being on the Endurance  Research Polar animals  Write a non- chronological report about a Polar animal  Shape poetry about water  The water cycle – write a scientific explanation for the water cycle  **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  Time connectives. Prefixes changing the meaning of words. Recap punctuation |

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| Science | Geography | History |
|  | Identify the North and South Poles – The Arctic and Antarctic on a World Map. Learn about the climate and daylight hours.  Describe and understand **climate,** rivers, mountains, volcanoes, earthquakes, **water cycle,** settlements, trade links etc  Learn about The Arctic and Antarctic  Learn about the water cycle |  |

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| Art and Design | Design and Technology | Music |
| Draw careful pictures of animals that live in the Polar Regions  Make chalk pictures of the aurora borealis (Northern Lights). Northern lights – chalk pictures |  | Charanga – Let your spirit fly (cont) |

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| Languages | Physical Education | Outdoor Learning |
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| PSHE/RSE | Religious Education | Computing/E-Safety |
| **Keeping Safe**  **H2** - Understanding how to make informed choices. **H10** - Exploring how to recognise, predict and assess risks in different situations. **H11** - Understanding that increased independence brings increased responsibility to keep themselves safe. **H15** - Understanding how rules can keep them safe. **H15** - Identifying where and how to get help. **H21** - Developing strategies for keeping physically and emotionally safe in different situations. **H22** - Understanding the importance of protecting information particularly online. **H23, H24, H25** - Understanding how to become digitally responsible. |  | Internet safety  Internet safety day February |