

Summer 2017 Year 6 Topic Map: Mathematics, Literacy and Science

	<u>Mathematics</u>	<u>Literacy</u>	<u>Science</u>
Problems involving number	<ul style="list-style-type: none"> ● To read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. ● To round any whole number to a required degree of accuracy. ● To use negative numbers in context and calculate intervals across zero. ● To solve number problems and practical problems that involve all the above. 	Fiction Focus: Horror Check that the book makes sense, discussing understanding and exploring the meaning of words in context. Recommend books to peers, giving reasons for choices. Identify and discuss themes and conventions in and across a wide range of writing. Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence. Predict what might happen from details stated and implied. Identify the audience for writing. Choose the appropriate form of writing using the main features identified in reading. Note, develop and research ideas. Plan, draft, write, edit and improve. Use the techniques that authors use to create characters, settings and plots. Interweave descriptions of characters, settings and atmosphere with dialogue.	This term, the children will be studying the unit: Animals including Humans. <ul style="list-style-type: none"> • Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. • Recognise the impact of diet, exercise, drugs and lifestyle in the way their bodies function. • Describe the ways in which nutrients and water are transported within animals, including humans.
Adding and subtracting large and small numbers	<ul style="list-style-type: none"> ● To perform mental calculations, including with mixed operations and large numbers. ● To solve addition and subtraction multi-step problems in contexts, deciding which operations to use and why. ● To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 	Poetry <i>Learn a wide range of poetry by heart.</i> <ul style="list-style-type: none"> • Prepare 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. • Identify the audience for writing. • Choose the appropriate form of writing using the main features identified in reading. • Note, develop and research ideas. • Plan, draft, write, edit and improve. Create vivid images by using alliteration, similes, metaphors and personification..	The children might work scientifically by: 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 Presenting findings from enquiries, including conclusions, causal relationships and explanations of and 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.
Long multiplication and division	<ul style="list-style-type: none"> ● To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written methods of long multiplication. ● To divide numbers up to 4 digits by two digit whole numbers using the efficient written method of long division and interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context. ● To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. 		
Working with fractions	<ul style="list-style-type: none"> ● To add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. ● To multiply simple pairs of proper fractions, writing the answer in its simplest form. ● To divide proper fractions by whole numbers. 	<i>During Summer 1, there will be revision on all aspects of spelling and grammar in preparation for the SPAG test in May</i>	

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<p>Problems involving percentages, fractions and decimals</p> <p>Ratio and proportion</p>	<ul style="list-style-type: none">● To solve problems involving the calculation of percentages of whole numbers or measures and the use of percentages for comparison.● To recall and use equivalences between simple fractions, decimals and percentages including in different contexts.● To solve problems involving the relative size of two quantities where missing values can be found by using integer multiplication and division facts.● To solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.● To solve problems involving similar shapes where the scale factor is known or can be found.		
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