Mathematics	Literacy	Science
Place Value:	This term children will be studying WW1 through reading the class novel 'War Horse' by Michael Morpurgo. They will also be doing cross curricular writing based on their geography topic on Brazil (this will include character descriptions of mythical Brazilian characters, writing their own myths, creation stories and recounts).	**Properties and changes in materials**
• Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones) **(Year 4)**		In this unit the children will learn:
• Order and compare numbers beyond 1000 **(Year 4)**	They will learn to:	• To understand that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
• Read, write, order and compare numbers to at least 1000000 and determine the value of each digit **(Year 5)**	• Make comparisons within and across books and stories.	• that some changes of state and dissolving and mixing processes can be reversed through filtering, sieving and evaporating.
• 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 **(Year 4)**	• Participate in discussion about books, taking turns and listening and responding to what others say.	• How to explain that some changes form new materials, and that these changes are not usually reversible.
• Read Roman numerals to 1000 (M) and recognise years written in Roman numerals **(Year 5)**	• To predict what might happen from details stated or implied.	• that new materials, and that these changes are often not reversible.
• Find 1,000 more or less than a given number **(Year 4)**	• Participate in discussion about books, taking turns and listening and responding to what others say.	• How to explain that some changes, caused by heating or cooling form new materials, and that these changes are often not reversible.
• Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 **(Year 5)**	• To write with purpose.	• How to explain that changes caused by burning form new materials, and that these changes are not reversible.
	• Identify an audience for writing.	
Addition and Subtraction:	• Choose the appropriate form of writing	• To compare and group together everyday materials on the basis of their properties. To compare and
• Add and subtract numbers mentally with increasingly large numbers **(Year 5)**	• Note, develop and research ideas.	
• Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate **(Year 4)**	• Plan, draft, edit, rewrite and improve.	
• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) **(Year 5)**	• Draw inferences such as inferring characters' feelings, thoughts and motives from their actions and justifying	
• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy **(Year 5)**		
• Estimate and use inverse operations to check answers to a calculation. Solve addition and subtraction two step problems in contexts,		

deciding which operations and methods to use and why **(Year 4)**
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why **(Year 5)**

- **Multiplication and Division:**
- Recall and use multiplication and division facts for multiplication tables up to 12 × 12 (Year 4).
- Multiply and divide numbers mentally drawing upon known facts **(Year 5)**
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers **(Year 4)**
- Multiply and divide whole numbers by 10, 100 and 1000 **(Year 5)**
- Recognise and use factor pairs and commutativity in mental calculations **(Year 4)**
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers **(Year 5)**
- Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes **(Year 5)**
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19 **(Year 5)**

- **Measurement:**
- Length and Perimeter: Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres **(Year 4)**

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inferences with evidence.
- Use and understand grammatical terminology when discussing writing and reading.

- Use the techniques that authors use to create characters, setting and plots.
- Use both familiar and new punctuation correctly in writing.
- Write about more than one idea.
- Organise paragraphs around a theme and sequence paragraphs.
- Write paragraphs that give a sense of clarity.
- Interweave descriptions of characters, settings and atmosphere with dialogue.
- Identify recurring themes and elements of different stories and identify and discuss themes and conventions in and across a wide range of writing.

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group together everyday materials on the basis of their properties.
- To give reasons based on evidence from comparative and fair tests, for the particular uses of everyday materials.

• Measure and calculate the perimeter of composite rectilinear shapes in cm and m **(Year 5)** • Convert between different units of measure [for example, kilometre to metre] **(Year 4)** • Convert between different units of metric measure [for example, km and m; cm and m; cm and mm] **(Year 5)**		