Mathematics

- To read, write, order and compare numbers at least to 10,000,000 and determine the value of each digit.
- To round any whole number to a required degree of accuracy.
- To solve number problems and practical problems that involve all of the above.
- To perform mental calculations, including with mixed operations and large numbers.
- To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- To perform mental calculations, including with mixed operations and large numbers.
- To identify common factors, common multiples and prime numbers.
- To solve problems involving addition, subtraction, multiplication and division.
- To multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication.
- To divide numbers up to 4 digits by a two-digit whole number 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 solve problems involving addition, subtraction, multiplication and division.
- To use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- To illustrate and name parts of circles, including radius, diameter and circumference.
- To recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
- To solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate.
- To use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa using decimal notation to three decimal places.
- To convert between miles and kilometres.

Literacy

Fiction

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.

Argument

Summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.
Identify how language, structure and presentation contribute to meaning.
Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.
Retrieve and record information from non-fiction.
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.
Guide the reader by using a range of organisational devices, including a range of connectives.
Choose effective grammar and punctuation and propose changes to improve clarity.
Ensure correct use of tenses throughout a piece of writing.

Science

This term, the children will be learning about Light.

Recognise that light appears to travel in straight lines.
Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

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
reporting and 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.