

Mathematics

- Calculate intervals across zero
- Use negative numbers in context
- Round whole numbers to 10 000 000 to a required degree of accuracy
- Solve multi-step addition and subtraction problems in less familiar contexts, deciding which operations and methods to use and why
- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- Divide numbers up to 4 digits by a two-digit whole number using the formal methods of short or long division, and interpret remainders as appropriate for the context as whole numbers, fractions or by rounding
- Check answers to calculations with mixed operations and large numbers, choosing the most appropriate method, including estimation, and determining, in the context of a problem, an appropriate degree of accuracy
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
- Use written division methods in cases where the answer has up to two decimal places
- Solve problems which require decimal answers to be rounded to specified degrees of accuracy
- Use, read and write standard units with up to three decimal places, including converting from smaller to larger units and vice versa
- Compare and classify geometric shapes based on increasingly complex geometric properties and sizes
- Find unknown angles and lengths in triangles, quadrilaterals, and regular polygons
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Year Six Learning Objectives

- Interpret data in pie charts
- Solve problems using pie charts and line graphs
- Calculate and interpret the mean as an average
- Solve problems involving the calculation of percentages and the use of percentages for comparison
- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples



Reading

- Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), both to read aloud and to understand the meaning of new words that they meet
- Maintain positive attitudes to reading and understanding of what they read by: continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- Maintain positive attitudes to reading and understanding of what they read by:
 - (a) increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
 - (b) identifying and discussing themes and conventions in and across a wide range of writing
- Understand what they read by:
 - (a) summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
 - (b) drawing inferences such as inferring characters' feelings, thoughts and motives from their actions and justifying inferences with evidence
 - (c) predicting what might happen from details stated and implied
- Retrieve, record and present information from non-fiction
- Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- Provide reasoned justifications for their views

Writing

- Plan their writing by: identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
- Draft and write by: using a wide range of devices to build cohesion within and across paragraphs
- Draft and write by: in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- Draft and write by: using further organisational and presentational devices to structure text and to guide the reader (e.g. headings, bullet points, underlining)
- Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary
- Evaluate and edit by: ensuring the consistent and correct use of tense throughout a piece of writing
- Proof-read for spelling and punctuation errors
- Evaluate and edit by: ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
- Using passive verbs to affect the presentation of information in a sentence
- Use of the semi-colon, colon and dash to mark the boundary between independent clauses, use of the colon to introduce a list and use of semi-colons within lists, punctuation of bullet points to list information, how hyphens can be used to avoid ambiguity

Science

- Plan different types of scientific enquiries to answer questions
- Recognise and control variables where necessary
- Take measurements using a range of scientific equipment
- Take measurements with increasing accuracy and precision
- Take repeat readings when appropriate
- Record data and results of increasing complexity using scientific diagrams and labels
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar charts
- Record data and results of increasing complexity using line graphs
- Report and present findings from enquiries, including conclusions and causal relationships
- Report and presents findings from enquiries in oral and written forms such as displays and other presentation
- Report and present findings from enquiries, including explanations of, and degree of, trust in results
- Identify scientific evidence that has been used to support or refute ideas or arguments
- Use test results to make predictions to set up further comparative and fair tests