

# Mathematics

- Count forwards and backwards with positive and negative whole numbers, including through zero
- Read and write numbers to at least 1 000 000 and determine the value of each digit
- Interpret negative numbers in context
- Order and compare numbers to at least 1 000 000
- Add and subtract numbers mentally with increasingly large numbers
- Solve calculation problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- Solve problems involving scaling by simple fractions and problems involving simple rates
- Identify multiples and factors, including all factor pairs of a number, and common factors of 2 numbers
- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- Read and write decimal numbers as fractions
- Know percentage and decimal equivalents of  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$  and those with a denominator of a multiple of 10 or 25
- Compare and order fractions whose denominators are all multiples of the same number
- Read, write, order and compare numbers with up to three decimal places
- Solve problems which require knowing key percentage and decimal equivalents
- Convert between different units of metric measure
- Measure the perimeter of composite rectilinear shapes
- Calculate the perimeter of composite rectilinear shapes
- Calculate and compare the area of rectangles

## Year Five Learning Objectives

- Draw given angles, and measure them in degrees (\*) and draw shapes with sides measured to the nearest millimetre
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- Interpret more complex tables, including timetables



# 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: 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
- Maintain positive attitudes to reading and understanding of what they read by: identifying and discussing themes and conventions in and across a wide range of writing
- Understand what they read by:
  - (a) checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
  - (b) summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
  - (c) drawing inferences such as inferring characters' feelings, thoughts and motives from their actions and justifying inferences with evidence
  - (d) predicting what might happen from details stated and implied
- Retrieve, record and present information from non-fiction

## Year Five Learning Objectives

- 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)
- Evaluate and edit by: ensuring the consistent and correct use of tense throughout a piece of writing
- Proof-read for spelling and punctuation errors
- Develop their understanding of the key concepts by: using modal verbs or adverbs to indicate degrees of possibility
- Converting nouns or adjectives into verbs using suffixes: e.g. -ate; -ise; -fy
- Devices to build cohesion, including adverbials of time, place and number
- Brackets, dashes or commas to indicate parenthesis, Use of commas to clarify meaning or avoid ambiguity

# Science

- With prompting, plan different types of scientific enquiries to answer questions
- With prompting, recognise and control variables where necessary
- Select, with prompting, and use appropriate equipment to take readings
- Take precise measurements using standard units
- Take and process repeat readings
- Record data and results
- Record data using labelled diagrams, keys, tables and charts
- Use line graphs to record data
- Report and present findings from enquiries, including conclusions and, with prompting, suggest causal relationships
- With support, present findings from enquiries orally and in writing
- With prompting, identify that not all results may be trustworthy
- Suggest how evidence can support conclusions
- Suggest further comparative or fair tests

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