NATIONAL CURRICULUM OVERVIEW: YEAR 6

Reading
- apply their growing knowledge of root words, prefixes and suffixes, both to read aloud and to understand the meaning of new words that they meet
- continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- reading books that are structured in different ways and reading for a range of purposes
- increasing their familiarity with a wide range of books
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- recommending books that they have read to their peers, giving reasons for their choices
- identifying and discussing themes and conventions in and across a wide range of writing
- making comparisons within and across books
- learning a wider range of poetry by heart
- preparing poems and plays to read aloud and to perform
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- checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
- asking questions to improve their understanding
- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- predicting what might happen from details stated and implied
- summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- identifying how language, structure and presentation contribute to meaning
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- discuss and evaluate how authors use language, considering the impact on the reader
- distinguish between statements of fact and opinion
- 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
- explain and discuss their understanding of what they have read, including through formal presentations and debates
- provide reasoned justifications for their views

Writing

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters
- continue to distinguish between homophones and other words which are often confused
- use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary use a thesaurus

- write legibly, fluently and with increasing speed, by choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters

- 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
  - noting and developing initial ideas, drawing on reading and research
  - in writing narratives, considering how authors have developed characters and settings
- draft and write by:
  - selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
  - in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
  - précising longer passages
  - using a wide range of devices to build cohesion within and across paragraphs
  - using further organisational and presentational devices to structure text and to guide the reader *[for example, headings, bullet points, underlining]*
- evaluate and edit by:
  - assessing the effectiveness of their own and others' writing
  - proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
  - ensuring the consistent and correct use of tense throughout a piece of writing
  - ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing
  - proof-read for spelling and punctuation errors
- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear

- recognise vocabulary and structures that are appropriate for formal speech and writing
- use passive verbs to affect the presentation of information in a sentence
- use the perfect form of verbs to mark relationships of time and cause
- use expanded noun phrases to convey complicated information concisely
- use modal verbs or adverbs to indicate degrees of possibility
- use relative clauses beginning with who, which, where, when, whose, that or with an implied relative pronoun
- use commas to clarify meaning or avoid ambiguity in writing
- use hyphens to avoid ambiguity
- use brackets, dashes or commas to indicate parenthesis
- use semi-colons, colons or dashes to mark boundaries between independent clauses
- use a colon to introduce a list
- punctuate bullet points consistently
- use and understand the grammatical terminology in English Appendix 2 accurately and appropriately

Maths

- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems that involve all of the above.

- 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 written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- add and subtract fractions with different denominators and mixed numbers, using the
- concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8]
- divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- 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 up to three decimal places
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average