

Year 6 Planning Grid – Literacy Year 6

Reading :

Word reading

Pupils should be taught to: apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet.

Reading comprehension

Pupils should be taught to: 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 reading books that are structured in different ways and reading for a range of purposes 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

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, showing understanding through intonation, tone and volume so that the meaning is clear to an audience understand what they read by: 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 discuss and evaluate how authors use language, including figurative 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, building on their own and others' ideas and challenging views courteously explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary provide reasoned justifications for their views.

Writing transcription

Spelling (see English Appendix 1)

Pupils should be taught to: use further prefixes and suffixes and understand the guidance for adding them spell some words with 'silent' letters [for example, knight, psalm, solemn] continue to distinguish between homophones and other words which are often confused use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1 use dictionaries to check the spelling and meaning of words use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary use a thesaurus.



Handwriting

Handwriting and presentation

Pupils should be taught to: 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 choosing the writing implement that is best suited for a task

Writing vocabulary, grammar and punctuation

Writing – vocabulary, grammar and punctuation

Pupils should be taught to: develop their understanding of the concepts set out in English Appendix 2 by: recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms using passive verbs to affect the presentation of information in a sentence using the perfect form of verbs to mark relationships of time and cause using expanded noun phrases to convey complicated information concisely using modal verbs or adverbs to indicate degrees of possibility using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun learning the grammar for years 5 and 6 in English Appendix 2 indicate grammatical and other features by: using commas to clarify meaning or avoid ambiguity in writing using hyphens to avoid ambiguity using brackets, dashes or commas to indicate parenthesis using semi-colons, colons or dashes to mark boundaries between independent clauses using a colon to introduce a list punctuating bullet points consistently use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.

Writing Composition

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 where necessary in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed 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 precisising 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 and choosing the appropriate register proof-read for spelling and punctuation errors - perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

Year 6 Planning Grid – Mathematics Year 6

Mathematics
Number and place value
 Negative numbers
 use negative numbers in context, and calculate intervals across zero
 Compare and order, more or less
 read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (rp)
 Place value and rounding
 read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (rp) round any whole number to a required degree of accuracy
Solving problems
 solve number and practical problems that involve all of the above.
 Pupils use the whole number system, including saying, reading and writing numbers accurately
Number – addition and subtraction
Understanding addition
 use their knowledge of the order of operations to carry out calculations involving the four operations
 Pupils explore the order of operations using brackets; for example, $2 + 1 \times 3 = 5$ and $(2 + 1) \times 3 = 9$.
Number bonds
 See Year 1 & Year 2 expectations
Mental calculation
 perform mental calculations, including with mixed operations and large numbers
 They undertake mental calculations with increasingly large numbers and more complex calculations.
Written statements /methods
 Pupils practise addition, subtraction, multiplication and division for larger numbers, using the formal written methods of columnar addition and subtraction, short and long multiplication, and short and long division (see Mathematics Appendix 1).
Inverse and checking
 use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
 Pupils round answers to a specified degree of accuracy, for example, to the nearest 10, 20, 50 etc., but not to a specified number of significant figures.
Solve problems
 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and whysolve problems involving addition, subtraction, multiplication and division

Fractions -Fractions of objects, shapes and quantities
Fractions
 Link fractions, decimals and percentages
 Identify the value of each digit in numbers given to three decimal places & multiply and divide numbers by 10, 100 & 1000 giving answers up to three decimal places.
 Compare, order and find the equivalence of fractions ,decimals and percentages
 Compare & order fractions, including fractions > 1 .
 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
 Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example $3/8$].
 Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
 For simple fractions with recurring decimal equivalents, pupils learn about rounding the decimal to three decimal places, or other appropriate approximations depending on the context.
 Pupils use their understanding of the relationship between unit fractions and division to work backwards by multiplying a quantity that represents a unit fraction to find the whole quantity [for example, if $1/4$ of a length is 36cm, then the whole length is $36 \times 4 = 144$ cm]. They practise calculations with simple fractions and decimal fraction equivalents to aid fluency, including listing equivalent fractions to identify fractions with common denominators.
 Pupils can explore and make conjectures about converting a simple fraction to a decimal fraction [e.g. $3 \div 8 = 0.375$].
 Addition, subtraction and multiplication & division of fractions and decimals
 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
 Pupils should practise, use & understand the addition and subtraction of fractions with different denominators by identifying equivalent fractions with the same denominator.
 They should start with fractions where the denominator of one fraction is a multiple of the other [for example, $1/2 + 1/8 = 5/8$] and progress to varied and increasingly complex problems.
 Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example $1/4 \times 1/2 = 1/8$].
 Divide proper fractions by whole numbers [for example $1/2 \div 2 = 1/6$].
 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.
 Pupils should use a variety of images to support their understanding of multiplication with fractions. This follows earlier work about fractions as operators (fractions of), as numbers, and as equal parts of objects, for example as parts of a rectangle
 Pupils multiply and divide numbers with up to two decimal places by one-digit and two-digit whole numbers. Pupils multiply decimals by whole numbers, starting with the simplest cases, such as $0.4 \times 2 = 0.8$, and in practical contexts, such as measures and money.
 Pupils are introduced to the division of decimal numbers by one-digit whole number, initially in practical contexts involving measures & money. They recognise division calculations
Problem solving
 Solve problems which require answers to be rounded to specified degrees of accuracy.
 Pupils also develop their skills of rounding and estimating as a means of predicting and checking the order of magnitude of their answers to decimal calculations. This includes rounding answers to a specified degree of accuracy and checking the reasonableness of their answers.

Number and place value

Number – multiplication and division

Measurement

Geometry-properties and shape

Statistics

Measurement

Measurement
 Measure, estimate, choose measuring devices
 standard units of measure :length ,mass ,capacity ,temperature
 Pupils could be introduced to compound units for speed, such as miles per hour, and apply their knowledge in science or other subjects as appropriate.

Conversion of units and equivalences
 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, & vice versa, using decimal notation to up to three decimal places
 convert between miles and kilometres
 Pupils connect conversion (for example, from kilometres to miles) to a graphical representation as preparation for understanding linear/proportional graphs.
 They know approximate conversions and are able to tell if an answer is sensible.

Perimeter, area, surface, area, volume
 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].
 They relate the area of rectangles to parallelograms and triangles, for example, by dissection, and calculate their areas, understanding and using the formulae (in words or symbols) to do this.

Measurement and calculation
 solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3- decimal places as appropriate
 Using the number line, pupils use, add and subtract positive and negative integers for measures such as temperature.

Geometry-properties of shapes
 Geometry-properties and shape
 Properties of 2D and 3D shapes
 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
 Pupils draw shapes and nets accurately, using measuring tools and conventional markings and labels for lines and angles.
 Pupils describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements.
 These relationships might be expressed algebraically for example, $d = 2 \times r$; $a = 180 - (b + c)$.

Angles
 recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
 Pupils draw shapes and nets accurately, using measuring tools and conventional markings and labels for lines and angles.
 Pupils describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements. These relationships might be expressed algebraically for example, $d = 2 \times r$; $a = 180 - (b + c)$.

Geometry –position and direction
 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.
 Pupils draw and label a pair of axes in all four quadrants with equal scaling. This extends their knowledge of one quadrant to all four quadrants, including the use of negative numbers.
 Pupils draw and label rectangles (including squares), parallelograms and rhombuses, specified by coordinates in the four quadrants, predicting missing coordinates using the properties of shapes. These might be expressed algebraically for example, translating vertex (a, b) to (a – 2, b + 3); (a, b) and (a + d, b + d) being opposite vertices of a square of side d.

Statistics

interpret and construct pie charts and line graphs and use these to solve problems
 calculate and interpret the mean as an average.
 Pupils connect their work on angles, fractions and percentages to the interpretation of pie charts.
 Pupils both encounter and draw graphs relating two variables, arising from their own enquiry and in other subjects.
 They should connect conversion from kilometres to miles in measurement to its graphical representation.
 Pupils know when it is appropriate to find the mean of a data set.