

Warmsworth Primary School

Parent Guide to the
National Curriculum
and expected level of attainment for
English and Mathematics
in
Year 5

(expectations for other Year groups are
available on www.warmsworth.doncaster.sch.uk)

Maths Year 5

Number & place Value

Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.

Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.

Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.

Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.

Solve number problems and practical problems that involve all of the above.

Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Addition & Subtraction

Add and subtract whole numbers with more than 4 digits.

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).

Add and subtract numbers mentally with increasingly large numbers (example, $12\,462 - 2300 = 10\,162$)

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Multiplication & Division

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.

Establish whether a number up to 100 is prime and recall prime numbers up to 19.

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.

Multiply and divide numbers mentally drawing upon known facts.

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.

Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).

Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.

Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.

Solve problems involving multiplication and division, including scaling by simple fractions

Fractions (including decimals & %)

Compare and order fractions whose denominators are all multiples of the same number.

Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 11/5$].

Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Read and write decimal numbers as fractions [for example, $0.71 = 71/100$].

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.

Round decimals with two decimal places to the nearest whole number and to one decimal place.

Read, write, order and compare numbers with up to three decimal places.

Solve problems involving number up to three decimal places.

Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.

Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.

Measurement

Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).

Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.

Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²).

Estimate the area of irregular shapes.

Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water].

Solve problems involving converting between units of time.

Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Geometry: Properties of Shapes

Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.

Draw given angles, and measure them in degrees (°).

Identify:

angles at a point and one whole turn (total 360°);

angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°);

other multiples of 90°.

Use the properties of rectangles to deduce related facts and find missing lengths and angles.

Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Geometry: Position & Direction

Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Statistics

Solve comparison, sum and difference problems using information presented in a line graph.

Complete, read and interpret information in tables, including timetables.

** Underlined objectives are Key Performance Indicators and have to be achieved to move onto next Year Group.

Reading Years 5 and 6

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.

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;

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;

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;

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.

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.

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Writing Year 5 – Spelling, Punctuation and Grammar

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 (Years 6).

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.

Develop their understanding of the concepts set out in English Appendix 2 (Year 5) by:

Word

Converting nouns or adjectives into verbs using suffixes (eg, -ate; -ise; -ify).

Verb prefixes (eg, dis-, de-, mis-, over- and re-).

Sentence

Relative clauses beginning with who, which, where, when, whose, that, or an omitted relative pronoun.

Indicating degrees of possibility using adverbs (eg, perhaps, surely) or modal verbs (eg, might, should, will, must).

using expanded noun phrases to convey complicated information concisely.

Text

Devices to build cohesion within a paragraph (eg, then, after that, this, firstly)

Linking ideas across paragraphs using adverbials of time (eg, later), place (eg, nearby) and number (eg, secondly).

Punctuation

Brackets, dashes or commas to indicate parenthesis.

Use of commas to clarify meaning or avoid ambiguity.

Terminology for pupils

Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately when discussing their writing and reading (*modal verb, relative pronoun, relative clause, parenthesis, bracket, dash cohesion, ambiguity*).

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Writing Years 5 and 6 - Transcription and Composition

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.

Plan their writing by:

identifying the audience for and purpose of the writing;

selecting the appropriate form and using other similar writing;

using other similar writing as models for their own compositions;

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;

selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning;

in narratives;

describing settings, characters and atmosphere;

integrating dialogue to convey character and advance the action;

precising 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, statements, underlining].

Evaluate and edit by:

assessing the effectiveness of their own and others' writing;

proposing changes to Vocabulary, Grammar & 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;

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.