

Mathematics in Year 5

By the end of year 5, children are expected to be able to do all of the following:

During years 5 and 6 (upper Key Stage 2), children use their knowledge of number facts and tables to tackle more complex problems, including larger multiplication and division. In Year 5, this includes more work on calculations with fractions and decimals, and using considerably larger numbers than previously.

Calculations

- add and subtract whole numbers with more than 4 digits, including using formal written methods
- add and subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine levels of accuracy
- find all factor pairs of a number and common factors of two 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 two-digit number using a formal written method
- multiply and divide numbers mentally using known facts
- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and use remainders
- multiply and divide whole numbers and decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, including symbols (2) and (3)
- solve multi-step calculation problems covering all the above, choosing methods to use

Number and Place Value

- read, write and order numbers to at least 1 000 000, understanding the value of each digit
- count forwards or backwards in steps of powers of 10 for any number up to 1 000 000
- use negative numbers in context, such as temperature
- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- solve place value problems
- read Roman numerals to 1000 (M) including years.

Fractions (incl. decimals and %)

- order fractions whose denominators are all multiples of the same number (e.g. $\frac{3}{5}$ and $\frac{7}{10}$)
- know equivalent fractions of a given fraction, including 10ths and 100ths
- convert between mixed numbers and improper fractions (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5}$ or $1 \frac{1}{5}$)
- add and subtract fractions with the same denominator or multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- read and write decimals as fractions (e.g. $0.71 = \frac{71}{100}$)
- use 10ths, 100ths and 1000ths; relate them to decimal equivalents
- round decimals to the nearest whole number and to one decimal place
- read, write and order numbers with up to three decimal places
- understand percentage, write a % as a fraction and as a decimal
- solve problems involving numbers up to three decimal places, percentage and decimal equivalents and fractions with a denominator of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$ or $\frac{4}{5}$ or a multiple of 10 or 25.

Maths in Year 5 continued.....

By the end of year 5, children are expected to be able to do all of the following:

Measurements

- convert between different units of metric measure (e.g. km and m, cm and m, cm and mm, g and kg, l and ml)
- understand approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- calculate the perimeter of rectangular shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares) and estimate the area of irregular shapes
- estimate volume and
- solve problems involving converting between units of time
- use all four operations to solve problems involving measure.

Geometry

- identify 3-D shapes, including cubes and other cuboids
- estimate and compare acute, obtuse and reflex angles
- draw 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°) and other multiples of 90°
- find missing lengths and angles in a rectangle
- compare regular and irregular polygons based on reasoning about sides and angles
- describe and show the position of a shape following a reflection or translation 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.

What do children have to demonstrate to achieve the expectations in year 5?

To show that children are able to....

- Covert between mixed numbers and improper fractions
- read and write decimals as fractions
- use 10ths, 100ths and 1000ths; relate them to decimal equivalents
- read, write and order numbers with up to three decimal places
- understand percentage
- order fractions whose denominators are all multiples of the same number
- solve problems involving numbers, decimals, percentage and fractions with a denominator of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$ or $\frac{4}{5}$ or a multiple of 10 or 25

....they would need to be able to tackle questions such as the examples opposite:

Ben and Isla each had two slices of toast of the same size. Ben ate $1\frac{1}{2}$ of his slices. Isla ate $\frac{5}{4}$ of her slices. Who ate more? How much more?



Put these numbers in the correct order, starting with the largest:
 $\frac{6}{10}$, 0.63, $\frac{6}{100}$, 0.063 61%

$$\frac{\square}{15} > \frac{\square}{10}$$

Are these true or false? Explain how you know.

0.1 of a kilometre is 1m. 0.2 of 2 kilometres is 2m.
0.3 of 3 Kilometres is 3m. 0.25 of 3m is 500cm.

Eva is serving pizzas; each child is given $\frac{3}{4}$ of a pizza. Eva has 6 pizzas. How many people can she serve?



Can you write this as a multiplication sentence?

English in Year 5

By the end of year 5, children are expected to be able to do all of the following:

In upper Key Stage 2 your child will increasingly meet a wider range of texts and types of writing, and will be encouraged to use their skills in a broader range of contexts. Their knowledge of grammar will also increase.

Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Years 5 and 6, these may include:

- speak clearly in a range of contexts, using Standard English where appropriate
- monitor the reactions of listeners and react accordingly
- consider different viewpoints, listening to others and responding with relevant views
- use appropriate language, tone and vocabulary for different purposes including formal presentations

Grammar Help

Grammatical terminology used in schools may not be familiar to all our families. Here are some useful reminders of some of the terms:

fronted adverbial: a word or phrase which describes how, where or when an action is performed and is placed at the start of the sentence, e.g. "Before breakfast,..." or "Carrying a heavy bag, he ..."

modal verb: a verb that indicates possibility - these are often used alongside other verbs, e.g. will, may, should, can.

relative clause: a clause which adds extra information or detail. Example: The girl, who had brown curly hair, raced down the street.

passive verb: a form of verb that implies an action being done to someone or something. Example: The boy was bitten by the dog.

perfect form: a form of verb that implies that an action is completed, using either the past or present form of the verb 'to have' before the verb. Example: The boy has walked home.

Reading Skills

- read and discuss a wide range of fiction, poetry, plays and non-fiction
- learn a range of poetry by heart
- perform plays and poems using tone, volume and intonation to convey meaning
- use knowledge of spelling patterns to read aloud and understand new words
- make comparisons between different books, or parts of the same book
- become familiar with a wide range of books, including legends, modern fiction, classic fiction and books from other cultures
- make book recommendations, giving reasons for choices
- identify and discuss themes and conventions across a wide range of writing
- discuss understanding of texts, including exploring the meaning of words in context
- ask questions to improve understanding of texts
- draw inferences from a text such as characters' feelings, thoughts and motives, justifying with evidence
- distinguish between fact and opinion
- retrieve, record and present information from non-fiction
- summarise ideas drawn from more than one paragraph, identifying key details
- predict future events from details either stated in a text or implied
- identify how language, structure and presentation contribute to meaning
- discuss how authors use language, including figurative, to affect the reader
- participate in discussions about books, building on and challenging ideas
- explain and discuss understanding of reading, including through formal presentations and debates about reading
- provide reasoned justifications for views

English in Year 5 continued.....

By the end of year 5, children are expected to be able to do all of the following:

Writing Skills

- Write with increasing speed, maintaining legibility and style
- spell some words with silent letters, such as knight and solemn
- recognise and use spellings for homophones and other often-confused words from the Y5/6 list
- use a dictionary to check spelling and meaning of words and use a thesaurus
- identify the audience and purpose before writing, using other similar writing as models for their own
- make notes to develop initial ideas, drawing on reading and research where necessary
- select appropriate grammar and vocabulary to change or enhance meaning
- develop setting, atmosphere and character, including through dialogue, when writing stories
- write a summary of longer passages of writing
- use a range of cohesive devices within and across paragraphs
- use advanced organisational and presentational devices, such as bullet points, headings, underlining
- use the correct tense consistently throughout a piece of writing
- ensure correct subject and verb agreement
- self-assess their own writing and peer assess others' writing for effectiveness
- suggest changes to vocabulary, grammar and punctuation to enhance effects
- proof-read for spelling and punctuation errors
- perform compositions using appropriate intonation, volume and movement
- recognise vocabulary and structures that are appropriate for formal use including subjunctive forms
- use passive verbs to affect the presentation of information
- 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
- using commas to clarify meaning or avoid ambiguity in writing
- using brackets, dashes or commas to indicate parenthesis
- use grammatical connections and adverbials for cohesion
- use ellipses, commas, brackets and dashes in writing
- use hyphens to avoid ambiguity
- 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 year 5 and 6 grammatical terminology accurately and appropriately



Supporting learning – grammar

By the end of year six, children will be expected to be able to tackle questions such as those opposite and below:

Rewrite the sentence below so that it begins with the **adverbial**. Use only the same words, and remember to punctuate your answer correctly.

We turned off the lights before we left.

verb
adverb
noun
pronoun
adjective
vowel
consonant

In the sentence below, Dad booked the cinema tickets before he collected them.

Complete the sentence with the correct **verb form**.

Although Dad _____ booked the tickets, he still had to queue to collect them.

Fill the gap using the past progressive form of the verbs.

to play



While I _____ in the park, my mum

to push



_____ my sister on the swing.

Supporting learning

At Ropley we expect children to use 'Edingly' sentence starters to add information to a sentence. Children might use:

verbs – 'Exhausteded, he trudged...'
verbs – 'Laughinging, the girl...'
adverbs - 'Quietly, he moved...'

Other ways of adding information include:

- Subordinating conjunctions – 'Although it was late..'
- prepositions – 'At about six-thirty...'
- fronted adverbials – 'Before breakfast,...'

Often these techniques allow children to write more complex sentences.

Spot the mistake and correct the errors:

- 1 Yesterday, I was played for my local team.
- 2 Our local café makes great cakes. On a Sunday we sat in the cafe and eat them.
- 3 The family was going on holiday tomorrow and they was so excited.
- 4 I am jumped up and down on my trampoline now!

Complete the sentence below with a contraction that makes sense.

If you give me the recipe _____ buy the ingredients on the way home.

Spelling list - year 5 & 6

accommodate	identity
accompany	immediate(ly)
according	individual
achieve	interfere
aggressive	interrupt
amateur	language
ancient	leisure
apparent	lightning
appreciate	marvellous
attached	mischievous
available	muscle
average	necessary
awkward	neighbour
bargain	nuisance
bruise	occupy
category	occur
cemetery	opportunity
committee	parliament
communicate	persuade
community	physical
competition	prejudice
conscience*	privilege
conscious*	profession
controversy	programme
convenience	pronunciation
correspond	queue
criticise	recognise
curiosity	recommend
definite	relevant
desperate	restaurant
determined	rhyme
develop	rhythm
dictionary	sacrifice
disastrous	secretary
embarrass	shoulder
environment	signature
equip (-ped, -ment)	sincere(ly)
especially	soldier
exaggerate	stomach
excellent	sufficient
existence	suggest
explanation	symbol
familiar	system
foreign	temperature
forty	thorough
frequently	twelfth
government	variety
guarantee	vegetable
harass	vehicle
hindrance	yacht

Spelling lists - guidance

As well as lists of words which contain the taught spelling patterns for each year group, children are expected to be able to spell the list of words below by the end of year 6. The lists are a mixture of words pupils frequently use in their writing and those which they often misspell.

Guidance on the statutory spelling patterns for each year group are available as separate documents