

Mathematics in Year 3

By the end of year 3, children are expected to be able to do all of the following:

During year 3, the focus of mathematics is to ensure that children become increasingly fluent with whole numbers and calculation, continuing with number facts and place value. In Year 3 your child is likely to be introduced to the standard written column methods of addition and subtraction.

Calculations

- add and subtract numbers mentally, including adding either 1s, 10s or 100s to a 3-digit number
- use the standard column method for addition and subtraction for up to 3 digits
- estimate answers to calculations and use inverse calculations to check answers
- **learn the 3x, 4x and 8x tables and related division facts, e.g. knowing that $56 \div 8 = 7$**
- begin to solve multiplication and division problems with two-digit numbers

Number and Place Value

- Count in multiples of 4, 8, 50 and 100
- find 10 or 100 more or less than a number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- read and write numbers up to 1000 in digits and in words
- solve number problems.

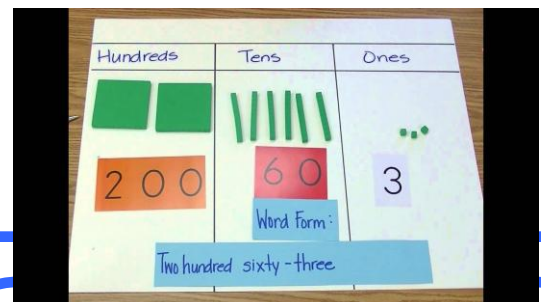
Statistics

- Answer questions about and present data using bar charts, pictograms and tables

Fractions

- count up/down in tenths, know that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers by 10
- add and subtract simple fractions worth less than one e.g. $5/7 + 1/7 = 6/7$
- find fractions of amounts using unit fractions (e.g. $1/3$ of 12, $1/5$ of..., $1/6$ of...) and non-unit fractions (e.g. $3/4$ of..., $3/5$ of...)
- understand simple equivalent fractions
- order a set of simple fractions
- solve fractions problems

Place value...263 (two hundred and sixty three) =



Shape

- draw familiar 2-d shapes and make and describe 3-d shapes
- recognise right angles, and know that these are a quarter turn, with two making a $1/2$ turn, three making $3/4$ of a turn and four a complete turn
- identify whether an angle is greater than, less than or equal to a right angle
- Identify horizontal, vertical, perpendicular and parallel lines

Measurements

- solve simple problems involving adding and subtracting length and weight
- measure the perimeter of simple shapes
- add and subtract amounts of £ to give change
- tell the time from an analogue clock and use 12-hour and 24-hour clocks
- use Roman numerals from I to XII
- record and compare time in terms of seconds, minutes and hours; use time vocab
- know the number of seconds in a minute and the number of days in each month, year and leap year
- calculate the time taken by events or tasks.

What do children have to be able to do, explain and understand to achieve the expectations in year 3?

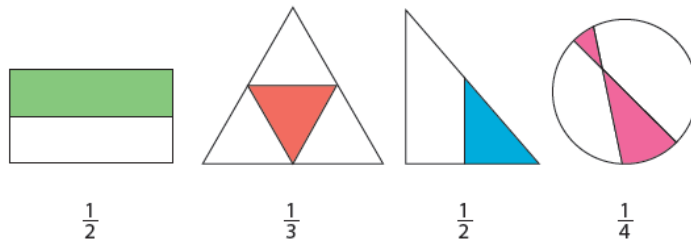
To show that children are able to....

- count up/down in tenths, know that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers by 10
- find fractions of amounts
- understand simple equivalent fractions
- order a set of simple fractions
- solve fractions problems

they would need to be able to tackle questions such as the examples given opposite and below

True or false?

Explain why.



What fraction of the bar does each section represent?



Draw two more bars of the same size and divide one into eighths and the other into sixths.

Which number is greater, a tenth, an eighth or a sixth?

How do the bars help you to explain your reasoning?

6 girls share 3 bars of chocolate equally.
4 boys share 2 bars of chocolate equally.

Does each girl get more chocolate, less chocolate or the same amount of chocolate as each boy?

Draw a picture to show your reasoning is correct.

Supporting learning

Inverse operations are opposite operations. Subtraction is the inverse of addition and division is the inverse of multiplication.

Example 1: If a child had worked out the following subtraction: $392 - 133 = 259$, he/she would be encouraged to add the 133 and their answer of 259 together to work out if these numbers total 392.

Example 2: *I think of a number. I add 17 to it. I divide it by 2. I end up with 20. What was my number?*
The best way to work this out would be by using the inverse. Start with 20, then multiply 20 by 2 to get 40. Since the original number had 17 added to it to make 40, you would need to subtract 17 from 40 to arrive at the answer, which is 23.

Using arrays to understand that division is the inverse of multiplication:



$6 \times 3 = 18$ and $3 \times 6 = 18$
the inverse of these
 $18 \div 6 = 3$ and $18 \div 3 = 6$

Children need to know **ALL** their tables up to 12 X 12 by the end of **year 4**, including related division facts!

English in Year 3

By the end of year 3, children are expected to be able to do all of the following:

In lower Key Stage 2 (years 3 and 4), your child will build on their work to become more independent in both their reading and their writing. Most children will be confident at decoding most words – or will have extra support to help them to do so – and so now they will be able to use their reading to support their learning about other subjects. They will begin to meet a wider range of writing contexts, including both fiction and non-fiction styles and genres.

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 3 and 4, some focuses may include:

- use discussion and conversation to explore and speculate about new ideas
- begin to recognise the need to use Standard English in some contexts
- participation in performances, plays and debates
- explain thinking and feeling in well - structured statements and responses

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 used:

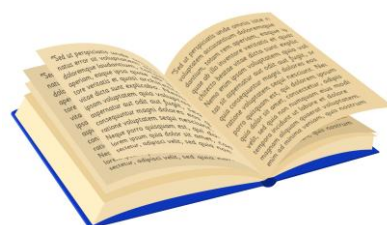
present perfect tense: a tense formed using 'have' and a participle, to indicate that an action has been completed at an unspecified time, e.g. The girl has eaten her ice-cream

noun phrase: a group of words which takes the place of a single noun. Example: The fluffy black cat..

direct speech: words quoted directly using inverted commas, as opposed to being reported in a sentence.

Reading Skills

- extend skills of decoding to tackle more complex words, including those with unusual spelling patterns
- listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- recognise some different forms of poetry preparing poems and play scripts to read aloud and to perform
- use dictionaries to find the meanings of words
- become familiar with a range of traditional and fairy tales, including telling some orally
- identifying themes and conventions in a wide range of books
- discuss words and phrases which have been chosen to interest the reader
- ask questions about what they have read
- drawing inferences such as characters' feelings, thoughts and motives from their actions; justifying with evidence
- make predictions about what might happen next in a story
- summarise ideas from several paragraphs of writing
- identify how language, structure, and presentation contribute to meaning
- find and record information from non-fiction texts
- take part in discussions about reading and books
- Check reading makes sense, and self-correct reading where necessary



English in Year 3 continued.....

By the end of year 3, children are expected to be able to do all of the following:

Writing Skills

- Write with joined handwriting, making appropriate join choices
- spell words that include prefixes and suffixes, such as anticlockwise and further homophones
- spell some commonly misspelt words correctly, taken from the Y3/4 list
- use a dictionary to check spellings
- use possessive apostrophes correctly in regular and irregular plurals, such as boys' and children's
- use examples of writing to help them structure their own similar texts
- plan out sentences orally to select adventurous, varied and rich vocabulary and an increasing range of sentence structures
- use paragraphs to organise ideas
- use description and detail to develop characters, setting and plot in story writing
- write interesting narratives in stories
- in non-fiction writing, use features such as sub-headings and bullet points
- evaluate and edit work to make improvements, including editing for spelling errors
- read other's writing and suggest possible improvements
- read aloud work that they've written using appropriate intonation to be clearly understood
- extend sentences using a wider range of conjunctions, including subordinating conjunctions
- use the present perfect verb tense
- use nouns and pronouns with care to avoid repetition

Supporting learning

To add information to a sentence, children might use conjunctions ("Although it was still early..."), adverbs ("Early that morning...") or prepositions ("At about six-thirty that morning..."). Often these techniques allow children to write more complex sentences.



Supporting learning

When children are writing outside of school – or when you are looking at school work with them try discussing their choices of vocabulary. Common words, such as 'went' and 'said' can often be replaced by more specific words that give a sense of the action, such as 'raced' or 'yelled'. You can also take opportunities to look at words like this that crop up in books you read with your child, considering how the choice of word affects understanding of a story.



The inbuilt thesaurus in Word is great to use if children are word processing their writing.

Spelling list for year 3 and 4

accident(ally)	interest
actual(ly)	island
address	knowledge
answer	learn
appear	length
arrive	library
believe	material
bicycle	medicine
breath	mention
breathe	minute
build	natural
busy/business	naughty
calendar	notice
caught	occasion(ally)
centre	often
century	opposite
certain	ordinary
circle	particular
complete	peculiar
consider	perhaps
continue	popular
decide	position
describe	possess(ion)
different	possible
difficult	potatoes
disappear	pressure
early	probably
earth	promise
eight/eighth	purpose
enough	quarter
exercise	question
experience	recent
experiment	regular
extreme	reign
famous	remember
favourite	sentence
February	separate
forward(s)	special
fruit	straight
grammar	strange
group	strength
guard	suppose
guide	surprise
heard	therefore
heart	though/although
height	thought
history	through
imagine	various
increase	weight
important	woman/women

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 4. 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