

## Mathematics in Year 4

By the end of Year 4, children will be expected to know all of their times tables up to  $12 \times 12$  by heart. This means not only recalling them in order but also being able to answer any times table question at random, and also knowing the related division facts. For example, in knowing that  $6 \times 8 = 48$ , children can also know the related facts that  $8 \times 6 = 48$  and that  $48 \div 6 = 8$  and  $48 \div 8 = 6$ . This expertise will be particularly useful when solving larger problems and working with fractions.

### Number and Place Value

- Count in multiples of 6, 7, 9, 25 and 1,000
- Count backwards, including using negative numbers
- Recognise the place value in numbers of four digits (1000s, 100s, 10s and 1s)
- Put larger numbers in order, including those greater than 1,000
- Round any number to the nearest 10, 100 or 1,000
- Read Roman numbers up to 100
  - Roman Numerals' Basics:
    - $I = 1$  ;  $V = 5$  ;  $X = 10$  ;  $L = 50$  ;  $C = 100$
    - Letters can be combined to make larger numbers. If a smaller value appears in front of a larger one then it is subtracted, e.g.  $IV$  ( $5 - 1$ ) means 4. If the larger value appears first then they are added, e.g.  $VI$  ( $5 + 1$ ) means 6.

### Calculations

- Use the standard method of column addition and subtraction for values up to four digits
- Solve two-step problems involving addition and subtraction
- Know the multiplication and division facts up to  $12 \times 12 = 144$
- Use knowledge of place value, and multiplication and division facts to solve larger calculations
- Use factor pairs to solve mental calculations, e.g. knowing that  $9 \times 7$  is the same as  $3 \times 3 \times 7$
- Use the standard short multiplication method to multiply three-digit numbers by two digit numbers

### Fractions

- Use hundredths, including counting in hundredths
- Add and subtract fractions with the same denominator, e.g.  $\frac{4}{7} + \frac{5}{7}$
- Find the decimal value of any number of tenths or hundredths, for example  $\frac{7}{100}$  is 0.07
- Recognise the decimal equivalents of  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$
- Divide one- or two-digit numbers by 10 or 100 to give decimal answers
- Round decimals to the nearest whole number
- Compare the size of numbers with up to two decimal places

### Measurements

- Convert between different measures, such as kilometres to metres or hours to minutes
- Calculate the perimeter of shapes made of squares and rectangles
- Find the area of rectangular shapes by counting squares
- Read, write and convert times between analogue and digital clocks, including 24-hour clocks
- Solve problems that involve converting amounts of time, including minutes, hours, days, weeks and months

### Shape and Position

- Classify groups of shapes according to the properties, such as sides and angles
- Identify acute and obtuse angles
- Complete a simple symmetrical figure by drawing the reflected shape
- Use coordinates to describe the position of something on a standard grid

- *Begin to describe movements on a grid by using left/right and up/down measures*

### **Graphs and Data**

- *Construct and understand simple graphs using discrete and continuous data*
  - *Discrete data is data which is made up of separate values, such as eye colour or shoe size. Continuous data is that which appears on a range, such as height or temperature.*

## English in Year 3 and Year 4

In lower Key Stage 2, your child will build on their work from the infants 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

### Reading skills

- Extend skills of decoding to tackle more complex words, including with unusual spelling patterns
- Read a wide range of fiction, non-fiction and literary books
- Recognise some different forms of poetry
- Use dictionaries to find the meanings of words
- Become familiar with a range of traditional and fairy tales, including telling some orally
- Identify words which have been chosen to interest the reader
- Ask questions about what they have read
- Draw simple inferences about events in a story, such as how a character might be feeling
- Make predictions about what might happen next in a story
- Summarise ideas from several paragraphs of writing
- Find and record information from non-fiction texts
- Take part in discussions about reading and books
  - Children begin to identify how authors choose words for effect, for example by selecting 'wailed' instead of 'cried', or 'enraged' rather than 'cross'. They may begin to make such choices in their own writing, too.

### Writing skills

- Write with joined handwriting, making appropriate join choices
- Spell words that include prefixes and suffixes, such as anticlockwise
- 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 children's and boys'
- Use examples of writing to help them to structure their own similar texts
- Plan out sentences orally to select adventurous vocabulary
- Use paragraphs to organise ideas
- Use description and detail to develop characters and settings in story-writing
- Write interesting narratives in stories
- In non-fiction writing, use features such as sub-headings and bullet points
- Review their own work to make improvements, including editing for spelling errors
- Read others' writing and suggest possible improvements
- Read aloud work that they've written 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
- Use conjunctions, adverbs and prepositions to add detail about time or cause
- Use fronted adverbials
- Use direct speech, with correct punctuation
  - Young children have a tendency to repeat nouns or pronouns, leading to several sentences containing 'He' or 'They'. They can use alternatives to make writing more interesting. For example, alternatives for describing an individual character might include: he, the burglar, Mr Smith, John, the criminal, the villain, etc.
  - To add information to a sentence about its location, 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.

### **Grammar Help**

For many parents, the grammatical terminology used in schools may not be familiar.

Here are some useful reminders of some of the terms used:

- Present perfect tense: a tense formed using the verb '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
- Fronted adverbial: a word or phrase which describes the time, place or manner of an action, which is placed at the start of the sentence, e.g. "Before breakfast,..." or "Carrying a heavy bag,..."
- Direct speech: words quoted directly using inverted commas, as opposed to being reported in a sentence