



Living our learning

Year 4 Expectations in Maths

Throughout the year your child will be working towards these expectations.

Number and Place Value

Count in 1000s to and from zero, using support apparatus or number lines
Count in 25s to and from zero, using support apparatus or number lines
Count in 6s to and from zero, using support apparatus or number lines
Count in 9s to and from zero, using support apparatus or number lines
Count in 7s to and from zero, using support apparatus or number lines
Use an understanding of place value in order to add or subtract 10 to any number with up to four digits
Use an understanding of place value in order to add or subtract 100 to any number with up to four digits
Use an understanding of place value in order to add or subtract 1000 to a four digit number
Find 1000 more or less than a given number
Count backwards through zero to include negative numbers
Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
Order and compare numbers beyond 1000
Round any number to the nearest 10, 100 or 1000
Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
Solve number and practical problems with numbers beyond 1000

Addition and Subtraction

Add numbers with up to four digits using **formal column written methods**.

$$\begin{array}{r} 4782 \\ + 2465 \\ \hline 7247 \\ \hline 11 \end{array}$$

Subtract numbers with up to four digits using **formal column written methods**.

$$\begin{array}{r} 3\overset{4}{5}132 \\ - 1240 \\ \hline 2292 \end{array}$$

Estimate and use inverse operations to check answers to a calculation

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

Multiplication and Division

Recall **multiplication facts** for multiplication tables up to 12×12

Multiply three-digit numbers by a one-digit number using **formal written methods**

$$\begin{array}{r} 230 \\ \times 4 \\ \hline 920 \\ 1 \end{array}$$

Record and solve **division problems including 2 and 3 digit numbers divided by 1 digit number** (including **remainders**)

$$423 \div 3 = 141 \quad \begin{array}{r} 141 \\ 3 \overline{) 423} \\ \underline{3} \\ 12 \\ \underline{12} \\ 3 \\ \underline{3} \\ 0 \end{array}$$

Record and solve division problems (using the multiplication tables that they know) including **2 and 3 digit numbers divided by 1 digit numbers** using **written methods** (including **remainders**)

Use place value, known and derived facts to **multiply and divide mentally**, including: **multiplying by 0 and 1; dividing by 1; multiplying together three numbers**

Identify a **pair of factors** for a given number from within the multiplication tables

Solve problems involving multiplying and adding, multiply two digit numbers by one digit, such as the number of choices of a meal on a menu, or three cakes shared equally between 10 children.

Fractions

Recognise and show, using diagrams, families of common **equivalent fractions**

Understand **one hundredth** is recorded as $1/100$. Understand that a **hundredth** is found by **dividing** a shape or object in to **100 equal parts** or division of a **quantity by 100**.

Know that a **hundredth** is **one tenth divided by ten**

Count up and down in hundredths

Know the **decimal equivalence of tenths and hundredths** e.g. know that 20 hundredths or two tenths and can be written as 0.2.

Recognise and write decimal equivalents of **any number of tenths or hundredths**

Recognise and write **decimal equivalents** to $1/4, 1/2, 3/4$

Find the effect of **dividing a one or two-digit number by 10 and 100**, identifying the value of the digits in the answer as ones, tenths and hundredths

Compare and order numbers with **one decimal place**

Compare numbers with the same number of decimal places up to **two decimal places**

Round decimals with one decimal place to the nearest whole number

Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number

Add fractions with the **same denominator**

Subtract fractions with the **same denominator**

Solve simple measure and money problems involving fractions and decimals to **two decimal places**

Measurement

Convert between **different units of measure** e.g. kilometre to metre; hour to minute; kilograms to grams; litres to millilitres

Measure and calculate the perimeter of a square or rectangle in centimetres and metres

Find the area of rectangle or square by **counting squares**

Read, write and **convert time between analogue and digital** 12- and 24-hour clocks

Know that **1 hour = 60 minutes**

Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days

Estimate, compare and calculate different measures, including money in pounds and pence

Geometry - Properties of Shape

Compare and classify geometric shapes, including **quadrilaterals and triangles**, based on their **properties** and **sizes**

Identify lines of symmetry in 2-D shapes presented in **different orientations**

Complete a simple symmetric figure with respect to a **specific line of symmetry**

Identify all lines of symmetry in **regular polygons**

Begin exploring line symmetry with **two lines of symmetry**

Order angles by direct comparison using the terms acute, obtuse and right angle to describe them. **Compare angles within a polygon** and order them by size

Begin to recognise where angles are greater than two right angles. Know the term **straight angle** referring to two right angles together

Geometry – position and direction

Describe positions on a 2-D grid as coordinates in the **first quadrant**

Describe movements between positions as **translations** of a given unit to the left/right and up/down

Plot specified points and draw sides to complete a given polygon

Statistics

Interpret and refine construction of bar charts to be appropriate for discrete data - bars separated and **continuous grouped data** - bars adjacent to one another. Identify which graph is more appropriate for the data that they are representing.

Interpret and present discrete and continuous data using appropriate graphical methods, including **bar charts and time graphs**

Solve comparison, sum and difference problems using information presented in **bar charts, pictograms, tables and other graphs**