

Being a mathematician in Year Five

A year 5 mathematician

Number

- I can count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000.
- I recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents.
- I recognise mixed numbers and improper fractions and can convert from one to the other.
- I can read and write decimal numbers as fractions.
- I recognise the % symbol and understand percent relates to a number of parts per hundred.
- I can write percentages as a fraction with denominator hundred and as a decimal fraction.
- I can compare and add fractions whose denominators are all multiples of the same number.
- I can multiply and divide numbers mentally drawing on known facts up to 12×12 .
- I can round decimals with 2dp to the nearest whole number and to 1dp.
- I recognise and use square numbers and cube numbers; and can use the notation 2 and 3 .
- I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- I can multiply numbers up to 4-digit by a 1 or 2-digit number using formal written methods, including long multiplication for a 2-digit number.
- I can divide numbers up to 4-digits by a 1-digit number.
- I can solve problems involving multiplication and division where large numbers are used by decomposing them into factors.
- I can solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.
- I can solve problems involving numbers up to 3dp.

Measurement, geometry and statistics

- I know that angles are measured in degrees.
- I can estimate and compare acute, obtuse and reflex angles.
- I can draw given angles and measure them in degrees.
- I can convert between different units of metric measures and estimate volume and capacity.
- I can measure and calculate the perimeter of composite rectilinear shapes in cm and m.
- I can calculate and compare the areas of squares and rectangles including using standards units (cm^2 and m^2).
- I can solve comparison, sum and difference problems using information presented in a line graph.