

## Stage 5 Maths Expectations

Count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000	Round any number to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	Recognise mixed numbers and improper fractions and convert from one to the other.	Read and write decimal numbers as fractions, e.g. $+ 0.47 = 47/100$
Multiply and divide numbers <b>mentally</b> drawing upon known facts up to $12 \times 12$	Add and subtract <b>mentally</b> with increasingly large numbers (add together any 5 digit numbers subtract and 4 digit from 5 digit).	Compare and add fractions whose denominators are all multiples of the same number	Recognise and use thousandths and relate them to tenths, hundreds and decimal equivalents
Recognise the per cent symbol (%) and understand per cent relates to number of parts per hundred.	Round decimals with 2dp to the nearest whole number and to 1 decimal place	Recognise and use square numbers, cube numbers and prime numbers and the notation for squared ( <sup>2</sup> ) and cubed ( <sup>3</sup> )	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
Read Roman numerals to 1000 (M) and recognise years written in Roman numerals	Add and subtract whole numbers with more than four digits using formal written methods.	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Divide numbers up to 4-digits by 1-digit numbers
Multiply number up to 4-digit by a 1 or 2-digit number using formal written methods, including long multiplication for 2-digit numbers	Write percentages as a fraction with denominator hundred, and as a decimal number	Solve problems involving multiplication and division where large numbers are used by decomposing them into factors	Solve problems involving 3-decimal places and problems which require knowledge of percentages and decimal equivalents
Multiply proper fractions by whole numbers supported by the use of diagrams and materials.	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Calculate and compare the area of squares and rectangles including using standard units ( $\text{cm}^2$ and $\text{m}^2$ )	Measure and calculate the area and perimeter of composite rectilinear and irregular shapes in centimetres and metres
Use all four operations to solve problems involving length, mass, volume, money and time including conversion and decimal notation	Solve comparison, sum and difference problems using information presented in a line graph	Convert between different units of metric measures and estimate volume and capacity	Draw given angles and measure them in degrees ( $^\circ$ ) Know angles are measured in degrees: estimate and compare acute; obtuse and reflex angles

Start of Autumn

Data Capture 1

Data Capture 2

Data Capture 3

End of Summer

### Instant recall facts

Autumn 1 I know the multiplication and division facts for all times tables up to $12 \times 12$ .	Autumn 2 I can find factor pairs of a number.	Spring 1 I can identify prime numbers up to 20. I can recall square numbers up to 144 and their square roots.
Spring 2 I know the decimal and percentage equivalents of the fractions $1/2$ , $1/4$ , $3/4$ , $1/3$ , $2/3$ , tenths and fifths	Summer 1 I know decimal number bonds to 1 and 10.	Summer 2 Revisit previous IRFS