



Year 6 Sticky Knowledge

The sticky knowledge is generally the essential elements and 'basics' of Maths that is crucial for children's mathematical learning and progression. Of course, all areas of Maths are important and valuable but a focus on the 'basics' can help to advance and secure their learning across this subject.

Number Facts:

Knowledge of number facts and a fluency in using them is a vital part of Maths for each year group. Rapid recall of number facts can provide the basic knowledge required for most aspects of primary mathematics, including mental and written calculations, fractions, decimals and percentages and problem solving. Number facts learned in Maths can also be transferred to many other subjects across the curriculum and in 'real life' situations.

At Church Vale Primary we **strongly** believe that knowing and using number facts can help support children's understanding and progression in Maths.

The Non negotiables for **Year 6** are as follows:

- Read, write and order numbers (using <, > and = symbol) to 10,000,000 and know the value of each digit, including numbers to three decimal places.
- Use negative numbers in context, and calculate intervals across zero.
- Use the BODMAS to calculate order of operations
- Use appropriate written method for multiplication and division (4 digits by a 2 digit)
- Identify common factors, common multiples and prime numbers.
- Recall equivalences between fractions, decimals and percentages.
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
- Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$)
- Divide numbers and record the remainder as a decimal to 2dp or fraction
- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.
- Use simple formulae.
- Describe positions on the full coordinate grid (all four quadrants)

Year 6 Vocabulary



Number – number and place value	
<u>Number</u> Factorise Prime factor Digit total	<u>Place Value</u> Tenths, hundredths, thousandths Decimal
Number – addition and subtraction	
Exchange	
Number – multiplication and division	
Divisor Long Division Remainder	
Number – fractions (including decimals)	
Ratio Percentage	
Algebra	
Formulae Equation Unknown Variable Constant	
Measurement	
Yard / foot / feet / inch / inches Dozen Circumference/diameter/radius Tonne Pound Ounce Centilitre Cubic centimetres (cm ³) / cubic metres (m ³) / cubic millimetres (mm ³) / cubic kilometres (km ³) Greenwich Mean Time / British Summer Time / International Date Line	

Profit / Loss

Geometry – properties of shapes / position and direction

Circumference/diameter/radius

Net / open / closed

Perpendicular/ parallel

Vertex/vertices

Reflex angle

Corresponding angles

Vertically opposite angles

Statistics

Pie chart/Bar chart/Tally

Mean

Statistics / distribution

General