



Year 4 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 4** are as follows:

- Read, write and order numbers (using $<$, $>$ and $=$ symbol) to 10,000 and know the value of each digit.
- Quick recall of multiplication and division facts for ALL times tables to 12x12. New multiplication and division facts in Y4 are x6 x7 x9 x11 and x12.
- Round numbers (up to 3 digits) to nearest 10, 100 or 1000
- Add and subtract mentally pairs of two digit numbers.
- Multiply and divide (up to 4) digit numbers by 10 or 100.
- Identify pairs of fractions that total 1 and equivalent fractions.
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{10}$ and $\frac{1}{100}$.
- Read, write and order decimals to 2 decimal places.
- Convert between different units of measure (km to m, cm to m, hours to minutes).
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.

Year 4 Vocabulary



Number – number and place value	
<u>Number</u> Ten thousand Hundred thousand Million Sixes Sevens Nines Twenty – fives Integer / positive / negative Above/below zero Minus / negative numbers Consecutive	<u>Place Value</u> 1000 more 1000 less Round to the nearest thousand,
Number – addition and subtraction	
Inverse	
Number – multiplication and division	
inverse Square / squared	
Number – fractions (including decimals)	
Hundredths Decimal / decimal fraction / decimal point / decimal place / decimal equivalent Proportion	
Measurement	
Unit / standard unit Metric unit Breadth Edge Area / covers Square centimetre (cm ²) Mass: big / bigger / small / smaller Measuring Cylinder Leap Year Noon	

Millenium	
Date of Birth	
Timetable / arrive / depart	
Geometry – properties of shapes / position and direction	
Line	North-east / north-west / south-east /
Construct	south-west / NE / NW / SE / SW
Sketch	Translate / translation
Centre	Rotate / rotation
Angle / right-angled	Degree
Base / square-based	Reflection
Reflect / reflection	Ruler / set square
Regular / irregular	Angle measurer / compass
2-D / two-dimensional	
Oblong	
Rectilinear	
Equilateral triangle / isosceles triangle /	
scalene triangle	
Heptagon	
Parallelogram / rhombus / trapezium /	
polygon	
3-D / three-dimensional	
Spherical	
Cylindrical	
Tetrahedron / polyhedron	
Statistics	
Survey	
Questionnaire	
Data	
General	
Justify	
Make a statement	