

# <u>Maths</u>

# Skills taught in Year 4 at The Grange

# Place Value

	Counting	Represent	Use PV and Compare	Problems & Rounding
Year Four	<ul> <li>Count backwards through zero to include negative numbers</li> <li>count in multiples of 6, 7, 9, 25 and 1000.</li> </ul>	<ul> <li>Identify, represent and estimate numbers using different representations.</li> <li>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.</li> </ul>	<ul> <li>Find 1000 more or less than a given number.</li> <li>Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, ones).</li> <li>Order and compare numbers beyond 1000.</li> </ul>	<ul> <li>Round any number to the nearest 10, 100 or 1000.</li> <li>Solve number and practical problems that involve all of the above and with increasingly large numbers.</li> </ul>

# **Addition & Subtraction**

	Recall, Represent, Use	Calculations	Solve Problems
Year Four	Estimate and use inverse operations to check answers to a calculation.	<ul> <li>Add and subtract numbers with up to 4 digits sding the formal written methods of columnar addition and subtraction where appropriate.</li> </ul>	<ul> <li>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>

## **Multiplication and Division**

		Recall, Represent, Use	Calculations	Solve Problems	Combined Operations
Year Four	•	Recall multiplication and division facts for multiplication tables up to 12 x 12.  Use place value, known and derived facts to multiply and divide mentally, including by 0 and 1, dividing by 1, multiplying together three numbers.  Recognise and use factor pairs and commutativity in mental calculations.	Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout.	Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit by 1-digit, integer scaling problems and harder correspondence problems.	

## **Fractions**

		Recognise and Write	Compare	Calculations	Solve Problems
Year Four	•	Count up and down in hundredths. Recognise that hundredths arise when dividing an object by one hundred and dividing by ten.	Recognise and show, using diagrams, families of common equivalent fractions.	Add and subtract fractions with the same denominator.	<ul> <li>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.</li> </ul>

# **Decimals, Percentages and Algebra:**

	Calculations & Problems (Decimals)	Fractions, Decimals and Percentages	Ratio and Proportion	Algrebra
Year Four	<ul> <li>Find the effect of dividing a 1 or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.</li> </ul>	Solve simple measure and money problems involving fractions and decimals to two decimal places.		

# Note – algebraic thinking is seen in the 'missing number' objectives from Y1 upwards.

#### Measurement

	Using Measures	Money	Time	Perimeter, Area, Volume
ear our	<ul> <li>Convert between different units of measure.</li> <li>Estimate, compare and calculate different measures.</li> </ul>	Estimate, compare and calculate different measures, including money in pounds and pence.	<ul> <li>Read, write and convert time between analogue and digital 12 and 24 hr clocks.</li> <li>Solve problems involving converting from hours to minutes, minutes to seconds,</li> </ul>	<ul> <li>Measure and calculate the perimeter of rectilinear figure in cm and m.</li> <li>Find the area of rectilinear shapes by counting squares.</li> </ul>
			years to months, weeks to days.	squares.

# Geometry

	2D shapes	3D shapes	Angles and Lines	Position and Direction
Year Four	<ul> <li>Compare and classify geometric shapes.</li> <li>Identify lines of symmetry in 2D shapes presented in different orientations.</li> </ul>		<ul> <li>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> <li>Identify lines of symmetry in 2D shapes presented in different orientations.</li> <li>Complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>	<ul> <li>Describe position on a 2D grid as coordinates in the first quadrant.</li> <li>Describe movements between positions as translations of a given unit to the left/right and up/down.</li> <li>Plot specified points and draw sides to complete a given polygon.</li> </ul>

## **Statistics**

	Present and Interpret	Solve Problems	
Year Four	<ul> <li>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> </ul>	<ul> <li>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul>	