

# Mathematics Learning Journey

Using and Applying    Number    Geometry & Measures    Statistics    Life Skills maths

Skills are transferred into college, employment and life skills

**Intent:** Maths is a really important part of everyday life. The intention of our Maths curriculum is for pupils to: Make sense of our world; Tackle real-life problems; Communicate information; Develop skills which are essential in most other areas of the curriculum; Develop skills for life to achieve success in the workplace; and economic well-being. We want students to acquire life-long skills which will support them in their futures.

**Implementation:** KS3 students will study Number, Geometry and Measures, and Statistics topics (some study Algebra). Real-life and functional Maths is used and applied throughout Maths lessons, and across other areas of the curriculum and as part of the school day. In KS4, some students will have opportunities to access the OCR Maths Entry Level course. Some students study AIM Awards in Maths, which are a series of Functional Skills qualifications, providing learners with the maths and numeracy skills and abilities they need to take an active and responsible role in their communities, workplace, educational settings and in their everyday life.

**Impact:** CRS use CREATE trackers and Go4schools for assessment. The system enables us to identify gaps in teaching and learning, determine where intervention is needed and measure progress within and across the school. Our Go4schools data shows us that all students are on track to meet their teacher target. The targets are informed and challenging. Students develop life-long skills to support them in contexts beyond the classroom.

Distance – time graphs	Money conversion graphs	Systematic listing	Tally charts	Bar graphs	Shopping	Budgeting	Bills
<b>Scales &amp; graphs</b>		<b>Lists &amp; outcomes</b>		<b>Averages &amp; trends</b>		<b>Post 16</b> Further develop Functional Maths skills	
Coordinates		Pictograms	Scatter graphs	Mean, median, mode, range			
Solve money problems	Read scales +/-	Venn diagrams	Proportion problems	Equivalent fractions, decimals, percentages	Percentages of amounts		
<b>Money, calendar, time</b>		<b>Ratio &amp; proportionality</b>		<b>Fractions / decimals / percentages</b>		<b>Year 11</b>	
Time conversion, 12-24hr	Timetables, two-way tables	Y10 and Y11 OCR Entry Level and AQA Accredited Courses		Equivalent fractions	Order decimals / fractions		
Reflection & symmetry	Rotations			Measure length	Perimeter & area		
<b>Symmetry and transformations</b>		<b>Scales / graphs</b>		<b>Units &amp; measure</b>			
Translations		Read scales / intervals		Compass points	Measure & draw angles		
Sorting shapes by property	Calculations with +/-x/÷	Negative numbers	Times tables	Index notation	Order/compare numbers		
<b>Shapes</b>		<b>Calculations / formulae</b>		<b>Place value / Estimation / Multiples</b>		<b>Year 10</b>	
Classification	Inverses in calculations	Sequences	Functions	Rounding	Decimal places / significant figures		
Letters/symbols to represent unknowns	Solve problems with time	Use x and ÷ as scale factors for ratio		Classify shapes	Missing angles & lengths	Mean average	
<b>Algebra</b>		<b>Measurement – perimeter/area/volume</b>		<b>Number – Ratio</b>		<b>Geometry – properties of shapes</b>	
		Perimeter, area & volume of simple 2D/3D shapes		Compare one thing to another		Build/draw 2D/3D shapes and nets	
Calculate with percentages		Translation / reflection		+ / - fractions with different denominators		Calculations with +/-x/÷	
<b>Number – decimals / percentages</b>		<b>Geometry – position &amp; direction</b>		<b>Number – fractions</b>		<b>Number – place value, +/-x/÷</b>	
Calculate with decimals			Coordinates	Multiply / divide fractions	+ / - numbers any size	Positive & negative integers	
Intro +/- fractions with different denominators		Multiply fractions	Intro to percentages	Draw, measure and compare angles	Reflection & translation	Capacity / volume	
<b>Measurement – perimeter/area</b>		<b>Number – fractions / decimals / percentages</b>		<b>Geometry – properties of shapes / position &amp; direction</b>		<b>Measurement – converting units / volume</b>	
		Compare, order, simplify fractions		2D representations of 3D shapes		Convert between units of time	
Perimeter and area of simple 2D shapes		Short division		Tables		Convert between metric units	
		Multiply 2-digit numbers		Line graphs		Roman Numerals to 1000	
<b>Number – multiplication &amp; division</b>		<b>Statistics</b>		<b>Number – place value / addition &amp; subtraction</b>		<b>Year 8</b>	
10s 100s 1000s		Factors, multiples & primes		Negative numbers		Numbers to 1 million	
Area by counting shapes		Fractions of amounts		Bar charts, pictograms		Symmetry	
<b>Measurement – area</b>		<b>Number – fractions/decimals</b>		<b>Measurement – money/time</b>		<b>Geometry – properties of shapes / position &amp; direction</b>	
		Equivalent fractions		Convert between units of time		Classify triangles/quadrilaterals	
$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$		+/- with same denominator		Time graphs, tables		Coordinates & translations	
6, 7, 9, 25, 100 Times tables		Short multiplication		4-digit numbers		Numbers below 0	
<b>Number – multiplication /division</b>		<b>Measurement – length / perimeter</b>		<b>Number – place value - Addition / subtraction</b>		<b>Year 7</b>	
Factor pairs		Perimeter of simple shapes		4-digit addition and subtraction		Roman Numerals to 100	