

Maths at Queenscroft High School



Within Maths Queenscroft follows the White Rose Curriculum. Work will be differentiated according to ability across the years. As part of our Admissions policy pupils starting at Queenscroft will be working below their Age Related Expectations. This means that within a year 7 class for example, there may be pupils working at Year 1 and Year 2 level. The level they are working at is determined through White Rose Assessment papers and ongoing teacher Assessment.

If you would like to know more about White Rose Maths please talk to your class teacher or your Key Stage Lead. Alternatively you can find out more about White Rose Maths at

[Parent FAQ's](#) | [Maths FAQs](#) | [White Rose Maths](#)

KS3, KS4 and KS5. The yearly overview provides suggested timings for each block of learning, which can be adapted to suit different term dates or other requirements.

KS4 (year 11) and KS5 will be working towards their Functional Skills Entry level qualification and will be sitting an exam in December. Pupils working towards a GCSE will sit 3 exams at the end of the course.

The main blocks of learning within White Rose Maths are outlined in this table.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value				Number Addition and subtraction					Geometry Shape		
Spring	Measurement Money	Number Multiplication and division					Measurement Length and height		Measurement Mass, capacity and temperature			
Summer	Statistics	Number Fractions			Geometry Position and direction		Problem solving		Measurement Time			

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Example of how the White Rose Curriculum is followed according to ability level.

Using the table below pupils working at Year 1 ability level will therefore follow a set scheme of work aimed at meeting place value learning in the first 4 weeks of the Autumn Term. For the last 3 weeks of the Summer Term they will follow a scheme of work considering Measurement, specifically Time.

Pupils working at Year 5 ability will also be completing Place value work during the first 4 weeks of the Autumn Term. However, this will be set at the Year 5 level. In the final 3 weeks of the Summer term pupils will be working towards objectives linked to Measurement. However, this will be set at the appropriate level for Year 5 ability pupils. They will be considering Measurement in terms of Converting Units and considering Volume.

As the pupils move up in ability level the blocks of learning are differentiated according to ability and considering the potential for pupils to earn qualifications in Mathematics.

Further support regarding the blocks of learning can also be found at

[Maths resources for teachers | White Rose Maths](#)

The table below outlines the Learning blocks for years 1 -9 according to the white Rose curriculum.

Mathematics Long Term Curriculum Overview KS3, KS4, KS5 (all linked with GCSE and Functional Skills)						
ACADEMIC YEAR WORKING AT.	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Early Years/Reception	Getting to know you. Just like me.	It's me 1,2,3! Light and dark.	Alive in 5!	Growing 6,7,8. Building 9 and 10.	To 20 and beyond. First, then, now.	Find my pattern. On the move.
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
1	Number: Place Value (Within 10)	Geometry: Shape	Place value: (Within 20)	Measurement: Length and height	Number: Multiplication and Division	Geometry: Position and direction
	Number: Addition and Subtraction (Within 10)		Number Addition and Subtraction (Within 20)	Measurement Weight and volume	Number: Fractions	Place value: (Within 100)
		Consolidation	Place value: 9Within 50)	Consolidation		Measurement: Money and time

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
2	Number: Place Value	Geometry: Shape	Measurement: Money	Measurement: Length and height	Number: Fractions	Geometry: position and direction
	Number: Addition and Subtraction		Number: Multiplication and Division	Measurement: Capacity, Volume and Temperature	Measurement: Time	Consolidation
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
3	Number: Place Value	Number: Multiplication and Division A	Number: Multiplication and Division B	Number: Fractions A	Number: Fractions B	Measurement: Money Time
	Number: Addition and Subtraction		Measurement: Length and perimeter	Measurement: Mass and capacity	Measurement: Money	Geometry: Shape Statistics
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
4	Number: Place Value	Measurement: Length and perimeter	Number: Multiplication and Division	Number: Fractions	Number: Decimals	Geometry: Position and direction
	Number: Addition and Subtraction	Number: Multiplication and Division	Measurement: Area	Decimals	Measurement: Money and time	Geometry: Properties of shape
			Number: Decimals	Consolidation		Consolidation

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
5	Number: Place Value	Number: Multiplication and Division	Number: Multiplication and Division	Number: Decimals and percentages	Geometry: Shape	Measurement: Converting units
	Number: Addition and Subtraction	Number: Fractions A	Number: Fractions B	Measurement: Perimeter and area	Geometry: Position and Direction	Measurement: Volume
				Statistics	Number: Decimals	
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
6	Number: Place Value	Number: Fractions A	Number: Ratio	Number: Fractions, decimals and percentages	Geometry: shape	Project work: Real life Maths
	Number: Addition, Subtraction, Multiplication and Division	Number: Fractions B	Number: Algebra	Measurement: Area, perimeter and volume	Geometry: Position and Direction	Problem Solving: Real Life Maths
			Number: Decimals	Statistics		Consolidation
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
7	Number: Algebraic thinking-sequences	Number: Place value and ordering integers and decimals	Application of number: Solving problems with	Directed number: Operations and equations of	Geometry: Lines and angles. Geometric reasoning.	Number: Reasoning with number- sets and probability

			addition and subtraction	directed number		
	Algebraic thinking- understand and use Algebraic notation	Number: Fraction, decimals and percentage equivalence	Application of number: Solving problems multiplication and division	Fractional thinking: Addition and subtraction of fractions.	Reasoning with number- developing number sense	Reasoning with number- Primer numbers and proof
	Equality and equivalence		Fractions and percentages of amounts.			
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
8	Number: Proportional Reasoning	Representations: Data, tables and probability	Algebra: Brackets, equations, and inequalities.	Developing number: Fractions and percentages	Developing geometry: Angles in a parallel lines and polygons	Reasoning of data: Data handling cycle
	Ratio and scale		Sequences and indices	Standard index form.	Area of trapezium and circles	Measures of location
	Multiplying and dividing fractions			Number sense		
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
9	Revise and improve all areas	Constructing in 2 and 3D dimensions	Reasoning with number: Numbers and percentages	Reasoning with geometry:	Reasoning with proportion: Enlargement and similarity	Representations and revision:

	Reasoning with Algebra	Revise and improve all areas	Maths and money	Revise and improve all areas	Solving ratio problems with proportion	

White Rose Maths is used and implemented across the whole school. Pupils will access the curriculum at the level they are working at. Pupils are assessed twice termly and are set three targets inline with their EHCPs and small targets identified from assessment data.

Moving into Key Stage 4 and 5. Considering Maths Qualifications.

As pupils move further up school we want to help prepare them for adult life by achieving as many Qualifications as possible. Pupils will continue to follow the White Rose Curriculum but will be entered for Functional Skill or GCSE qualifications according to the year group and ability level they are working at.

The tables below outline the skills they will need to demonstrate they are confident at in order to achieve the respective qualifications.

Entry level Functional Skills Qualifications are below a GCSE grade. A pass in Level 1 Function Skills is equivalent to GCSE grade 1-3. Level 2 is equivalent to a GCSE Grade 4. GCSE grades are assessed at level 1-9. 1 being the lowest and moving up to a level 9.

Entry Level 1 Functional Skills in Maths

Learners at Entry Level 1 are expected to become confident in their use of fundamental mathematical knowledge and skills, as described through the following content areas and demonstrate their understanding by applying their knowledge and skills to solve simple mathematical problems or carry out simple tasks.

Autumn Term 1. Content area: Using numbers and the number system - whole numbers	Spring Term 2. Content area: Using common measures, shape and space	Summer Term 3. Content area: Handling information and data
E1.1 Read, write, order and compare numbers up to 20 E1.2 Use whole numbers to count up to 20 items, including zero E1.3 Add numbers which total up to 20, and subtract numbers from numbers up to 20 E1.4 Recognise and interpret the symbols +, - and = appropriately	E1.5 Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20 E1.6 Read 12-hour digital and analogue clocks in hours E1.7 Know the number of days in a week, months and seasons in a year; be able to name and sequence E1.8 Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity E1.9 Identify and recognise common 2-D and 3-D shapes, including circle, cube, rectangle (including square) and triangle E1.10 Use everyday positional vocabulary to describe position and direction, including left, right, in front, behind, under and above	E1.11 Read numerical information from lists E1.12 Sort and classify objects using a single criterion E1.13 Read and draw simple charts and diagrams, including a tally chart, block diagram/graph Assessment weighting Learners at Entry Level 1 are required to demonstrate their understanding of underpinning skills, and their ability to apply mathematical thinking to solve problems in familiar contexts, as set out below. Problem solving Entry Level 1 learners are expected to be able to: 75% 1. use given mathematical information and recognise and use simple mathematical terms appropriate to 2. use the methods given in the content areas above to produce, check and present results that make sense; and 3. provide a simple explanation for those results. Underpinning skills The ability to do mathematics when not part of a problem. 25%
		Assessments: Pupils will be entered when we feel they are ready based on assessments in school.

Entry Level 2 Functional Skills in Maths

Learners at Entry Level 2 are expected to become confident in their use of fundamental mathematical knowledge and skills, as described through the following content areas and demonstrate their understanding by applying their knowledge and skills to solve simple mathematical problems or carry out simple tasks. Pupils in KS4 and Post 16 at year 3 White Rose will work towards this qualification.

Autumn Term 1. Content area: Using numbers and the number system - whole numbers, fractions and decimals	Spring Term 2. Content area: Using common measures, shape and space	Summer Term 3. Content area: Handling information and data
E2.1 Count reliably up to 100 items E2.2 Read, write, order and compare numbers up to 200 E2.3 Recognise and sequence odd and even numbers up to 100 E2.4 Recognise and interpret the symbols +, -, ×, ÷ and = appropriately E2.5 Add and subtract two-digit numbers E2.6 Multiply whole numbers in the range 0 × 0 to 12 × 12 (times tables) E2.7 Know the number of hours in a day and weeks in a year; be able to name and sequence E2.8 Divide two-digit whole numbers by single-digit whole numbers and express remainders E2.9 Approximate by rounding to the nearest 10, and use this rounded answer to check results E2.10 Recognise simple fractions (halves, quarters and tenths) of whole numbers and shapes E2.11 Read, write and use decimals to one decimal place	E2.12 Calculate money with pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p) E2.13 Read and record time in common date formats and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour digital clock E2.14 Use metric measures of length, including millimetres, centimetres, metres and kilometres E2.15 Use measures of weight, including grams and kilograms E2.16 Use measures of capacity, including millilitres and litres E2.17 Read and compare positive temperatures E2.18 Read and use simple scales to the nearest labelled division E2.19 Recognise and name 2-D and 3-D shapes, including pentagons, hexagons, cylinders, cuboids, pyramids and spheres E2.20 Describe the properties of common 2-D and 3-D shapes, including numbers of sides, corners, edges, faces, angles and base E2.21 Use appropriate positional vocabulary to describe position and direction, including between, inside,	E2.22 Extract information from lists, tables, diagrams and bar charts E2.23 Make numerical comparisons from bar charts E2.24 Sort and classify objects using two criteria E2.25 Take information from one format and including use of bar charts Assessment weighting Learners at Entry Level 2 are required to demonstrate their understanding of underpinning skills, and their ability to apply mathematical thinking to solve problems in familiar contexts, as set out below. Problem solving Entry Level 2 learners are expected to be able to: 75% 1. use given mathematical information, including numbers, symbols, simple diagrams and charts 2. recognise, understand and use simple mathematical terms appropriate to Entry 3. use the methods given in the content areas above to produce, check and present results that make sense; and 4. present appropriate explanations using numbers, measures, simple diagrams, simple charts and symbols appropriate to Entry Level

Entry Level 3 Functional Skills in Maths

Learners at Entry Level 3 are expected to become confident in their use of fundamental mathematical knowledge and skills, as described through the following content areas, and demonstrate their understanding by applying their knowledge and skills to solve simple mathematical problems or carry out simple tasks. Pupils in Key stage 4 and Post 16 working at White Rose year 4 or above will work towards this qualification.

Autumn Term 1. Content area: Using numbers and the number system - whole numbers, fractions and decimals	Spring Term 2. Content area: Using common measures, shape and space	Summer Term 3. Content area: Handling information and data
<p>E3.1 Count, read, write, order and compare numbers up to 1000</p> <p>E3.2 Add and subtract using three-digit whole numbers</p> <p>E3.3 Divide three-digit whole numbers by single- and double-digit whole numbers and express remainders</p> <p>E3.4 Multiply two-digit whole numbers by single- and double-digit whole numbers</p> <p>E3.5 Approximate by rounding numbers less than 1000 to the nearest 10 or 100 and use this rounded answer to check results</p> <p>E3.6 Recognise and continue linear sequences of numbers up to 100</p> <p>E3.7 Read, write and understand thirds, quarters, fifths and tenths, including equivalent forms</p> <p>E3.8 Read, write and use decimals up to two decimal places</p> <p>E3.9 Recognise and continue sequences that involve decimals</p>	<p>E3.10 Calculate with money using decimal notation and express money correctly in writing in pounds and pence</p> <p>E3.11 Round amounts of money to the nearest £1 or 10p</p> <p>E3.12 Read, measure and record time using am and pm</p> <p>E3.13 Read time from analogue and 24-hour digital clocks in hours and minutes</p> <p>E3.14 Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division</p> <p>E3.15 Compare metric measures of length, including millimetres, centimetres, metres and kilometres</p> <p>E3.16 Compare measures of weight, including grams and kilograms</p> <p>E3.17 Compare measures of capacity, including millilitres and litres</p> <p>E3.18 Use a suitable instrument to measure mass and length</p> <p>E3.19 Sort 2-D and 3-D shapes using properties, including lines of symmetry, length, right angles, angles, including in rectangles and triangle</p> <p>E3.20 Use appropriate positional vocabulary to describe position and direction, including eight compass points and full/half/quarter turns</p>	<p>E3.21 Extract information from lists, tables, diagrams and charts and create frequency tables</p> <p>E3.22 Interpret information, to make comparisons and record changes, from different formats, including bar charts and simple line graphs</p> <p>E3.23 Organise and represent information in appropriate ways, including tables, diagrams, simple line graphs and bar charts</p> <p>Assessment weighting Learners at Entry Level 3 are required to demonstrate their understanding of underpinning skills, and their ability to apply mathematical thinking to solve problems in familiar contexts, as set out below.</p> <p>Problem solving: Entry Level 3 learners are expected to be able to: 75%</p> <ol style="list-style-type: none"> 1. use given mathematical information, including numbers, symbols, simple diagrams and charts 2. recognise, understand and use simple mathematical terms appropriate to Entry Level 3 3. use the methods given in the content areas above to produce, check and present results that make sense to an appropriate level of accuracy; and 4. present results with appropriate and reasoned explanation using numbers, measures, simple diagrams, charts and symbols appropriate to Entry Level 3. <p>Underpinning skills: The ability to do mathematics when not part of a problem. 25%</p>