

Stone Hill School

Long Term Curriculum Plan

Mathematics Y11

Subject Intent

Our Mathematics curriculum aims to ensure that all pupils become confident mathematicians, who can solve real life problems and reach their full potential in qualification work. The curriculum is based on the Maths Mastery principles. Pupils are encouraged to build their fluency by securing their knowledge of mathematical facts and models, and then use this understanding to solve a wide range of problems. Pupils in Years 10 and 11 work towards Entry Level and Functional Skills qualifications, as well as a Prince’s Trust unit on Managing Money. Their curriculum moves further towards applying knowledge in reasoning and problem solving tasks, including organising events, learning about banking and budgeting, and also sitting exams where appropriate. Most qualification work is assessed by KS4 staff and the subject leader, and then moderated by external exam boards, although pupils accessing Functional Skills are required to sit a formal examination that is externally marked and graded. Mathematics skills are further embedded through the foundation subject curriculums, and the leaders of these subjects contribute to the assessment of pupils in areas such as measures, money and statistics. We also plan multiple opportunities for our pupils to use mathematics in real world situations, through for example, role play, enterprise projects and visits out of school.

Year Group	11	Week/s	Topic/Theme <i>Key vocabulary including Tier 3 subject specific words</i>	Learning Outcomes Knowledge and Skills To know, to use, to apply...	Links to: Literacy, Numeracy, SMSC and British Values Gatsby Benchmarks Learning Behaviours/Skills Builder
Term					
Autumn		1-3	<p>Place value, addition and subtraction.</p> <p>Digit, numeral, total, value, equal, calculation, sum, difference, share, total, twice, triple.</p>	<ul style="list-style-type: none"> Write, order and compare whole numbers up to 1000. Know the value of each digit in a 3-digit number. Understand vocabulary associated with numerical calculations: sum, difference, share, total, twice, triple. Add and subtract whole numbers from an initial value no greater than 1000. <p>Enrichment Activities Ideas: design their own card games or board game. Investigate prices and partition to £ and p.</p> <p>Key Questions:</p>	<p>Literacy Take part in discussions, talk or write about pictures, answer questions</p> <p>Skills Builder Staying positive, Problem solving</p>

			<p>What approach would you use to...? How could you determine...?</p>	
4-6	<p>Fractions, decimals and percentages.</p> <p>Decimal point, decimal place, halves, quarters, thirds, quarters, fifths, tenths, equivalent, denominator, numerator</p>	<ul style="list-style-type: none"> • Add and subtract decimals in context, i.e. money, mensuration, etc. • Recognise equivalent fractions including fractional quantities greater than 1 • Calculate thirds, quarters, fifths and tenths of quantities where the answer is an integer. Use fractions in context. • Order decimals and fractions. • Recognise equivalent fraction, decimal and percentage notation. • Understand that 1% is equivalent to dividing by 100. • Find 1%, 25%, 50% for three digit numbers, limited to results which are whole number answers. <p>Enrichment Activities Ideas: Life skills - shopping and sales. Use money in the local community – calculate totals and change. Design and make an ordering fraction, decimals or percentage game.</p> <p>Key Questions: What examples can you find can you say about...? How would you use....?</p>	<p>SMSC and British Values Offer reasoned views, Enjoy learning about the world around them. (Mutual Respect)</p> <p>Gatsby Benchmark 4 Skills Builder Staying positive, Problem solving</p>	
7	<p>Multiples</p> <p>Multiple, multiply, divide, counting, equal, pairs, factor, product, inverse, equation, calculate, divisible</p>	<ul style="list-style-type: none"> • Know and use multiplication of numbers up to 10 by 3, 4, 5 and 10. • Recognise when a two-digit number is divisible by 2, 3, 4, 5 and 10. 	<p>SMSC and British Values Offer reasoned views (Democracy)</p> <p>Skills Builder Problem solving, speaking, listening</p>	

			<p>Enrichment Activities Ideas: online games and activities</p> <p>Key Questions: Can you list...? Which one....?</p>	
	8-12	Revision and Assessment	<ul style="list-style-type: none"> • Pupils will revisit some of the Year 10 learning (to be selected by the teacher). • Pupils will sit two assessment papers for the OCR Entry Level qualification. 	<p>Literacy Answer questions</p> <p>Skills Builder Staying positive, Problem solving, Aiming high</p>



Spring	1-4	Practical Task	<ul style="list-style-type: none"> Pupils will complete a practical task for their OCR Entry Level qualification. They will organise a visit to the cinema using public transport. 	Literacy Ask questions, answer questions, research Gatsby Benchmarks 2,3,4 and 5 Skills Builder Staying positive, aiming high
	5-11	OCR units of work	<ul style="list-style-type: none"> Pupils will revisit some of the units of work listed in the Year 10 planning (as chosen by the teacher). 	Careers Recognise how you are changing, what you have to offer and what's important to you
	12	Assessment opportunity	<ul style="list-style-type: none"> Pupils will have an opportunity to re-sit any of the OCR assessment papers (if appropriate). 	Literacy Answer questions. Skills Builder Staying positive, aiming high
Summer	1-4	Units of Measure – Money Coin, note, bank card, cash, total, add, change, more, less, customer, increase, decrease, combine, decimal point.	<ul style="list-style-type: none"> Use £ and p notation. Select coins equivalent to an amount of money up to £5. Order a collection of coins and notes. Give change from £5. Enrichment Activities Ideas: Life skills – pupils to use money in the community Key Questions: Why did...? How would you solve.... Using what you have learnt?	Literacy Role play SMSC and British Values Enjoy learning about the world around them. Cooperate with others. Offer reasoned views. (Individual Liberty) Gatsby Benchmarks 3 and 4 Skills Builder

				Problem solving, teamwork.
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	5-8	<p>Units of Measure – Time</p> <p>Clock face, hands, hour, minute, second, analogue, digital, am, pm, 24-hour display, 12-hour display, leap year, convert.</p>	<ul style="list-style-type: none"> • Find start or end times for a planned time period. Calculate the duration given the start and end times. • Understand and use am/pm method of stating time. • Read and write time for digital and analogue clocks (in hours and in fifteen minute intervals). • Use a calendar to solve problems. <p>Enrichment Activities Ideas: Life skills – pupils to use time for independent travel and travelling in the community.</p> <p>Key Questions: Which is the best option...? Why did you choose....?</p>	<p>Literacy Role play</p> <p>SMSC and British Values Cooperate with others. Understand consequences. Enjoy learning about the world around them. (Tolerance and Mutual Respect)</p> <p>Gatsby Benchmarks 3 and 4</p> <p>Skills Builder Problem solving, teamwork.</p>
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Intended impact:
Pupils will leave Stone Hill School with qualifications that will help them to access Mathematics at a Post 16 provision. They will have experienced problems set in a wide variety of contexts and will present their answers in full sentences (number or words), developing their ability to problem solve and stay positive. In addition, the interactive and practical nature of the curriculum will have helped them to develop teamwork, speaking and listening skills.