Stone Hill School

Long Term Curriculum Plan

Mathematics Y5 - 6

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 qualifications 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. The National Curriculum: Pupils in Years 5 – 9 access the national curriculum through a mastery approach. Over the first half of the year, they progressively develop their understanding of number, calculation, geometry and fractions. The second half of the year revisits this knowledge through time, money and measure contexts. Assessment at this stage is mostly based on pupil work books and is moderated periodically in whole school meetings and through subject leader book scrutiny. Mathematical 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 5-6 **Term**	**Week/s**	**Topic/Theme** ***Key vocabulary including Tier 3 subject specific words***	**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**
Autumn	1-3	**Place Value** Digit, number, numeral, partition, combine, total, value, equal, ones, tens, hundreds, compare, order.	• Begin to build confidence with numbers to 100: counting, ordering and comparing. • Some pupils will extend to partitioning tens and ones. Reasoning and Problem Solving (RPS) Focus: Missing number opportunities **Enrichment Activities Ideas**: Environmental numbers, finding and hiding numbers in the environment, make a number staircase, partitioning physical objects. **Key Questions**: What is…? Can you count/partition….?	**Literacy** Make marks on materials
	4-8	**Number, Addition and Subtraction** Parts, whole, combine, partition, total, number bond, multiple, add, subtract, equal, cherry model, ten frame.	• Recognise ‘parts’ and ‘wholes’. • Compose numbers to 20 in different ways, exploring number bonds, partitioning and combining. • Composing multiples of 10 up to 100. RPS: Missing number opportunities	**Literacy** Take part in discussions, talk or write about pictures
	9-12	**Multiplication and division** Group, set, multiple, multiply, divide, counting, equal, pairs.	• Unitising by counting in groups. • Counting in twos, fives and tens. • Work with arrays to solve simple problems. RPS: Odd one out opportunities **Enrichment Activities Ideas**: Target practice and other scoring games, stick tapping and listening games. **Key Questions**: How is…? Can you….?	**SMSC and British Values** Socialise with other pupils and other people, Cooperate with others (Mutual respect and Tolerance)
	13-15	**Properties of Shapes**	• Naming common 2D and 3D shapes	**Gatsby Benchmark 4**

		Circle, square, triangle, rectangle, 2D, flat, 3D solid, cube, cuboid, sphere, pyramid, cone, cylinder, curved, straight, face, side, angle.	• Sorting shapes based on their properties. RPS: Odd one out opportunities **Enrichment Activities Ideas**: making sculptures using recyclable materials, using mud, sand and clay to manipulate and flatten shapes. **Key Questions**: Can you find…? What can you say about….?	**Careers** Describe what you are like, what you are good at and what you enjoy doing.
Spring	1-2	**Review of Autumn term**	Revisit elements from Autumn Term (as chosen by Class Teacher). • Four operations in contexts (money/measures). • Revisit of shapes.	**Gatsby Benchmarks 4 and 6**
	3-6	**Fractions** Half, quarter, whole, part, equal, split, divide, share, groups.	• Recognising halves in a range of contexts. • Begin to recognise quarters. • Recognising a fraction as being part of a whole. RPS: True/False/Sometimes true opportunities **Enrichment Activities Ideas**: The perfect half e.g. snapping a dead twig, use tape to slip objects in half and quarters, sharing food e.g. make and divide a pizza. **Key Questions**: How did----------happen? Which one….?	**SMSC and British Values** Cooperate with others, offer reasoned views (Mutual Respect and Tolerance) **Literacy** Take part in discussions. **Careers** Explain how to get what you want
	7-10	**Time** O'clock, half past, before, after, later, morning, afternoon, evening, day, week, month, year, clock face, hands, hour, minute, second.	• Read analogue and digital clocks using terms 'o'clock' and 'half past'. • Understand everyday language linked to time including 'before', 'after', 'later', 'morning', 'afternoon', etc. • Know the days of the week. RPS: Visualisation opportunities **Enrichment Activities Ideas**: make and play with piñata, rope swings, tell the time on a dandelion clock, play time games. Time different events. **Key Questions**: How long…? Why did…?	**Literacy** Talk or write about pictures, use new vocabulary. **Gatsby Benchmark 4**

	11-12	**Geometry: Sequences, Position and Direction** Above, below, next to, opposite, North, South East, West, compass, left, right, direction.	• Correctly use prepositions such as 'above', 'below', 'opposite' and 'next to'. RPS: Visualisation opportunities **Enrichment Activities Ideas**: plan a journey around a park, hunt the thimble, washing line and pegging out objects, make a large outdoor compass. **Key Questions**: Where is…? How is….?	**Literacy** Use new vocabulary, speak coherently, talk or write about pictures.
Summer	1-3	**Money** Coin, note, bank card, cash, total, add, change, more, less, shopper, customer, shopkeeper.	• Recognise coins of different values. • Combine smaller coins to make different totals. • Compare amount of money. RPS: Word problem opportunities. **Enrichment Activities Ideas**: flipping and spinning coins, role play and shops, create a treasure box of coins to find, visit different shops, coin rubbings **Key Questions**: Can you find…? Can you point to….?	**Literacy** Role play **Gatsby Benchmarks 4 and 6** **Careers** Identify what you are learning from careers, employability and enterprise activities and experiences
	4-7	**Measures: Length, capacity and mass** Measuring cylinder, beaker, scales, balancing scales, metre stick, ruler, trundle wheel, centimetre, metre, millilitre, litre, gram, measure, estimate. .	• Become familiar with measuring equipment and begin to record measurements on a chart. • Compare lengths using everyday language such as 'longer', 'shorter', 'longest and 'shortest'. RPS: Word problem opportunities. **Enrichment Activities Ideas**: making a splash, bubble play, water play and filling stations, ordering natural objects by their mass, tiny or huge scavenger hunt. **Key Questions**: Can you list three…? What did ----------happen?	**Literacy** Take part in discussions, develop vocabulary **Gatsby Benchmark 4**
	8-10	**Geometry: Properties of Shapes** Circle, square, triangle, rectangle, 2D, flat, 3D solid, cube, cuboid,	• Recognise 2D shapes on the faces of 3D objects. • Use shapes in patterns and sequences. • Begin to discuss the properties of 2D and 3D shapes.	**Literacy** Use new vocabulary, make marks on materials. **SMSC and British Values** Participate positively in art, Interest in different faiths. (Individual Liberty)

		sphere, pyramid, cone, cylinder, curved, straight, face, side, angle.	RPS: Opportunities to use charts and tables **Enrichment Activities Ideas**: make large 3D shapes using sticks, put up a tent, make patterns and sequences using natural objects. **Key Questions**: Which one…? What can you say about….?	
	11-12	**Statistics** Question, answer, total, mark, tally, survey, collect.	• Collect data to answer simple questions. RPS: Opportunities to use charts and tables **Enrichment Activities Ideas**: collect data about the natural world e.g. Woodland Trust resources, make a natural tally chart. **Key Questions**: Can you find…? Can you point to….?	**Literacy** Ask questions, answer questions, listen to an opinion, use punctuation.
Intended impact: Pupils will leave Lower School with a secure understanding of key mathematical concepts and be able to solve simple problems using the reasoning skills that they have developed. In addition, the focus on reasoning and problem solving will have helped them to develop as team workers, effective participators and resourceful thinkers.				