

Stone Hill School
Curriculum Plan 2020/21
Mathematics Years 5-6

Intent:
Pupils will begin to access the National Curriculum objectives through a mastery approach. In the first half of the year, they will build their knowledge and understanding of place value, calculation and fractions. In the second half, they will use these skills to develop their understanding of time, money, direction and measures. In all of these units, pupils will be taught reasoning and problem-solving skills that will be essential in Upper School.

Term	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, Gatsby Benchmarks
Autumn	1-3	Place Value Digit, number, numeral, partition, combine, total, value, equal, ones, tens, hundreds, compare, order.	<ul style="list-style-type: none"> Begin to build confidence with numbers to 100: counting, order and comparing. Some pupils will extend to partitioning tens and ones. Reasoning and Problem Solving (RPS) Focus: Missing number opportunities	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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> Unitising by counting in groups. Counting in twos, fives and tens. RPS: Odd one out opportunities	SMSC Socialise with other pupils and other people, Cooperate with others
	13-15	Properties of Shapes Circle, square, triangle, rectangle, 2D, flat, 3D solid, cube, cuboid, sphere, pyramid, cone, cylinder, curved, straight, face, side, angle	<ul style="list-style-type: none"> Naming common 2D and 3D shapes Sorting shapes based on their properties. RPS: Odd one out opportunities	Gatsby Benchmark 4
Spring	1-2	Review of Autumn term	Revisit elements from Autumn Term (as chosen by Class Teacher). <ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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	SMSC Cooperate with others, offer reasoned views Literacy Take part in discussions.
	7-10	Time O'clock, half past, before, after, later, morning, afternoon, evening, day, week,	<ul style="list-style-type: none"> Read analogue and digital clocks using terms 'o'clock' and 'half past'. 	Literacy Talk or write about pictures, use new vocabulary. Gatsby Benchmark 4

		month, year, clock face, hands, hour, minute, second.	<ul style="list-style-type: none"> Understand everyday language linked to time including 'before', 'after', 'later', 'morning', 'afternoon', etc. Know the days of the week. 	
	11-12	Geometry: Sequences, Position and Direction Above, below, next to, opposite, North, South East, West, compass, left, right, direction.	<ul style="list-style-type: none"> Correctly use prepositions such as 'above', 'below', 'opposite' and 'next to'. 	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.	<ul style="list-style-type: none"> Recognise coins of different values. Combine smaller coins to make different totals. Compare amount of money. 	Literacy Role play Gatsby Benchmarks 4 and 6
	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.	<ul style="list-style-type: none"> 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'. 	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, sphere, pyramid, cone, cylinder, curved, straight, face, side, angle	<ul style="list-style-type: none"> 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 Participate positively in art, Interest in different faiths.
	11-12	Statistics Question, answer, total, mark, tally, survey, collect	<ul style="list-style-type: none"> Collect data to answer simple questions. 	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.