

Stone Hill School
Curriculum Plan 2019/20
Mathematics Years 7-8

Intent: In the Autumn term, pupils will develop their understanding of place value to 1000 and extend their calculation work to include all four operations. They will progress in their understanding of mental arithmetic and begin to learn multiplication facts by heart. In Spring, they will secure their understanding of quarters and then apply this to reading clocks to the quarter hour and recognising quarter turns. In the Summer term, they will revisit their number work by applying place value and calculation skills to solving measures and money problems.

| Term | Week/s | Topic/Theme <i>Steam</i> | Learning Outcomes Knowledge and Skills To know, to use, to apply... | Literacy Link Numeracy Link SMSC Link |
|--------|--------|---|--|--|
| Autumn | 1-2 | Place Value | <ul style="list-style-type: none"> Counting forwards and backwards in steps of 2, 3, 5 and 10 from any number. Recognising the value of digits in 2-digit and 3-digit numbers. Comparing and ordering numbers, using $<$, $>$ and $=$ correctly. | |
| | 3-7 | Number, Addition and Subtraction | <ul style="list-style-type: none"> Adding 3 single digit numbers. Recalling and using number bonds to 20. Using inverse operations to solve missing number problems. Knowing that additions can be solved in any order but subtractions cannot. | Literacy – reasoning through spoken language |
| | 8-12 | Multiplication and division | <ul style="list-style-type: none"> Recalling and using facts for the two, five and ten multiplication tables. Solve problems involving multiplication and division using arrays, pictorial representations and concrete objects. Recognising and using the multiplication and division signs. | SMSC - sharing and groups |
| | 13-14 | Properties of Shapes. | <ul style="list-style-type: none"> Naming a range of 2D and 3D shapes. Sorting shapes based on their properties. | Gatsby 4 |
| Spring | 1-4 | Fractions | <ul style="list-style-type: none"> Recognising halves and quarters in a range of contexts. Writing simple fractions with a numerator and denominator. | SMSC – sharing and groups |
| | 5-8 | Time | <ul style="list-style-type: none"> Read analogue and digital clocks using terms 'o'clock', 'half past' and 'quarter past/to'. Know the months of the year. Know the number of hours in a day. Order events by their duration. | Gatsby 4 Literacy – story language and sequencing events. |
| | 9-12 | Geometry: Sequences, Position and Direction | <ul style="list-style-type: none"> Recognise whole, half and quarter turns. Discuss and extend patterns involving shapes and rotations. | Literacy - prepositions |
| Summer | 1-4 | Money | <ul style="list-style-type: none"> Recognise coins of different values. Combine smaller coins to make different totals. Compare amount of money. Find change from 20p and £1 (when the cost is a multiple of 10p). | Gatsby 4,6 |
| | 4-5 | Statistics | <ul style="list-style-type: none"> Retrieve information from pictograms, tallies | SMSC contexts for data |

| | | | | |
|--|-------|-------------------------------------|---|--|
| | | | <ul style="list-style-type: none"> and bar charts. • Complete tallies, pictograms and bar chart. • Draw simple conclusions from tallies, bar charts and pictograms. | Gatsby – 2,7 |
| | 6-9 | Measures: Length, capacity and mass | <ul style="list-style-type: none"> • Measure with a reasonable level of accuracy and record findings on a table or chart. • Compare measurements using < > and = signs. • Solve addition and subtraction problems involving measures. | Gatsby 4 Literacy – comparative language. |
| | 10-12 | Geometry: Properties of Shapes | <ul style="list-style-type: none"> • Recognise 2D shapes on the faces of 3D objects. • Use shapes in patterns and sequences. • Describe 2D and 3D shapes based on their properties. • Begin to recognise right angles in 2D shapes. | Literacy – adjectives and description. |

Intended impact:

By the end of Year 8, pupils will have a secure understanding of place value and calculation and be able to follow simple procedures and recall number facts with a reasonable level of fluency. They will have experienced problems set in a wide variety of contexts and will present their answers in full sentences (number or words).

