| | Theme | Overview of key learning to take place | How learning will be assessed |
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| **Term 1** | Unit 1: Analysing and displaying data<br><br><br>Unit 2: Numbers | **1.1**<br>We are learning to find the mode, median and range of a set of data.<br>We are learning to calculate and interpret the mean of a set of data.<br>We are learning to compare sets of data using averages and range.<br>We are learning to solve problems involving mean, mode, median and range.<br>**1.2**<br>We are learning to group discrete and continuous data.<br>We are learning to draw and interpret grouped frequency diagrams.<br>**1.3** We are learning to use two-way tables.<br>We are learning to interpret and draw dual bar charts and compound bar charts.<br>**1.4** We are learning to interpret and draw line graphs.<br>We are learning to recognise when a graph is misleading.<br>**1.5** We are learning to analyse and present data using spreadsheets in a computer software program.<br>We are learning to choose the most appropriate graph to represent data and solve problems.<br>We are learning to draw, read and interpret tables, bar charts, pie charts, bar-line graphs and line graphs.<br>2.1<br> We are learning to Use rules for divisibility by 2, 3, 4, 5, 9 and 10.<br>2.2<br> We are learning to understand the difference between multiples, factors and primes.<br>We are learning to find all the factor pairs of any whole number.<br>We are learning to find the HCF and LCM of two numbers.<br>2.3 | **Examples of Formative Assessment to be used this term:**<br><br>There will be several modes of formative assessment. Grades are not given for these pieces of work as the focus is on supporting students to make improvements to future pieces of work.<br>Pre-knowledge questions<br>Question worksheets<br>Sparx Maths<br>Exercise tasks<br>AFL questions<br>Checkpoint questions<br><br><br><br>**Summative assessment**<br><br>Assessment to take place 2 times this term.<br><br>**Approximate** timings and topics<br><br>Week 5 - assessment Unit 1 and 2<br><br>Week 9 -  assessment Unit 3 and 4 |

| | | We are learning to compare and order positive and negative numbers.<br>We are learning to add and subtract positive and negative numbers.<br>2.4<br>We are learning to calculate and use index notation for squares and square roots.<br>2.5<br>We are learning to carry out calculations involving squares, cubes, square roots and cube roots.<br>We are learning to use factorising to work out square roots and cube roots.<br>We are learning to solve word problems using square roots and cube roots.<br>2.6<br>We are learning to Estimate answers to complex calculations.<br>We are learning to carry out calculations involving brackets. | Students will receive a mark for each assessment and personalised next steps for improvement |
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| **Term 1** | Unit 3: Equations, functions, formulae | 3.1<br>We are learning to Simplify expressions by collecting like terms.<br>3.2<br>We are learning to Write expressions using four operations.<br>3.3<br>We are learning to substitute into formulae.<br>3.4<br>We are learning to Write formulae from a description.<br>3.5<br>We are learning to expand expressions involving brackets. | |
| | Unit 4: Fractions | 4.1<br>We are learning to compare and simplify fractions.<br>We are learning to write one number as a fraction of another.<br>We are learning to work out simple fractions of amounts.<br>4.2<br>We are learning to write an improper fraction as a mixed number.<br>We are learning to add and subtract fractions.<br>4.3<br>We are learning to work with equivalent fractions, decimals, and percentages. | |

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| | | We are learning to use division to write a fraction as a decimal. 4.4 We are learning to multiply a fraction by a whole number and a fraction by a fraction. 4.5 We are learning to add and subtract mixed numbers. We are learning to multiply a mixed number by a fraction. | | |

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| **Term 2** | Unit 5: Angles and shapes | 5.1 We are learning to Use a protractor to measure and draw angles. We are learning to solve problems involving angles. We are learning to work out unknown angles when two or more lines cross at a point. 5.2 We are learning to describe the line and rotational symmetry of triangles. We are learning to use properties of a triangle to work out unknown angles. We are learning to understand how to prove that a result is true. We are learning to use the properties of isosceles and equilateral triangles to solve problems. 5.3 We are learning to Describe the line and rotational symmetry and the properties of quadrilaterals. We are learning to understand how to prove that angles of a quadrilateral add up to 360°. We are learning to solve problems involving quadrilaterals. . 5.4 We are learning to draw triangles accurately using a ruler and a protractor. We are learning to draw diagrams to scale. 6.1 | **Examples of Formative Assessment to be used this term:** There will be several modes of formative assessment. Grades are not given for these pieces of work as the focus is on supporting students to make improvements to future pieces of work. Pre-knowledge questions Question worksheets SparxMaths Exercise tasks AFL questions Checkpoint questions **Summative assessment** Assessment to take place 2 times this term. **Approximate** timings and units Week 4- assessment Unit 5 and 6 Week 10- assessment Unit 7 and 8 Students will receive a mark for each assessment and personalised next steps for improvement |
| | Unit 6:Decimals and percentages | | |

| | | We are learning to recognise the place value of each digit in large numbers.<br>We are learning to Round decimals to 1 decimal place.<br>SC- I can recognise the place value of each digit in numbers beyond 1 000 000 (one million) to 000 000 000 (one billion).<br>I can round decimals to 1 decimal place.<br>6.2<br>We are learning to write decimals in ascending and descending order.<br>6.3<br>We are learning to add and subtract decimals.<br>6.4<br>We are learning to multiply a decimal by an integer.<br>We are learning to round decimals to make estimates.<br>6.5<br>We are learning to divide decimals by a whole number.<br>We are learning to solve problems by dividing decimals.<br>6.6<br>We are learning to compare and order decimals, fractions and percentages.<br>We are learning to convert between percentages, decimals and fractions.<br>We are learning to write one number as a fraction of another.<br>6.7<br>We are learning to mentally calculate a percentage of an amount. | |
| **Term 2** | Unit 7: Ratio and proportion | 7.1<br>We are learning to write and understand ratios.<br>We are learning to write a ratio in its simplest form.<br>7.2<br>We are learning to solve word problems that involve dividing a quantity into two<br>parts in a given ratio.<br>We are learning to solve word problems where given a ratio and one quantity,<br>students have to find the other quantity.<br>7.3 | |

| | Unit 8: Measures and shapes | We are learning to understand the relationship between ratio and proportion.<br>7.4<br>We are learning to solve simple word problems involving ratio and direct proportion.<br>We are learning to solve simple word problems involving ratio and inverse proportion.<br>7.5<br>We are learning to Solve problems involving ratio and proportion using the unitary method.<br>We are learning to solve best buy problems.<br><br>8.1<br>We are learning to convert between metric units of measures of length, mass and capacity.<br>We are learning to solve problems in everyday contexts involving measures<br>and conversions.<br>8.2<br>We are learning to find the perimeter of regular polygons with one side given.<br>We are learning to find the perimeter of irregular polygons including compound<br>shapes.<br>8.3<br>We are learning to Calculate the area of squares and rectangles.<br>We are learning to calculate the area of compound shapes made from<br>rectangles.<br>We are learning to solve perimeter and area problems.<br>8.4<br>We are learning to identify properties of 3D solids, including cubes, cuboid and<br>prisms.<br>We are learning to identify reflective symmetry in 3D solids. | |
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| Term 3 | Unit 9: Sequences and Graphs<br><br>Unit10: Transformations<br><br>Unit11:Probability | 9.1<br>We are learning to work out the terms of an arithmetic sequence using the<br>term-to-term rule.<br>We are learning to work out a given term in a simple arithmetic sequence.<br>9.2<br>We are learning to work out and use expressions for the $n$th term in an<br>arithmetic sequence.<br>9.3<br>We are learning to generate sequences and predict how they will continue.<br>We are learning to recognise geometric sequences and work out the term-to-term rule.<br>9.4<br>We are learning to use positive and negative coordinates.<br>We are learning to work out the midpoint of a line segment.<br>9.5<br>We are learning to draw straight-line graphs.<br>We are learning to recognise straight-line graphs parallel to the axes.<br>We are learning to recognise graphs of $y = x$ and $y = -x$<br>9.6<br>We are learning to Draw graphs that represent relationships.<br>Solve problems involving coordinates and straight lines.<br>10.1<br>We are learning to Identify congruent shapes.<br>We are learning to use the language of enlargement.<br>We are learning to enlarge shapes using given scale factors.<br>We are learning to work out the scale factor given an object and its image.<br>10.2<br>We are learning to recognise and carry out reflections in a mirror line.<br>We are learning to reflect a shape on a coordinate grid.<br>We are learning to describe a reflection on a coordinate grid.<br>10.3 | Formative Assessment<br><br>There will be several modes of formative assessment. Grades are not given for these pieces of work as the focus is on supporting students to make improvements to future pieces of work.<br>Pre-knowledge questions<br>Question worksheets<br>Exercise tasks<br>SparxMaths<br>AFL questions<br>Checkpoint questions<br><br>Summative assessment<br><br>Assessment to take place 2 times this term<br>**Approximate** timings and units:<br>Week 4-  assessment Unit 9 and 10<br>Week 9 –  assessment Unit 11<br><br><br>Students will receive a mark for end of topic assessment and personalised next steps for improvement. |

| | | We are learning to recognise and carry out rotations.<br>We are learning to describe and carry out rotations on a coordinate grid.<br>10.4<br>We are learning to Translate 2D shapes.<br>We are learning to transform 2D shapes by combinations of rotations, reflections and translations.<br><br>11.1<br>We are learning to use and interpret probability scales.<br>We are learning to calculate and compare probabilities.<br>11.2<br>We are learning to calculate more complex probabilities.<br>We are learning to find the probability of an event not happening. | |
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| **Term 3** | **Revision and End of Term Assessment** | **Content to be revised in preparation for End of Term Assessment.** | **Style of the assessment- TBC** |