	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Theme/Big Idea	Developing Fluency with Number and Measure for Confident Mathematical Thinking	Building Connections Across Number, Algebra and Geometry for Mathematical Understanding	Building fluency in Calculations and Understanding Data in Everyday Contexts	Developing Strong Number Foundations and Algebraic Thinking for Solving Problems	Building fluency and Confidence in Proportional Reasoning in Real-Life Contexts	Building Confidence in Data, Number and Graphical Thinking for Deeper Mathematical Understanding
Content What are they learning? (including keywords)	**Unit 1** Students strengthen and extend their understanding of the size of numbers by exploring Place Value. This unit works with integers, decimals and negative numbers, to develop fluency and accuracy within comparing and ordering, addition and subtraction, and multiplying and dividing by powers of ten. **Unit 2** Students strengthen and extend their understanding of length and area, converting metric lengths, and	**Unit 3** Students strengthen and extend their understanding of fractions, decimals and percentages, and the links between them. This develops fluency and accuracy in the representation and equivalence of the different forms, addition and subtraction of fractions and calculation of fractions and percentages of amounts. **Unit 4** Students are introduced to formal algebraic thinking where they write and	**Unit 6** Students develop and strengthen their understanding of the statistical measures we use to describe sets of data. Students will calculate and use the mean, median, mode and range to analyse, interpret and compare data sets in real-world contexts with an appreciation for the reliability of their calculations and conclusions. **Unit 7** Students develop fluency in key calculation skills including rounding decimals and applying the correct order of operations. They build	**Unit 8** Students develop understanding of number structure by exploring multiples, factors and divisibility rules. They investigate square numbers and square roots, and the link between these. This unit builds fluency, reasoning and accuracy with the patterns in the number system. **Unit 9** Students develop their algebraic thinking, simplifying multiplication and division expressions and linking them to geometrical contexts such as area. They solve equations of increasing complexity	**Unit 10** Students develop a deeper understanding of proportional reasoning using fractions, decimals and percentages. They explore ratio through writing, simplifying and dividing amounts, and apply a range of methods to solve direct proportion problems, building confidence in solving real-life mathematical situations. **Unit 11 (start)** Students develop and extend skills in representing and interpreting data using a range of graphs and charts, including bar charts, time series	**Unit 12** Students strengthen and extend their understanding of number structure by exploring factors, highest common factors and prime numbers. They build fluency in multiplying and dividing decimals, strengthening accuracy and confidence. **Unit 13** Students develop and extend coordinate skills by plotting points in all four quadrants and solving geometrical problems involving shapes. They explore patterns in coordinate sequences, drawing and describing relationships. This unit

	calculating the perimeter and area of a range of shapes, including composite figures. **Key vocabulary listed in Appendix 1**	simplify expressions, expand brackets and substitute values into expressions. This unit builds the foundations for recognising patterns and using algebra to represent and solve problems. **<u>Unit 5</u>** Students explore the properties and geometry of common shapes in conjunction with the main rules for angles, strengthening their reasoning skills for geometrical problem solving in later years. **Key vocabulary listed in Appendix 1**	confidence in multiplying and dividing negative numbers, alongside strengthening mental and written methods for multiplication and division. **Key vocabulary listed in Appendix 1**	and apply these skills to form and solve equations involving, perimeter, area and angles. **Key vocabulary listed in Appendix 1**	graphs and pie charts. This unit builds confidence in analysing data, identifying patterns and trends and communicating findings clearly. **Key vocabulary listed in Appendix 1**	builds reasoning and spatial awareness, helping students recognise structure and patterns within coordinates as a foundation for formal graph work in Year 8. **Key vocabulary listed in Appendix 1**
Skills How are they learning it?	Apply efficient calculation strategies, including multiplying and dividing by powers of ten. Use mathematical reasoning to explain relationships in number and measures. Represent and communicate	Apply mathematical thinking to recognise relationships between fractions, decimals and percentages and generalise across forms. Apply algebraic thinking to represent patterns, simplify expressions and model relationships.	Apply mathematical thinking to interpret data, recognising patterns and connections within statistical measures. Apply accurate calculation skills, including rounding, order of operations and working with negative numbers.	Apply mathematical thinking to recognise patterns in number structure, including factors, multiples and square numbers. Apply reasoning to form and solve equations, linking algebra to perimeter, area and angle relationships.	Apply mathematical thinking to recognise proportional relationships, connecting fractions, decimals, percentages and ratio. Represent proportional relationships clearly using a range of models, including	Apply mathematical thinking to recognise structure in number, including factors, primes and decimal relationships. Apply reasoning to solve geometrical problems using coordinates, linking shape properties and position.

	mathematical ideas clearly using diagrams, notation and precise vocabulary.	Use geometric reasoning to identify properties of shapes and apply angle rules to solve problems.	Use efficient mental and written methods to perform multiplication and division with confidence and precision.	Develop algebraic thinking to simplify expressions and form general rules across number and geometry.	diagrams and numerical forms. Apply mathematical thinking to identify patterns and trends in data using graphs and charts. Use mathematical reasoning to interpret, analyse and communicate conclusions from data effectively.	Develop spatial and mathematical thinking by recognising patterns and relationships within coordinate sequences. Represent and communicate mathematical ideas clearly using coordinate grids, diagrams and precise notation.
Key Questions	**What** is place value, and **why** is it important when working with integers and decimals? **What** is the difference between perimeter and area, and **why** do they measure different aspects of a shape? **How** do we calculate the perimeter and area of the individual common shapes and their composite shapes?	**What** relationships exist between fractions, decimals and percentages, and **why** is it useful to convert between them? **How** do we calculate with fractions and percentages? **What** is algebra, **why** do we use it to represent patterns and relationships, and **how** can we use expressions, brackets and substitution to model, simplify and solve a wide range of mathematical problems?	**What** do measures such as mean, median, mode and range tell us about a set of data, **how** do we calculate them and **why** is it important to consider the reliability of our conclusions? **What** rules govern the calculations we do and **why** is it important to apply them correctly? **How** can we use mental and written methods to carry out multiplication and division efficiently, and **why** might different methods be more	**What** patterns exist within numbers, **why** is it important to recognise and understand these structures, and **how** can we use them to make calculation more efficient? **Why** are square numbers and square roots important, and **how** do they help us understand number relationships? **How** can algebra be used to model, simplify and solve geometrical problems?	**What** is the difference between ratio and proportion and **how** can we recognise and use each when solving problems? **What** is the role of multiplicative relationships in proportional reasoning, **why** is this important, and **how** can we apply it to solve problems? **What** do different graphs and charts show about data, **why** do we use them, and **how** can they help us identify patterns and trends?	**What** are factors, prime numbers and highest common factors, **why** are they important in understanding number structure, and **how** can we use them to solve problems efficiently? **How** can we multiply and divide decimals accurately? **What** do coordinates represent, **why** are they useful for describing position and shape, and **how** can we use them to solve geometrical problems?

		What are the key properties of shapes and angle rules, and **how** can we use these to solve problems?	suitable in different situations?	**Wh**at does the equals sign really represent, **why** must both sides of an equation remain balanced, and **how** can we use inverse operations to solve equations accurately?		**Why** do patterns in coordinate sequences matter, and **how** can recognising them help us describe relationships accurately?
Assessment (specific assessed piece(s); milestone(s))	Unit 1 Learning Review Unit 2 Learning Review Assessment 1 covering units 1 and 2. QLA sheets provided from this.	Unit 3 Learning Review Unit 4 Learning Review Assessment 2 covering units 3 and 4. QLA sheets provided from this.	Unit 5 Learning Review Unit 6 Learning Review Unit 7 Learning Review Assessment 3 covering units 5, 6 and 7. QLA sheets provided from this.	Unit 8 Learning Review Unit 9 Learning Review Assessment 4 covering units 8 and 9. QLA sheets provided from this.	Unit 10 Learning Review Summer Term assessments (Non-calculator and Calculator papers). QLA sheets provided from these.	Unit 11 Learning Review Unit 12 Learning Review Unit 13 Learning Review