



What will you learn?

Topic(s)	
Autumn 1	<p>Decimal Number System: Base 10-integers, adding and subtracting integers, base 10- decimals, adding and subtracting decimals, ordering decimals, multiplying and dividing by 10 and 100</p> <p>Properties of Arithmetic 4 operations, fact families, commutativity, associativity, decomposition, distributivity, mental multiplication</p> <p>Factors and Multiples: Multiples, common multiples, divisibility rules, factors, common factors, square numbers, primes numbers, prime factor decomposition, HCF, LCM,</p> <p>Order of operations: Equal priority, non-equal priority, combined operations, squares and roots,</p>
Autumn 2	<p>Negative Numbers: Directed numbers, order of numbers, absolute value, adding and subtracting with directed numbers, multiplying and dividing with directed numbers, order of operations, using a calculator, negative numbers in context</p> <p>Expressions: Algebraic notation, multiplying terms, simplifying indices, substitution, collecting like terms, expanding brackets, expanding and collecting like terms, factorising</p>
Spring 1	<p>Equations: Equality, inverse operations, solving two step equations, solving equations with brackets</p> <p>Coordinates: Reading and writing coordinates, plotting coordinates, midpoints, equations of horizontal and vertical lines; finding gradients, identifying parallel lines</p> <p>Angles: Angle notation, types of angles, estimating angle sizes, working with right angles, angles on a straight line, angles at a point, measuring and drawing angles, corresponding angles, alternate angles, co-interior angles</p>



Spring 2	<p>Properties of 2D Shapes: Types of triangles, angles in triangles, properties of quadrilaterals, angles in quadrilaterals (parallelogram, rhombus, kite, trapezium), rotational symmetry, triangles and quadrilaterals on a coordinate grid</p> <p>Conceptualising and comparing fractions: Representing fractions, converting between improper fractions and mixed numbers, equivalent fractions, simplifying fractions, comparing and ordering fractions, converting between fractions and decimals</p>
Summer 1	<p>Manipulating Fractions: Adding and subtracting fractions, fraction of amounts, multiplying with fractions and decimals, reciprocals, dividing with fractions,</p> <p>Ratio and Proportion: Forming ratios, writing ratios as fractions, equivalent ratios, simplifying ratios, unit ratios, sharing in ratios, metric measures, scale diagrams and maps</p>
Summer 2	<p>Representing Data: Types of data, collecting and recording data, interpreting data tables, bar charts, pictograms, pie charts, working with time, timetables</p> <p>Revision</p>

How will you be assessed?

Overall assessment

Autumn 1	End of unit assessments
Autumn 2	End of unit assessments
Spring 1	Mid-year exams
Spring 2	End of unit assessments
Summer 1	End of unit assessments
Summer 2	End of year assessments

End of Year Assessment

Students are given two one-hour non-calculator assessments comprising all the topics covered in Year 7

These assessments cover the skills that students have learnt, students should apply their knowledge and solve problems in context.



Which resources should you use?

Books, websites, online resources, trips and visits

Students will be given overviews at the beginning of every term outlining the topics which will be covered.

One piece of home learning task will be set by the teacher. This could be a range of activities from online or worksheets.

- Sparx Maths (school subscription)
- KS3 quizzes - [KS3 Maths – Revision Quizzes – Years 7, 8 and 9](#)
- Oak National Academy

What independent work can you do?

Books, websites, online resources

Use the VIP Zone, there you will find:

- An 'Independent Learning' folder full of resources and ideas to support your learning
- PLCs [Personal Learning Checks] - use these to rate your understanding of each topic and to recap and stretch your knowledge and skills.

Start revising. Try some of these to improve your understanding of each lesson and to help you prepare for assessments.

- **Summarise your notes:** Identify the key ideas and essential details. This technique improves understanding and retention by making information clearer and more manageable.
- **Flashcards:** Write key information on cards, don't forget to include an example
- **Mind maps:** Visually organize information by creating diagrams that connect ideas. This helps you see the relationships between topics.
- **Mnemonics:** Use songs, rhymes, or acronyms to help remember facts and figures.
- **Recording and replaying:** Record yourself reading notes and listen back to them.
- **Sticky notes:** Write / draw a key point on each note and place them around your house to help with memorisation.

Watch this: BBC Bitesize [The Best Memory Hacks to Help Your Revision](#)