



What will you learn?

Topic(s)	
Autumn 1	<p>Accuracy and Estimation: Rounding using a number line, rounding to decimal places, estimating answers, rounding to significant figures</p> <p>Percentages: Introduction to percentages, converting between fractions, decimals and percentages, write a number as a percentage of another, percentage of amounts, increasing/decreasing by a percentage (non-calc and calc methods)</p> <p>Expressions: Understanding and using fractions as division, simplifying with indices, substitution, collecting like terms with indices, expanding and collecting like terms, factorising</p>
Autumn 2	<p>Sequences: Term-to-term rule, arithmetic and geometric sequences, common difference, nth term, square and cubic numbers, quadratic sequences</p> <p>Linear Graphs: Reading and plotting coordinates, plot and identifying horizontal and vertical lines, relating ordinates to form equations, plotting linear graph, equation of a line, gradient of a line, gradient between two points</p> <p>Equation and Inequalities: Solving equations: one-step, two-step, fractions, brackets, unknowns on both sides Inequalities: using notation and language, represent on a number line, solving linear inequalities, solving double inequalities and representing on a number line</p>
Spring 1	<p>Angles in Polygons: Names of polygons, interior angles, angles in a triangle, sum of interior angles in polygons, missing angles, exterior angles, angle notation</p> <p>Real-life Graphs: Representing linear relationships on graphs, piecewise graphs, speed-distance-time, distance-time graphs</p>
Spring 2	<p>Direct and Inverse Proportion: Identifying scale factors, conversions, direct proportion on graphs, gradient of graphs, unitary method, inverse proportion</p> <p>Circles: Anatomy, circle construction, circumference, area of circles, area of sectors</p> <p>Volume and Surface Area: Faces-edges-vertices, nets of cubes and cuboids, surface area of cubes and cuboids, prisms, surface area of prisms, volume by counting, volume of cubes and cuboids, volume of prism (triangular prism, cylinder, L-shapes)</p>



Summer 1	<p>Univariate Data: Types of data, collecting data, representing data, finding and using the mean, changing the mean, mean from frequency tables, mode, median, range, averages from bar charts</p> <p>Bivariate Data: Plotting scatter diagrams, types of correlation, line of best fit, causation, two-way tables</p>
Summer 2	Revision

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 one hour of calculator and one hour of non-calculator assessment comprising all the topics covered in year 8.

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.

Two pieces of home learning tasks 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](#)