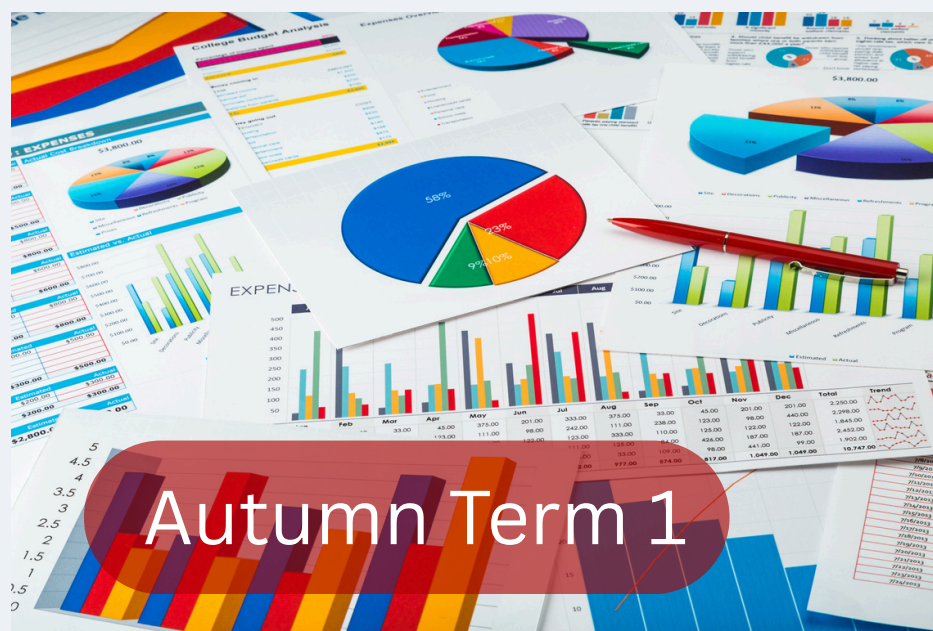


## MATHS

**Gradients and lines**  
**Non-linear graphs**  
**Using graphs**

**Expanding and factorising**  
**Changing the subject**  
**Functions**

**Multiplicative reasoning**  
**Geometric reasoning**  
**Algebraic reasoning**



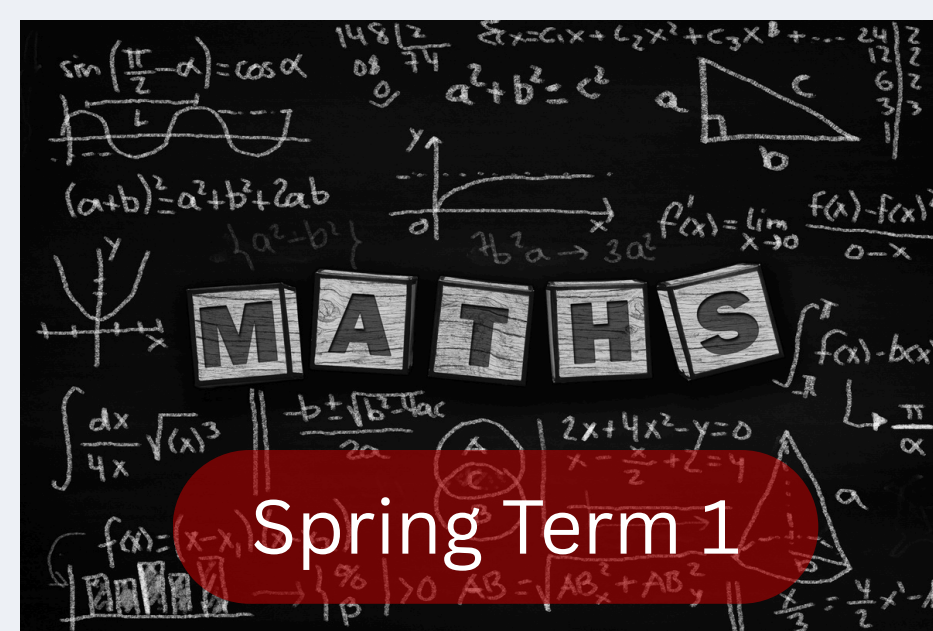
**Autumn Term 1**

This block builds understanding of graphs. Students start with gradients and lines, linking algebra and geometry, then progress to non-linear graphs like quadratics, learning to plot and interpret them. Finally, they apply graphs to solve problems, estimate solutions, and model real-life situations confidently.



**Autumn Term 2**

This term starts with quadratic equations and solving methods such as factorisation and the quadratic formula, reinforcing algebra skills. Students then move on to rearranging formulae before exploring functions, including composite and inverse, to understand how transformations affect graphs. Finally, they apply these concepts to interpret and model real-life scenarios using algebraic and graphical techniques.



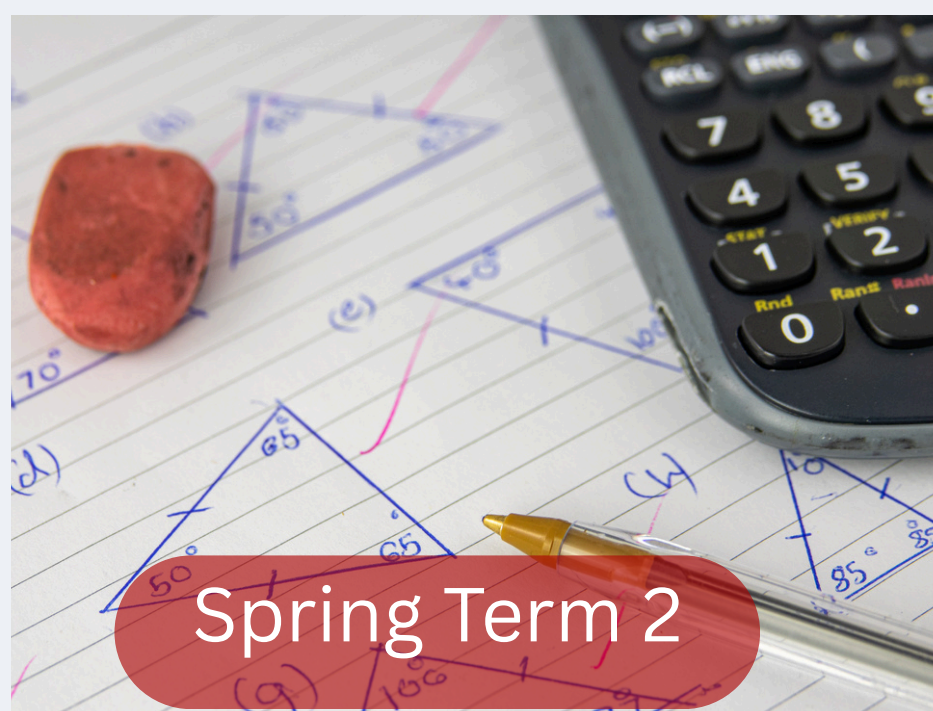
**Spring Term 1**

This half term develops problem-solving and logical thinking. Students cover Multiplicative Reasoning with scale factors, ratio, and proportion, then move to Geometric Reasoning, revisiting angles, polygons, circle theorems, and extending to vectors and proofs. Finally, Algebraic Reasoning consolidates sequences, simultaneous equations, and inequalities, with Higher tier learners tackling formal proofs and quadratic inequalities.

**Transformations and Constructions**  
**Listing and describing**  
**Show that**

**Revision and examinations**

**Revision and examinations**



**Spring Term 2**

This block focuses on revisiting key topics and improving mathematical communication. Students review transformations and constructions, including symmetry, enlargements, trigonometric graphs, and invariance. They then cover listing and describing through systematic listing, probability, Venn diagrams, and data interpretation. The term ends with 'Show That' tasks, promoting clear reasoning and proof across number, algebra, geometry, and vectors to prepare for exam-style questions.



**Summer Term 1**



**Summer Term 2**