

## **Maths**

## Year 9

Please use this Route Through to learn more about what students are learning in lessons, and how they can extend their learning at home. Please contact the Head of Department or Director of Year for more information.

Subject	What are students learning in lessons?	What could students do to extend their learning and develop their character?
Autumn Term 1	Decimal manipulation. Estimation and error intervals. HCF and LCM using Venn diagrams. Related calculations. Calculations with fractions	Be curious: research how prime numbers are used in cybersecurity.
Autumn Term 2	Algebraic manipulation. Laws of indices. Standard form. Expanding and factorising double brackets.	Be independent: explore how standard form is useful in Science.
Spring Term 1	Forming expressions. Substitution. Direct and inverse proportion. Probability 1.	Be independent: make a formula sheet for all the formulae you use in Science and Maths.
Spring Term 2	Solving equations 2. Inequalities. Sequences.	Be curious: research the Golden Spiral. Find examples of it in nature in your local area and take pictures.
Summer Term 1	Pythagoras Theorem. Interior and exterior angles in polygons. Vectors. Transformations.	Be creative: Research tessellation. Can you create your own tessellating pattern?
Summer Term 2	Plans and elevations. Arcs and sectors. Surface area.	Be curious: research how technical drawings of plans and elevations are used in Architecture.

		Assessment	Home Learning
	How should	Students think hard and answer lots of questions every lesson.	
			Due every Thursday at 4pm:
l	time?		1 hour Sparx Maths
l		Exam: Spring 1 and Summer 2	