Addressing the Year 9 Syllabus

Geometry and Geometrical Patterns

- Draw geometrical figures, angles, triangles, quadrilaterals, 3D objects
- Use geometric techniques to construct angles, lines and 2D figures
- Recognise and name common geometric figures and their parts
- Use geometrical facts, properties and relationships to solve problems
- Recognise symmetry in 2D shapes
- Identify and use the properties of polygons
- Use transformations to draw geometrical patterns
- Identify objects as symmetrical about a plane, line or a point
- Construct a variety of tessellations and simple fractals
- Identify shapes and transformations used in tessellations
- Use compasses, ruler and protractor to construct angles, lines and curves

Measurement

- Use techniques and tools to measure and compare quantities and angles
- Select and use appropriate common units and convert between measures
- Estimate measurements appropriately in various contexts
- Find the perimeters and areas of triangles, circles, squares using formulæ

Trigonometry and Pythagoras' Theorem

- Use Pythagoras' theorem to solve problems
- Use right-angled triangles and trigonometry to solve problems

Algebra

- Use calculation techniques for fractions, decimals, percentages and ratios
- Use written and graphical information to solve problems
- Interpret and use ratios to solve simple problems
- Identify, describe and extend number patterns
- Draw graphs to represent relationships given descriptions or value tables
- Substitute into given formulæ and evaluate the resulting expression
- Solve simple linear equations