	Mid-Year Expectations	End of Year Expectations
Higher Prior Attainer	**HA students need to be able to show learning identified for MA students and the areas identified here.** **Reasoning with Algebra.** • Write an equation in the form of y = mx + c. • Model real-life graphs involving inverse proportion. • Understand perpendicular lines. • Rearrange complex formulae including brackets and squares. • Expand three binomials. **Constructing in 2 and 3 Dimensions.** • Explore volumes of cones, pyramids, and spheres. **Reasoning with Number.** • Understand and use surds. • Solve problems with repeated percentage change. Throughout the year, students are expected to use prior learning with new. Students use reasoning and develop problem solving skills, using learning from more than one area.	**HA students need to be able to show learning identified for MA students and the areas identified here.** **Reasoning with Geometry.** • Link constructions and geometrical reasoning. • Find the result of a series of transformations. • Use Pythagoras' Theorem in 3D. **Reasoning with Proportion.** • Enlarge a shape by a negative scale factor. • Solve problems with similar triangles. • Explore ratio in right angled triangles. • Use graphs of inverse proportion. • Solve problems in ratio and algebra. • Convert compound units. **Representations.** • Use tree diagrams. • Use tree diagrams to solve 'without replacement' problems. • Graphs of simultaneous equations. Throughout the year, students are expected to use prior learning with new. Students use reasoning and develop problem solving skills, using learning from more than one area.

	Mid-Year Expectations	End of Year Expectations
Middle Prior Attainer	**Reasoning with Algebra.** • Use y = mx + c as the general form of the equation of a straight line and interpret m and c in abstract and real-life contexts. • Form, solve and rearrange one-step and two-step equations and inequalities. • Test conjectures on prime numbers, factors, and multiples and create conjectures to test. • Expand brackets. **Constructing in 2 and 3 Dimensions.** • Calculate surface area and volume of 3-D shapes including prisms and cylinders. • Draw nets and draw and interpret plans and elevations. • Understand and draw a locus of points and produce standard constructions using a straight edge and pair of compasses. • Identify congruent triangles. **Reasoning with Number.** • Develop further and use number skills in problem solving. • Use 'reverse' percentages to find original amounts. • Apply number skills used in financial contexts. Throughout the year, students are expected to use prior learning with new. Students use reasoning and develop problem solving skills.	**Reasoning with Geometry.** • Apply reasoning in angle and shape problems. • Test conjectures and deductions in the context of geometry. • Name the order of rotational symmetry. • Compare rotational symmetry to line symmetry. • Rotate a shape around a point. • Translate a shape. • Use Pythagoras' Theorem to find missing lengths and on a coordinate grid. **Reasoning with Proportion.** • Enlarge shapes using integer and fractional scale factors. • Use the properties of similar shapes to calculate missing lengths and angles. • Solve direct and inverse proportion problems. • Solve ratio problems given the whole or a part. • Solve 'best buy' problems. • Solve speed, distance and time problems. • Use distance-time graphs. • Solve density, mass and volume problems. **Representations.** • Calculate a relative frequency and expected outcomes from independent events. • Draw and interpret quadratic, exponential, and reciprocal graphs. • Represent inequalities using graphs. Throughout the year, students are expected to use prior learning with new. Students use reasoning and develop problem solving skills.

	Mid-Year Expectations	End of Year Expectations
Lower Prior Attainer	**Reasoning with Algebra.** • Identify gradient and y intercept from the equation of a graph in the form of y = mx + c. • Form, solve and rearrange one-step equations and inequalities. • Test simple conjectures on prime numbers, factors, and multiples. • Expand brackets. **Constructing in 2 and 3 Dimensions.** • Calculate surface area and volume of 3-D shapes. • Draw nets of simples 3-D shapes. • Draw plans and elevations. • Draw a locus of points and produce standard constructions using a straight edge and pair of compasses. • Identify identical triangles. **Reasoning with Number.** • Use number skills in problem solving. • Apply number skills used in financial contexts. Throughout the year, students are expected to use prior learning with new.	**Reasoning with Geometry.** • Apply reasoning in angle and shape problems. • Name the order of rotational symmetry. • Compare rotational symmetry to line symmetry. • Rotate a shape around a point. • Translate a shape. • Use Pythagoras' Theorem to find missing lengths. **Reasoning with Proportion.** • Enlarge shapes using integer scale factors. • Use the properties of similar shapes to calculate missing lengths and angles. • Solve ratio problems given the whole or a part. • Solve 'best buy' problems. • Solve speed, distance and time problems. • Use distance-time graphs. **Representations.** • Calculate a relative frequency and expected outcomes from independent events. • Draw and interpret quadratic graphs. • Represent simple inequalities using graphs.