

Year 10 Autumn

Foundation

Higher

Real-life graphs

- Function machine
- Coordinates and shapes in all four quadrants
- Coordinates of midpoint
- Real-life graphs
- Distance-time graphs
- Velocity-time graphs
- Gradient as a rate of change

Transformation

- Rotation
- Translation
- Reflection
- Enlargement
- Preservation of properties under a given transformation
- Area after enlargement compared to before
- Congruence
- Invariance points

Straight Line graphs

- Plot and draw graphs of $y = a$, $x = a$, $y = x$ and $y = -x$
- Plot and draw graphs of $y = mx + c$
- Plot and draw graphs of the form $ax + by = c$
- Gradient of a straight line
- Gradient of parallel lines
- Draw linear graphs using gradient and y-intercept
- Find equation of a straight line

Construction and Loci

- Plan and elevation
- Map reading and scale drawing
- Bearing
- Angle bisection
- Line bisection
- Construct perpendicular line from a given point
- Construct 90° and 45°
- Construction of shapes
- The four loci
- Loci and regions

Assessment 1

<p>Transformation</p> <ul style="list-style-type: none"> - Congruent shapes - Rotation - Reflection - Translation - Enlargement - Examine the impact of transformation on the image 	<p>Quadratic and Simultaneous Equations</p> <ul style="list-style-type: none"> - Factorise and solve Quadratic equations - The use of completing the square method - Quadratic formula - Elimination method of simultaneous equation - Substitution method of simultaneous equation - Equation of circles - Simultaneous equation involving one linear and one quadratic - Forming and solving simultaneous and quadratic equations - Solve inequality in one variable - Solve inequality in two variables - Inclusivity and exclusivity and inequality
<p>Year 10 Assessment 1</p>	
<p>Ratio</p> <ul style="list-style-type: none"> - Simplifying ratio - Ratio to describe a situation - Write ratios in the form 1:n or m: 1 - Ratio of quantity - Ratio when part is known - Ratio to fractions - Ratio and linear functions - Ratio to compare measures and currencies - Write area and volume in ratio 	<p>Probability</p> <ul style="list-style-type: none"> - Calculate the probability of event happening or not happening - Experimental and theoretical probabilities - Expectations - Sample space diagram - Probability of event not happening - Venn diagram and probability - Two-way table and probability - Laws of probability - Probability tree diagram - Conditional probability
<p>Proportion</p> <ul style="list-style-type: none"> - Direct and indirect proportion - Best buy - Unitary method of proportion - Proportion and recipes 	<p>-</p>

<ul style="list-style-type: none">- Proportion problems and unitary method- Proportional graphs-	
<ul style="list-style-type: none">• Assessment 2	<ul style="list-style-type: none">•