



KS4 Learning Overview

Maths (Higher Tier)

Exam Board: Edexcel

Year 10		
Term	Topics	Extra learning opportunities
Autumn 1	<ul style="list-style-type: none"> Perimeter, area & circles 3D forms & volume, cylinders, cones & spheres Accuracy & bounds 	<p>Research task: If the circumference of a circle is directly proportional to the diameter, what is the constant of proportionality? Who were the first people to use this constant?</p>
Autumn 2	<ul style="list-style-type: none"> Transformations Constructions, loci & bearings Solving quadratic & simultaneous equations 	<p>Research task: What is the Angle Trisection Problem?</p>
Spring 1	<ul style="list-style-type: none"> Inequalities Probability 	<p>Research task: Who conceived the Venn diagram and when?</p> <p>Research task: What is the probability of winning the EuroMillions jackpot? How is this calculated?</p>
Spring 2	<ul style="list-style-type: none"> Multiplicative reasoning Similarity & congruence in 2D & 3D 	
Summer 1	<ul style="list-style-type: none"> Graphs of trigonometric functions Further trigonometry 	<p>Research task: What is the ASTC diagram used for?</p>
Summer 2	<ul style="list-style-type: none"> Collecting data Cumulative frequency, box plots & histograms 	<p>Research task: What are the origins of the tally marking system?</p>