

Subject: Maths	
	<b>Maths Tier 1-2</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Collect and read data in tally charts, bar charts, pictograms and simple pie charts</li> <li>• Find the mode, median and range of discrete data</li> <li>• Recognise and name 2D shapes and 3D solids</li> <li>• Plot and read coordinates in all four quadrants</li> <li>• Calculate the angles in a triangle</li> <li>• Recognise and extend simple number sequences</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.

Subject: Maths	
	<b>Maths Tier 3</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Find the mode, median, mean and range of discrete data</li> <li>• Construct and interpret bar-line graphs, frequency diagrams and simple pie charts</li> <li>• Recognise the properties and types of triangle and quadrilateral</li> <li>• Find angles at a point, on a straight line, in a triangle and vertically opposite</li> <li>• Generate and describe simple sequences</li> <li>• Plot graphs of simple linear functions (using all four quadrants)</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.

Subject: Maths	
	<b>Maths Tier 4</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Estimate and find the mean and median of a set of data</li> <li>• Recognise and use alternate and corresponding angles</li> <li>• Solve problems using side/angle properties of triangles and quadrilaterals</li> <li>• Plot graphs of linear functions</li> <li>• Recognise that equations of the form <math>y=mx+c</math> correspond to linear graphs</li> <li>• Interpret real life graphs</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.

Subject: Maths	
	<b>Maths Tier 5</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Interpreting a set of data using averages and frequency diagrams</li> <li>• Draw plans and elevations of 3D shapes</li> <li>• Find the volume of prisms</li> <li>• Find the surface area of prisms</li> <li>• Generate and plot points of linear functions</li> <li>• Find the gradient of a line</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.

Subject: Maths	
	<b>Maths Tier 6</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Use tree diagrams to represent probability problems (with or without replacement)</li> <li>• Calculate probabilities using AND and OR rules</li> <li>• Solve problems using Pythagoras' theorem</li> <li>• Solve problems using trigonometric identities in right angled triangles</li> <li>• Find the mean and median of large data sets</li> <li>• Draw and interpret scatter diagrams and frequency polygons</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.

Subject: Maths	
	<b>Maths Tier 7</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Use tree diagrams to calculate probabilities (with or without replacement)</li> <li>• Use trigonometric ratios in right angled triangles in 2D and 3D</li> <li>• Find the area of triangle using <math>\frac{1}{2} ab \sin c</math></li> <li>• Draw and recognise trigonometric graphs</li> <li>• Use sine and cosine rules in non-right angled triangles</li> <li>• Draw and interpret histograms</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.

Subject: Maths	
	<b>Maths Tier 8-9</b>
<b>KS4 target direction</b>	
Advanced  <i>Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress.</i>	<ul style="list-style-type: none"> <li>• Demonstrate fluency in mathematical concepts taught</li> <li>• Reason mathematically – developing an argument, justification or proof using mathematical language</li> <li>• Apply mathematical concepts to a variety of routine and non-routine problems</li> </ul>
Secure  <i>Students must achieve competence in all statements before being judged secure.</i>	<ul style="list-style-type: none"> <li>• Find the point that divides a line in a given ratio</li> <li>• Transform and enlarge 2D shapes</li> <li>• Apply and describe transformations to graphs</li> <li>• Calculate stratified samples</li> <li>• Draw and interpret histograms for continuous data</li> <li>• Know and use circle theorems</li> </ul>
Developing	4 or more objectives met.
Beginning	Fewer than 4 objectives met.