| Subject: <br> Maths |  |
| :---: | :---: |
|  | Maths Tier 1-2 |
| KS4 target direction |  |
| Advanced <br> Students <br> must <br> achieve <br> competence <br> in all <br> objectives <br> in good <br> progress <br> too to be <br> judged as <br> making <br> exceptional <br> progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure <br> Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Identify lines of symmetry in 2D shapes <br> - Reflect a shape in a mirror line <br> - Draw and classify polygons <br> - Order and use positive and negative numbers <br> - Use letter symbols to represent unknown numbers <br> - Collect like algebraic and numeric terms |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |


| Subject: <br> Maths |  |
| :---: | :---: |
|  | Maths Tier 3 |
| KS4 target direction |  |
| Advanced <br> Students <br> must <br> achieve <br> competence <br> in all <br> objectives <br> in good <br> progress <br> too to be <br> judged as <br> making <br> exceptional <br> progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure <br> Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Recognise and visualise symmetries of 2D shapes <br> - Reflect a shape in a given mirror line <br> - Rotate a shape around a point <br> - Translate a shape around a coordinate grid <br> - Understand and use the language of transformations <br> - Identify and use the properties of 2D shape |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |


| Subject: <br> Maths |  |
| :---: | :---: |
|  | Maths Tier 4 |
| KS4 target direction |  |
| Advanced <br> Students <br> must <br> achieve <br> competence <br> in all <br> objectives <br> in good <br> progress <br> too to be <br> judged as <br> making <br> exceptional <br> progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure <br> Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Find the midpoint of a line segment, given its end coordinates <br> - Identify the symmetries of a 2D shape <br> - Rotate a shape around a given point <br> - Reflect a shape in a given line <br> - Translate a shape around a coordinate grid <br> - Enlarge a shape from the origin (positive scale factor) |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |


| Subject: Maths |  |
| :---: | :---: |
|  | Maths Tier 5 |
| KS4 target direction |  |
| Advanced <br> Students <br> must <br> achieve <br> competence <br> in all <br> objectives <br> in good <br> progress <br> too to be <br> judged as <br> making <br> exceptional <br> progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure <br> Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Use a coordinate grid to solve problems using transformations <br> - Apply and describe combinations of transformations <br> - Enlarge 2D shapes around a given point (positive scale factor) <br> - Recognise congruence of shapes with reflection, rotation and translation <br> - Recognise enlargement preserves angles but not lengths <br> - Use and interpret maps and scale drawings |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |


| Subject: <br> Maths |  |
| :---: | :---: |
|  | Maths Tier 6 |
| KS4 target direction |  |
| Advanced <br> Students must achieve competence in all objectives in good progress too to be judged as making exceptional progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure |  |
| Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Find the length of a line segment given its coordinates <br> - Find the point that divides a line into a given ratio <br> - Enlarge a shape using positive, negative and fractional scale factors <br> - Find the locus of a point <br> - Understand the effects of enlargement on perimeter <br> - Describe a rotation by measuring its angle |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |


| Subject: <br> Maths |  |
| :---: | :---: |
|  | Maths Tier 7 |
| KS4 target direction |  |
| Advanced <br> Students <br> must <br> achieve <br> competence <br> in all <br> objectives <br> in good <br> progress <br> too to be <br> judged as <br> making <br> exceptional <br> progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure <br> Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Plot graphs of quadratic and cubic functions <br> - Understand effects of transformations of graphs <br> - Understand and use function notation <br> - Create graphs of simple loci, including circles <br> - Find intersection points of circles and lines <br> - Sketch and recognise reciprocal, exponential and trigonometric functions |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |


| Subject: <br> Maths |  |
| :---: | :---: |
|  | Maths Tier 8-9 |
| KS4 target direction |  |
| Advanced <br> Students <br> must <br> achieve <br> competence <br> in all <br> objectives <br> in good <br> progress <br> too to be <br> judged as <br> making <br> exceptional <br> progress. | - Demonstrate fluency in mathematical concepts taught <br> - Reason mathematically - developing an argument, justification or proof using mathematical language <br> - Apply mathematical concepts to a variety of routine and non-routine problems |
| Secure <br> Students <br> must <br> achieve <br> competence <br> in all <br> statements <br> before <br> being <br> judged <br> secure. | - Understand and use vector notation <br> - Find the sum, difference and scale multiple of vectors <br> - Find the resultant force of two vectors <br> - Understand and use commutative and associative properties of vectors <br> - Solve problems in 2D using vectors <br> - Use vectors to construct geometric arguments |
| Developing | 4 or more objectives met. |
| Beginning | Fewer than 4 objectives met. |

