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**Mathematics Faculty**

**Year 10 Unit 10 Overview**

**Transformations**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Transformations** | I can reflect shapes on a coordinate grid and describe reflections |  |  |  |
| I can rotate shapes on a coordinate grid and describe rotations |  |  |  |
| I can translate shapes on a coordinate grid and describe translations |  |  |  |
| I can enlarge shapes on a coordinate grid and describe enlargements |  |  |  |
| I can transform shapes by a combination of transformations |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | **Drawing reflections of a shape in a mirror line and on a coordinate grid.** Describing reflections on a coordinate grid.  (CM clips 272 & 273) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc.  Assessment is also supported with our use of ILOs which alternate between Basic Skills Checks one week and then a more individual ILO the following set through Century and Corbettmaths.  Finally every unit is assessed half termly as part of our Assessment Calendar in Mathematics. | transformation, reflection, mirror line, axis, equation |
| **2** | **Rotating shapes on a coordinate grid.** Describing rotations.  (CM clip 275) | transformation, rotation, direction, (anti)clockwise, degree, centre, origin |
| **3** | **Translating shapes on a coordinate grid.** Using column vectors to describe translations.  (CM clips 325 & 326) | transformation, translation, direction, vector |
| **4** | **Enlarging shapes by a positive and fractional scale factor.** Identifying the scale factor of enlargement.  (CM clips 104 & 107) | transformation, enlargement, scale factor, positive, fractional |
| **5** | Enlarging shapes using a centre of enlargement. Finding the centre of enlargement. Describing enlargements.  (CM clips 104a, 105 & 106) | transformation, enlargement, scale factor, positive, fractional, centre |
| **6** | Transforming shapes using more than one transformation. Describing combined transformations of shapes on a grid.  (CM clips 104 – 107, 272, 273, 275, 325 & 326) | transformation, reflection, equation, axis, rotation, direction, degree, centre, translation, vector, enlargement, scale factor |