|  | Subject: Mathematics |  |  |
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| Theme / Area Covered | Transformations End Points |  |  |
|  | Age Related Targets - Year 7 | Age Related Targets - Year 8 | Age Related Targets - Year 9 |
| Key Objectives / Learning Pathway Emerging | Use coordinates to describe the position of a point in all four quadrants | Use coordinates to plot the position of a point in any of the four quadrants <br> Draw and translate simple shapes using vectors Carry out a reflection using one of the axes as a mirror line | Construct reflections in horizontal and vertical lines <br> Construct rotations using a given angle, direction and centre of rotation |
| Key Objectives / Learning Pathway Developing | Use coordinates to plot the position of a point in any of the four quadrants <br> Draw and translate simple shapes using vectors Carry out a reflection using one of the axes as a mirror line | Construct reflections in horizontal and vertical lines <br> Construct rotations using a given angle, direction and centre of rotation | Describe reflections in horizontal and vertical lines <br> Construct reflections in diagonal lines <br> Write the equation of a line parallel to the $x$-axis or the $y$-axis <br> Identify and draw the lines $y=x$ and $y=-x$ <br> Describe rotations giving the angle, direction and centre of rotation <br> Enlarge shapes by a given scale factor <br> Solve multi-step problems involving more than one transformation |
| Key Objectives / Learning Pathway Mastering | Construct reflections in horizontal and vertical lines <br> Construct rotations using a given angle, direction and centre of rotation | Describe reflections in horizontal and vertical lines <br> Construct reflections in diagonal lines <br> Write the equation of a line parallel to the $x$-axis or the $y$-axis <br> Identify and draw the lines $y=x$ and $y=-x$ <br> Describe rotations giving the angle, direction and centre of rotation <br> Enlarge shapes by a given scale factor Solve multi-step problems involving more than one transformation | Enlarge shapes by a given scale factor from a centre of enlargement outside the shape |
| Key Objectives / Learning Pathway | Describe reflections in horizontal and vertical lines | Enlarge shapes by a given scale factor from a centre of enlargement outside the shape | N/A |


| Excelling | Construct reflections in diagonal lines <br> Write the equation of a line parallel to the $x$-axis <br> or the $y$-axis <br> Identify and draw the lines $y=x$ and $y=-x$ <br> Describe rotations giving the angle, direction and <br> centre of rotation <br> Enlarge shapes by a given scale factor <br> Solve multi-step problems involving more than <br> one transformation |  |  |
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