Curriculum End Points	Subject: Mathematics		
Theme / Area Covered	Transformations		
	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 Draw and translate simple shapes Carry out a reflection using one of the axes as a mirror line	Solve geometrical problems on coordinate axes Construct and describe reflections in horizontal and vertical lines Describe a translation as a 2D vector Construct rotations using a given angle, direction and centre of rotation Solve problems involving rotations, reflections and translations
Key Objectives / Learning Pathway Developing	Use coordinates to plot the position of a point in any of the four quadrants Draw and translate simple shapes Carry out a reflection using one of the axes as a mirror line	Solve geometrical problems on coordinate axes Construct and describe reflections in horizontal and vertical lines Describe a translation as a 2D vector Construct rotations using a given angle, direction and centre of rotation Solve problems involving rotations, reflections and translations	Construct and describe reflections in diagonal mirror lines (45° from horizontal) Write the equation of a line parallel to the x-axis or the y-axis Identify and draw the lines y = x and y = -x Describe rotations giving the angle, direction and centre of rotation
Key Objectives / Learning Pathway Mastering	Solve geometrical problems on coordinate axes Construct and describe reflections in horizontal and vertical lines Describe a translation as a 2D vector Construct rotations using a given angle, direction and centre of rotation Solve problems involving rotations, reflections and translations	Construct and describe reflections in diagonal mirror lines (45° from horizontal) Write the equation of a line parallel to the x-axis or the y-axis Identify and draw the lines y = x and y = -x Describe rotations giving the angle, direction and centre of rotation	Know that graphs of functions of the form y = mx + c, x ± y = c and ax ± by = c are linear Plot graphs of functions of the form y = mx ± c Plot graphs of functions of the form ax ± by =c Find the gradient of a straight line on a unit grid Find the y-intercept of a straight line Sketch linear graphs
Key Objectives / Learning Pathway Excelling	Construct and describe reflections in diagonal mirror lines (45° from horizontal)	Know that graphs of functions of the form y = mx + c, x ± y = c and ax ± by = c are linear Plot graphs of functions of the form y = mx ± c	Plot and interpret graphs of piece-wise linear functions in real contexts

	Write the equation of a line parallel to the x-axis or the y-axis Identify and draw the lines y = x and y = -x Describe rotations giving the angle, direction and centre of rotation	Plot graphs of functions of the form ax ± by =c Find the gradient of a straight line on a unit grid Find the y-intercept of a straight line Sketch linear graphs	Plot and interpret distance-time graphs (speed-time graphs) including approximate solutions to kinematic problems Distinguish between a linear and quadratic graph Plot graphs of quadratic functions of the form y = x^2 ± c Sketch a simple quadratic graph