Lode Heath School

Mathematics Department

**Year 10 Foundation
Summer Term**

Assignment Title	Unit 6: Transformations	Set	Summer

Summary of Unit 6	Key Words
Be able to carry out and accurately describe all four transformations; rotation, reflection, translation, and enlargement. Carry out multiple transformations and describe the combined transformations.	Reflection, rotation, enlargement, translation, movement, vector, scale factor, combination, single, describe, centre of enlargement, clockwise, anticlockwise.

Prior Knowledge:

1. Reflect the shape in the mirror line given

2. Redraw this shape twice as big
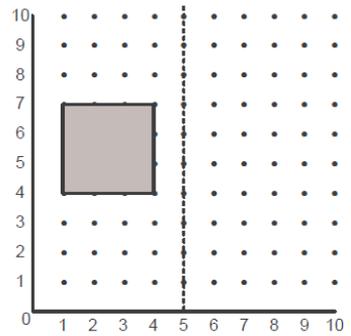
3. Describe what has happened to shape A to get B
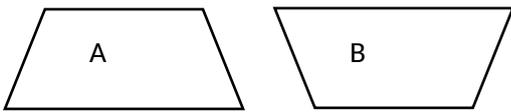
LEARNING JOURNEY

Level	Task Description
3	**6.1 Translation** Translate a shape on a coordinate grid. Use a column vector to describe a translation.
2-3	**6.2 Reflection** Draw a reflection of a shape in a mirror line. Draw reflections on a coordinate grid. Describe reflections on a coordinate grid.
3	**6.3 Rotation** Rotate a shape on a coordinate grid. Describe a rotation.
4	**6.4 Enlargement** Enlarge a shape by a scale factor. Enlarge a shape using a centre of enlargement.
4-5	**6.5 Describing enlargements** Identify the scale factor of an enlargement. Find the centre of enlargement. Describe an enlargement.
4-5	**6.6 Combining transformations** Transform shapes using more than one transformation. Describe combined transformations of shapes on a grid.

Assignment Title	Unit 7: Graphs	Set	Summer

Summary of Unit 7	Key Words
To be able to plot and understand straight line graphs. Find the midpoint of straight line graphs. To understand and interpret real-life graphs.	Midpoint, parallel, perpendicular, gradient, coordinates, interpret, rate of change, y-intercept, acceleration, speed, distance, time.

Prior Knowledge:

1. Write down the equation of the lines
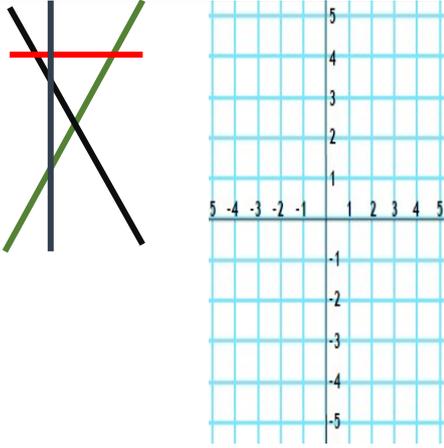
LEARNING JOURNEY

	Task Description
	7.1 Coordinates Find the midpoint of a line segment. Recognise, name and plot straight-line graphs parallel to the axes.
	7.2 Linear graphs Generate and plot coordinates from a rule. Plot straight-line graphs from tables of values. Draw graphs to represent relationships.
	7.3 Gradient Find the gradient of a line. Identify and interpret the gradient from an equation. Understand that parallel lines have the same gradient.
	7.4 y = mx + c Understand what m and c represent in y = mx + c. Find the equations of straight-line graphs. Sketch graphs given the values of m and c.
	7.5 Real-life graphs Draw and interpret graphs from real data.
	7.6 Distance-time graphs Use distance–time graphs to solve problems. Draw distance–time graphs. Interpret rate of change graphs.
	7.7 More real-life graphs Draw and interpret a range of graphs. Understand when predictions are reliable.