Stage 8 – Algebraic Proficiency Visualising

WHAT DO WE ALREADY *know*?

- Use coordinates in all four quadrants.
- Write the equations of lines parallel to the x and y axes and be able to draw them.
- Identify and draw the lines y=x and y=-x.
- Substitute positive and negative numbers into formulae.

- Understand and plot linear graphs.
- Understand and plot quadratic graphs.
- Plot and interpret real life graphs.

- Plot
- Equation
- Function
- Linear
- Coordinate
- Gradient
- y-intercept
- Substitute
- Quadratic
- Kinematic

Algebraic Proficiency Visualising - Targets	Before Topic	After Topic	Teacher Mark
Know that graphs of functions of the form y = mx + c, x ± y = c and ax ± by = c are linear.			
Complete tables of values and plot graphs of linear functions.			
Find the gradient and y-intercept of a straight line on a unit grid.			
Sketch linear graphs.			
Be able to find the coordinates of the mid-point of 2 points.			
Be able to give the equation of a horizontal or vertical line.			
Distinguish between a linear and quadratic graph.			
Plot graphs of quadratics of the form $y = x^2 \pm c$ and sketch simple quadratic graphs.			
Plot and interpret graphs of linear functions in real life contexts including distance-time and speed-time graphs.			