

ALGEBRA 1 (HIGHER) REVISION PLANNER

| Learning objectives (We Are Learning To...) | Grade | Can I do it? |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Pupils can recognise number patterns and find term to term rules and position to term rules for linear sequences | D (Substitute numbers into nth term rule) C (nth term linear sequence) |    |
| 2. Pupils can find the nth term of quadratic sequences by spotting a link between x^2 and their sequence and by more complex mathematical methods | B (Find nth term of a quadratic sequence) |    |
| 3. Pupils generate straight line graphs from an equation in the form $y=mx+c$. Pupils find the gradient of a straight line and can use the gradient and intercept to write the equation of a straight line. Pupils can use their linear graphs to represent inequalities. | D (Straight line graph from equation) C (Find gradient of line), C (Use gradient and intercept to draw graphs $y=mx+c$) |    |
| 4. Plotting quadratic graphs and using them and a linear graph to solve equations | C (Draw Quadratic graphs from a table), B (Solve Quadratic equation from a graph) |    |
| 5. Pupils can generate a table of values for cubic, and reciprocal graphs. They can identify graphs from their shape. | B (Plot cubic graphs from a table), B (Recognise the shape of graphs), A (Draw reciprocal and exponential graphs) |    |
| 6. Draw and interpret travel (Distance/Time) graphs. Use conversion graphs to change currency, weights and other practical graphs | F (Read values from a conversion graph), E (Use conversion graphs to solve problems) E (Read distance/time from travel graph), C (interpret graph including distance/speed) |    |
| 7. Substitute positive and negative numbers into simple formulae in real life and mathematical situations | D (Substitute numbers into expressions) |    |
| 8. Factorise a linear expression and multiply out single brackets. Collect terms together to simplify. | D (factorise simple linear expressions) C (Expand and simplify expressions) |    |
| 9. Multiplying out a pair of brackets using either the grid method or FOIL | C (Expand a pair of linear brackets to get a quadratic) |    |
| 10. Factorise a quadratic starting x^2 | B (factorise a quadratic in form x^2+bx+c) |    |
| 11. Completing the square. | A* (Solve a quadratic equation by completing the square) |    |