Year 9 Level 2 algebra award

Half term 4	Key vocabulary
 Half term 4 Quadratic functions Sketch graphs of quadratics functions, considering orientation and labelling the point of intersection with the y axis, considering what happens to y for large positive and negative values of x [maths watch clip 99] Find approximate solutions of a quadratic equation from the graph of the corresponding function [maths watch clip 160] Revision of: Basic algebraic manipulation Know the meaning of the words variable, expression, equation, formulae and identity [maths watch clip 7] Collect like terms [maths watch clips 33, 34, 35] Expand and simplify linear brackets [maths watch clip 134a] Factorise an algebraic expression into a single bracket [maths watch clip 94] Substitute into, simplify and use algebraic expressions [maths watch clip 95] Change the subject of a formula where the subject only appears once [maths watch clip 136] Write an algebraic expression [maths watch clip 137] 	Quadratic function intersection approximate equation formula identity substitute expand factorise linear term indices powers solve variable Inequality inclusive exclusive linear solve Key ideas
 Indices and standard form Write a number as a power of another number [maths watch clips 82, 131] Use index laws for multiplication, division and raising a power to a power [maths watch clips 82, 131] 	 linear and a quadratic function A quadratic function can have 0, 1 or 2 solutions and how using a graph can only give an approximate solution to the function. Identifying the properties of a quadratic
 Solving linear equations Solve linear equations where the variable appears on only one side [maths watch clip 135a] Solve equations where the variable appears in the numerator of a fraction [maths watch clip 135a] Solve equations which involve brackets [maths watch clip 135a] 	function
 Solve equations where the variable appears on both sides [maths watch clip 135a] <u>Inequalities</u> Show inequalities on a number line, using solid circles to show inclusive values and open circles to show exclusive values [maths watch clip 138] Write down an inequality shown on a number line [maths watch clip 138] Solve a simple linear inequality and represent it on a number line [maths watch clips 138, 139] 	