Year 7 Algebra 1 – Order of Operations, Basic Rules of Algebra, Expanding Brackets, Substitution, Linear Equations

	Knowledge, Skills, Understanding
Higher	Pupils/I: • Solve two-step equations (including the use of brackets) when the solution is a fraction • Solve three-step equations (including the use of brackets) when the solution is a whole number • Solve three-step equations (including the use of brackets) when the solution is a fraction • Check the solution to an equation by substitution • Construct & solve equations that involve multiplying out brackets by a positive number and simplifying first • Construct & solve equations that involve multiplying out brackets by a negative number
Intermediate	Pupils/I: • Use brackets in problem involving the order of operations • Understand and apply the fact that addition and subtraction have equal priority • Understand and apply the fact that multiplication and division have equal priority • Know the meaning of expression, term, formula, equation, function • Simplify an expression by collecting like terms • Know how to multiply a (positive) single term over a bracket (the distributive law) • Substitute positive numbers into expressions and formulae • Given a function, establish outputs from given inputs • Given a function, establish inputs from given outputs • Use a mapping diagram (function machine) to represent a function • Use an expression to represent a function • Use the order of operations correctly in algebraic situations • Recognise a simple formula written in words • Interpret the information given in a written formula • Interpret the information that results from substituting into a formula • Create a one-step formula from given information • Create a two-step formula from given information • Use symbols to represent variables in a formula • Choose the required inverse operation when solving an equation • Identify the correct order of undoing the operations in an equation • Solve one-step equations when the solution is a whole number (fraction) • Solve two-step equations (including the use of brackets) when the solution is a whole number
Foundation	Pupils/I: • Know the order of operations for the four operations • Know basic algebraic notation (the rules of algebra) • Use letters to represent variables • Identify like terms in an expression • Substitute numbers into a one-step formula written in words • Substitute numbers into a two-step formula written in words

NB: direct command = knowledge, 'can'= understanding, 'able to'=skills