

Algebra: Maths : Year 6 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To use simple formulae involving addition and subtraction.	Children will learn what algebra is and why it is used. They will find the value of a variable using simple formulae and will move on to substituting values into formulae. Where necessary, they will use the method of finding the difference, rather than rearranging the formula, to find missing variables.	<ul style="list-style-type: none"> Do they understand that the value of 'x' can change? Can they use their mathematical knowledge to find the value of 'x'? Do they understand that any letters can be used in algebraic formulae? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Instruction Sheet (FSD? activity only) Formula Flip Book Template (FSD? activity only) Sticky notes, scissors (FSD? activity only)
Lesson 2	To express missing number problems algebraically.	Children will express a variety of problems algebraically, exploring the different ways a problem can be written. They will be challenged to read word problems and express them algebraically before solving them.	<ul style="list-style-type: none"> Can they express number problems algebraically? Can they apply their mathematical knowledge to solve questions involving algebra? Do they understand equations can be expressed in different ways? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C/2D Number Cards X/Y/Z (FSD? activity only)
Lesson 3	To use simple formulae involving multiplication.	Children will discover the difference between an equation and a formula. They will be introduced to the formula they need to use to find the area of square and rectangular quadrilaterals. They will find out how multiplication is expressed in a formula and apply this knowledge when finding the area of the quadrilaterals.	<ul style="list-style-type: none"> Can they use a formula in context? Can they check their answer is correct? Do they understand how to rearrange the formula to find a missing value? 	<ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C Challenge Cards A/B (FSD? activity only) Squared paper and rulers (FSD? activity only)
Lesson 4	To generate and describe linear number sequences.	Children will explore simple linear equations. After using the equation to find values of 'y', they will plot the points on a graph and discuss the shape of line they form. They will then use their graph and the equation to work out and check the values of different variables.	<ul style="list-style-type: none"> Do they understand when a formula is asking them to multiply? Can they use the formula in context? Can they use their mathematical knowledge to create formulae? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Graph and Table Sheet A/B/C (FSD? activity only)
Lesson 5	To use simple formulae involving multiplication and division.	Children will be introduced to division in algebra. They will find the area of right-angled triangles using a formula and be challenged to find the area of a square that has had a triangular shape removed from its corner.	<ul style="list-style-type: none"> Do they understand the letters in the formula can be any number? Can they apply their maths skills to answer questions involving algebra? Do they understand the order they need to use the numbers in this equation? 	<ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C Area Cards (FSD? activity only)