

More about Algebra: Maths : Year 6 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To use simple equations.	Children will recap what algebra is and why it is used. They will find the value of a variable using simple equations and will move on to rearranging and balancing equations to prove their answers. They will also be encouraged to solve equations where there are several possible answers.	<ul style="list-style-type: none"> • Can children solve simple equations involving addition or subtraction? • Can children solve simple equations involving multiplication or division? • Do children understand that the letter in an equation is a variable? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Equation Cards (FSD? activity only) • Number Cards X/Y (FSD? activity only)
Lesson 2	To use formulae to find the area of a triangle.	Children will explore different formulae to find the area of a triangle and find out why they work. During the plenary they will be challenged to come up with different ways to find the area of a rhombus. This will encourage them to apply their understanding of shape and algebra and gain a deeper understanding.	<ul style="list-style-type: none"> • Can children use a simple formula to find the area of a triangle? • Do children understand why the formula to find the area of a triangle is divided by two? • Do children understand that the letter in an equation is a variable? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Triangle Cards (FSD? activity only) • Instruction Sheet (FSD? activity only) • Squared paper, rulers, scissors (FSD? activity only)
Lesson 3	To use formulae to find the length of the sides of a triangle.	Children will be introduced to Pythagoras' Theorem. They will find out why the formula works and apply it to find the missing lengths of right-angled triangles. They will then be challenged to find the perimeter of the shapes.	<ul style="list-style-type: none"> • Can children use a formula to find the length of the longest side of a triangle? • Can children use a formula to find the length of the any side of a triangle? • Do children understand that the letter in an equation is a variable? 	<ul style="list-style-type: none"> • Slides • Calculators • Worksheet 3A/3B/3C • Shape Cards A/B (FSD? activity only)
Lesson 4	To use formulae to find the area and the circumference of a circle.	Children will be introduced to pi and the symbol that is used to represent it. They will be encouraged to substitute values into the given formula to find the area or the circumference of a circle. They will become more confident about the relationship between the diameter and radius of a circle and use this knowledge when problem solving.	<ul style="list-style-type: none"> • Can children use a simple formula to find the area of a circle? • Can children use a simple formula to find the circumference of a circle? • Do children understand that the letter in an equation is a variable? 	<ul style="list-style-type: none"> • Slides • Calculators • Worksheet 4A/4B/4C/4D • Race Track Cards (FSD? activity only)
Lesson 5	To use formulae to convert temperatures from Fahrenheit to Celsius.	Children will explore the relationship between Celsius and Fahrenheit by converting temperatures. They will substitute values into a given formula to find out what different USA temperature records are in degrees Celsius. The plenary consolidates their understanding of algebra and how to use it to solve problems.	<ul style="list-style-type: none"> • Can children use a formula that involves multiplication? • Can children use a formula that involves division? • Do children understand that the letter in an equation is a variable? 	<ul style="list-style-type: none"> • Slides • Calculators • Worksheet 5A/5B • Graph paper, rulers • Climate Cards (FSD? activity only) • Follow Me Cards (Plenary only)