Year 10 Higher Scheme of learning 2023- 2024
Term 1

Stretch key learning in italics

Topic	Key learning	Mathswatch Clip No	☹	😐	☺
Rationalising Surds	Rationalise the denominator involving surds	207c			
	Use function notations	194			
	Find the inverse of a linear function	288 - 289			
	Solve proof questions using consecutive integers	193			
Perimeter & Area	Calculate arc lengths, angles and area of sectors	149 & 167			
	Find the radius or diameter, given the area or circumference	117 & 118			
	Form equations involving more complex shapes and solve them				
	Know the impact of estimating answers				
Surface Area & Volume	Find the volume and surface area of a cylinder	114a, 114b, 119			
	Use the formula for the volume of a pyramid and find the surface area	170			
	Solve more complex shapes and solids including segments of circles and frustums.	171 & 172			
	Combinations of 3D forms such as a cone and sphere where the radius needs to be calculated	169 - 172			
October half term					
Assessment 1 on topics taught to date					
Solving quadratics	Solve quadratic equations by factorisation and completing the square	157, 209a, 209b			
	Solve quadratic equations by using the quadratic formula	191			
	Set up and solve quadratic equations				
Simultaneous equations	Use elimination or substitution to solve simultaneous equations	162			
	Solve 2 linear equations including where both need to be multiplied	162			
	Solve a linear and quadratic equation	211			
	Set up and solve simultaneous equations in a real life context	162 & 211			
Direct and indirect proportion	Direct & Inverse proportion	199			
	Calculate an unknown quantity from quantities that vary in D or I proportion	199			
	Set up and use equations to solve problems involving D & I proportion	199			
	Relate algebraic solutions to graphical representation of the equations	199			
	Work out the multiplier for repeated proportional change as a single decimal	164			
Probability	Work out probabilities from a Venn diagram and use set notation	127a & 127b, 185			
	Construct and use a probability tree diagram for independent events	151, 175			
	Use a Venn diagram, two way table & tree diagram to calculate conditional probability	151, 175, 204			
	Compare relative frequencies from samples of different sizes	152			
Christmas holidays					