NAME		TEACHER				
My GCSE Target Grade is		End of Cycle Teacher Assessment Please circle				
		SAE	AE	E	BE	SBE
End of unit assessment type		Your end of topic assessment will be a written exam.				

YEAR 8 CYCLE 6: PROBABILITY, STATISTICS & ALGEBRA

	Knowledge	Prior knowledge	End of topic
7 to 9	**Graphs –** I can plot linear graphs using a table and find the y intercept of a straight line Teach coordinates, midpoint of line segment, recognising lines parallel to axis, y=x, y=-x		
	Gradient – I can find the gradient of a straight line and plot graphs using only the gradient and y intercept		
	y = mx + c - Use y = mx + c, Find the equation of a straight-line graph.		
	Parallel and perpendicular lines - Identify parallel and perpendicular lines.		
	Non-linear graphs - Plot and use non-linear graphs.		
6	**Pie Charts -** I can draw and interpret pie charts		
	Presenting Data – I can draw and interpret two way tables and apply to worded problems		
	Mean (Grouped Data) – I can calculate the mean from a simple & grouped frequency table		
	Stem & Leaf Diagrams – I can draw and interpret stem and leaf diagrams and find the mode, median and range and make comparisons between sets of data		
	Scatter Graphs – I can draw scatter graphs, identify types of correlation and draw a line of best fit to estimate values		
	Comparing data - Compare data using averages and range, including mean calculated from frequency table.		
5	**Language of Probability** – I can use the language of probability and use a probability scale		
	Outcomes – I can find all the possible outcomes of an event and calculate the probability of an event not happening		
	Probability calculations - Learn and use probability notation. Calculate the probability of an event not happening. Find all the possible outcomes of two simple events.		
	Experimental Probability – I can use data from an experiment to estimate probabilities		

LEARNING TOOLS

KEY CONCEPTS	**Gradient**	What does the gradient represent?	
	Mean	How do we find the mean of a set of numbers?	
KEY QUESTIONS	What angle does a set of perpendicular lines form?	What is the reverse process of expanding brackets?	If two variables have no correlation, what does that say about them?
KEY EQUATION	$M : \left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2}\right)$		

YEAR 8 CYCLE 6: STATISTICS & ALGEBRA

	Skills	Prior knowledge	End of topic
7 to 9 Delta	A9 - plot graphs of equations that correspond to straight-line graphs in the coordinate plane; use the form y = mx + c to identify parallel **and perpendicular** lines; find the equation of the line through two given points or through one point with a given gradient		
	A10 - identify and interpret gradients and intercepts of linear functions		
	A12 - recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic function		
	R14 - interpret the gradient of a straight line graph as a rate of change		
6 Theta	S2 - interpret and construct tables, charts and diagrams and pie charts		
	A9 - plot graphs of equations that correspond to straight-line graphs in the coordinate plane; use the form y = mx + c to identify parallel **and perpendicular** lines; find the equation of the line through two given points or through one point with a given gradient		
	R10 - solve problems involving graphical and algebraic representations		
5 Pi	P1 -record, describe and analyse the frequency of outcomes of probability experiments using tables and frequency trees		
	P3 - relate relative expected frequencies to theoretical probability, using appropriate language and the 0-1 probability scale		
	P4 - apply the property that the probabilities of a set of outcomes sum to one		
	A1 - use and interpret algebraic manipulation, including: ● ab in place of a × b ● 3y in place of y + y + y and 3 × y ● a^2 in place of a × a, a^3 in place of a × a × a, a^2b in place of a × a × b ● a/b in place of a ÷ b ● brackets		
	A2 -substitute numerical values into formulae and expressions		

EVERYBODY READS… IN MATHS!

KEY WORDS	Comparison	Gradient	Correlation	Median	Equation

PROBLEM OF THE CYCLE

A person is driving past a clock tower.
The clock seen in the car's side-view mirror is this:

What is the actual time?