

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 5: NUMBER / PROBABILITY / ALGEBRA

Knowledge		Prior knowledge	End of topic
<b>7 to 9</b>	<b>Probability</b> - I can calculate and compare probabilities and decide if a game is fair		
	<b>Experimental Probability</b> – I can carry out a probability experiment, estimate probability using the data collected and work out expected results		
	<b>Probability Diagrams</b> – I can list all the possible outcomes of one or two events, using <i>Sample Space Diagram</i> or a <i>Venn Diagram</i>		
	<b>Tree Diagrams</b> – I can use tree diagrams to find the probabilities of two or more events		
	<b>Bearings</b> – I can measure and use bearings & draw diagrams to scale using bearings		
	<b>Congruent &amp; Similar Shapes</b> – I can identify congruent and similar shapes and use similarity to solve problems in 2D shapes		
<b>6</b>	<b>Real Life Graphs</b> – I can plot a real life graphs and read values to solve problems		
	<b>Straight Line Graphs</b> – I can plot a straight line graph and work out its gradient		
	<b>Equation of a Line</b> – I can plot the graphs of any linear function, find the midpoint of a line segment and write equations in the form <b><math>Y=MX+C</math></b>		
	<b>Fractions &amp; Decimals</b> - I can convert simple fractions to decimals and recognise recurring and terminating decimals		
	<b>Equivalent Proportions</b> – I can use fractions, decimals and percentages when working with equivalence problems (best value)		
	<b>Percentages</b> – I can work out one number as a percentage of another and percentage increase and decrease		
<b>5</b>	<b>Sequences</b> – I can recognise, describe and continue number sequences and shape patterns		
	<b>Nth Term</b> – I can extend sequences using the term-term rule and find the Nth Term		
	<b>Special Sequences</b> – I can recognise geometric, Fibonacci & triangular number sequences		
	<b>Fractions</b> – I can compare, simplify and identify equivalent fractions		
	<b>Fractions of Amounts</b> – I can find a fraction of a quantity and multiply a fraction by a whole number		
	<b>Fraction Arithmetic</b> – I can add & subtract fractions and write a number as a fractions of another number		

### LEARNING TOOLS

<b>KEY QUESTIONS</b>	What is a fraction?	Percent means out of ____	How do we plot a straight line graph?
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<b>KEY EQUATION</b>	<b><math>y=mx+c</math></b> (where <b>m</b> is the gradient and <b>c</b> is the y intercept)
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## YEAR 8 CYCLE 5: NUMBER / PROBABILITY / GRAPHS

	<b>Skills</b>	Prior knowledge	End of topic
<b>7 to 9</b>	P1- record, describe and analyse the frequency of outcomes of probability experiments using tables and frequency trees		
	P6 - enumerate sets and combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams		
	P8 - <u>calculate the probability of independent and dependent combined events, including using tree diagrams and other representations, and know the underlying assumptions</u>		
	G5 - <u>use the basic congruence criteria for triangles (SSS, SAS, ASA, RHS)</u>		
	G7 - identify, describe and construct congruent and similar shapes		
	G15 - measure line segments and angles in geometric figures, including interpreting maps and scale drawings and use of bearings		
<b>6</b>	A9 - plot graphs of equations that correspond to straight-line graphs in the coordinate plane; <u>use the form <math>y = mx + c</math> to identify parallel and perpendicular lines</u>		
	N10 - work interchangeably with terminating decimals and their corresponding fractions		
	N12 - interpret fractions and percentages as operators		
	R9 interpret percentages and percentage changes as a fraction or a decimal; express one quantity as a percentage of another; compare two quantities using percentages; work with percentages greater than 100%; solve problems involving percentage change, including percentage increase/decrease and original value problems, and simple interest including in financial mathematics		
<b>5</b>	A23 -generate terms of a sequence from either a term-to-term or a position-to-term rule		
	A24 -recognise and use sequences of triangular, square and cube numbers, simple arithmetic progressions, <u>Fibonacci type sequences</u>		
	A25 - deduce expressions to calculate the nth term of linear sequence		
	R3 - express one quantity as a fraction of another, where the fraction is less than 1 or greater than 1		
	N11 -identify and work with fractions in ratio problems		

### EVERYBODY READS... IN MATHS!

KEY WORDS	Recurring	Fibonacci	Independent Events	Congruent

<b>PROBLEM OF THE CYCLE</b>	<p style="text-align: center;">How many triangles are there in this figure?</p> <div style="text-align: center;"> </div>
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