



# Year 8 Milestone Criteria

## Mathematics

PURPLE	To use Pythagoras to solve problems involving more than one triangle	
	To use the trigonometric ratios to find the missing angle in a right angled triangle	
	To use the trigonometric ratios to find the missing side in a right angled triangle	
	Use elimination or substitution to solve linear simultaneous equations	
	Be able to form equations that will enable problems to be solved	
	Be able to carry out calculations with numbers given in standard form	
	Write simultaneous equations to represent a situation	
	Solve compound interest calculations	
	Sketch a graph of a linear function, using the gradient and $y$ -intercept;	
	Find the equation of a straight line from a graph in the form $y = mx + c$ ;	
Generate points and plot graphs of quadratic functions		
BLUE	Convert large and small numbers into standard form	
	To use Pythagoras' theorem to find the missing side of a right-angled triangle.	
	To rewrite fractions as ratio	
	Solve linear equations which contain brackets and those with a negative solution;	
	Substitute into a formula, and solve the resulting equation	
	Calculate the percentage increase/decrease.	
	Solve problems involving percentage change, including finding the original value	
	Interpret distance–time graphs, and calculate: the speed of individual sections, total distance and total time;	
	Plot and draw graphs of straight lines of the form $y = mx + c$ using a table of values;	
Identify and interpret gradient from an equation $y = mx + c$ ;		
GREEN	Multiply and divide positive and negative numbers	
	Read values from straight-line graphs for real-life situations	
	Round numbers to a given power of 10;	
	Know the properties of each special type of quadrilateral and use these to name a given shape	
	Identify and mark perpendicular lines on a diagram	
	Be able to write ratios in their simplest form	
	Know that a square root can be positive and negative	
	Use function machines and find missing operations in two-step function machines	
	Solve simple equations;	
Order fractions, decimals and percentages		
YELLOW	Measure angles up to $180^\circ$	
	Identify right angles	
	Be able to use negative numbers in relation to temperature change	
	Be able to add and subtract whole numbers with confidence	
	Find the missing numbers in simple equations	
	To change between decimals and percentages	
To extract information from simple tables		