Key Stage 3
Subject Assessment Criteria: Math Year 9

Level	Assessment Descriptor											
Year 9	Unit 1		Unit 2		Unit 3		Unit 4		Unit 5		Unit 6	
%	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher
9				97-100				97-100				
8				93-96				85-96				
7		91-100		89-92				55-84				
6		64-90		80-88				29-54				
5		11-63		68-79			99-100	14-28				
4	73-100	0-10	91-100	1-67	92-100		67-98	1-13				
3	6-72		84-90		52-91		31-66					
2	0-5		7-83		5-51		7-30					
1			1-6		1-4		1-6					

To achieve each level the above percentage of the learning outcomes needs to have been achieved.

Year 9 Unit 1		Year 9 Unit 2		Year 9 Unit 3	
Topic	**Learning Objective**	**Topic**	**Learning Objective**	**Topic**	**Learning Objective**
Number		**Algebra**		**Algebra**	
Ratio and proportion		**SITiM**		Real life graphs	
Ratio	find a ratio	Expressions 1	interpret numerical expressions using area and word representations	Distance-time	interpret distance time
	simplify a ratio		recognise the order of operations when evaluating numerical expressions		plot a distance time
	1:n and n:1		understand commutative, associative, distributive laws		speed from a distance time
	ratio to a fraction/percentage	Expressions 2	writing in algebraic form	Other graphs	filling vessels
	dividing in a given ratio		substitution		conversion graphs
	limiting factor problems		expanding brackets - single brackets		Line graphs (time series)
Proportion	find proportion as a fraction, decimal or percentage		expanding brackets - double brackets	SITiM	
	grow in proportion by multiplying	Expressions	expressions	Expressions 3	grow equations
	unitary method	Real life formulae	taxi hire, mobile phone bill, exchange rates		solve equations
	direct proportion		from science and technology		equations with unknowns on both sides
	inverse proportion		area, volume, SA formulae	Expressions 4	distinguish between equations, inequations and identities
Measures			sides of a polygon, interior sum		matching situations to equations
Compound measures	Speed (e.g. km per hour, miles per hour, metres per second)	Approximate solutions by Iteration	Decimal Search		making equations from real life situations
	Converting compound measures (e.g. m/sec to km/hour)				
	density				
	pressure				
	population density				

Year 9 Unit 4		Year 9 Unit 5		Year 8 Unit 6	
Topic	**Learning Objective**	**Topic**	**Learning Objective**	**Topic**	**Learning Objective**
Algebra		**Algebra**		**Data**	
Algebra manipulation		Rearranging		Bivariate diagrams	
Expressions	collect like terms	Changing the subject	for y=mx+c	Scatter graphs	plot
	index laws	Plotting graphs	linear using y=mx+c		identify correlations
	Multiplying out single bracket		linear using cover-up		identify relationship between variables
	Factorising with a single bracket	Reading Graphs	gradients		estimate from line of best fit
	Multiplying out double brackets		intercepts	**Algebra**	
	Factorising with double brackets		find linear equation (y=mx+c)	Rearranging	
Linear equations			finding gradient from a pair of coordinates	Changing the subject	Reverse functions
Solving	reverse functions including brackets SITiM style		parallel and perpendicular gradients		Subject on both sides
	expand brackets when the SITiM way gives non-integers	Coordinates	midpoint of line	Real life formulae	taxi hire, mobile phone bill, exchange rates
	unknowns on both sides				from science and technology
	with fractions				area, volume, SA formulae
Plotting graphs	via table of coordinates				sides of a polygon, interior sum
Solving				Involving factorising	single brackets
	expand brackets when the SITiM way gives non-integers				
	unknowns on both sides				
	with fractions				
Plotting graphs	via table of coordinates				