

YEAR 8 MATHEMATICS CURRICULUM MAP 2022-2023

AUTUMN TERM		SPRING TERM		SUMMER TERM	
TERM 1	TERM 2	TERM 1	TERM 2	TERM 1	TERM 2
INTRODUCTION LESSONS <ul style="list-style-type: none"> Calculator skills PERIMETER, AREA, VOLUME <ul style="list-style-type: none"> Find area and perimeter for triangles, squares and composite shapes Find missing sides Pythagoras FRACTIONS, DECIMALS, PERCENTAGES <ul style="list-style-type: none"> Recognise fractions and equivalent fractions Convert between mixed and improper fractions Convert between fraction decimal and percentage 4 operations with fractions Interest NUMERACY 1 <ul style="list-style-type: none"> Estimates Rounding and operations with negatives Prime factors Index notation Bounds 	ALGEBRAIC EQUATIONS & FORMULA <ul style="list-style-type: none"> Simplify expressions Expand and factorise brackets Solve linear equations Substitution Use inequalities Solve inequalities Simultaneous equations NUMERACY 2 <ul style="list-style-type: none"> Multiplication and division Powers of ten and place value Manipulate decimals PROBABILITY <ul style="list-style-type: none"> Use correct vocabulary Place events on probability scale Find experimental probability and estimates Sample space diagrams Bias and relative frequency 	ANGLES & GEOMETRICAL REASONING <ul style="list-style-type: none"> Estimate sizes of angles Use angle facts Use angle sums for polygons Bearings NUMERACY 3 <ul style="list-style-type: none"> Factors multiples and types of numbers Add and subtract fractions Index laws Prime factor decomposition BIDMAS DATA HANDLING SKILLS 1&2 <ul style="list-style-type: none"> Averages, mean, median, mode, range Averages from tables Grouped data Pie charts Bar charts Frequency polygons, scatter graphs and stem and leaf diagrams 	STRAIGHT LINE GRAPHS <ul style="list-style-type: none"> Function machines Find gradient and intercepts Identify parallel lines Midpoints Real life graphs Implicit and explicit linear functions [SET 4] Unit on time and timetables <ul style="list-style-type: none"> Convert between 12 and 24 hr clocks Use timetables to plan journeys RATIO & PROPORTION <ul style="list-style-type: none"> Understand ratio notation Simplify ratio Convert between units Understand scale factors and map/ model scales Understand proportion direct and inverse 	NUMERACY 4 <ul style="list-style-type: none"> Factors and multiples Prime numbers Metric units Convert between units Rounding Upper and lower bounds TRANSFORMATIONS <ul style="list-style-type: none"> Lines of symmetry Reflection, rotation, translation, enlargement Vectors Planes of symmetry 	NUMERACY 5 <ul style="list-style-type: none"> Two way tables Sequences recap Nth term Recurring decimals Prime factor decomposition NUMERACY 6 <ul style="list-style-type: none"> Estimate lengths and weights HCM LCF Two way tables problems Conversion graphs Compound measure PROBLEM SOLVING LESSONS <ul style="list-style-type: none"> Teachers have an opportunity to use problem solving tasks and lessons to allow the year 8s to engage in project work and problem solving lessons Resources recommended to be used Lower ability sets to go back over skills and topics from the year Teachers given autonomy
ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT
	Topic assessment 1 <ul style="list-style-type: none"> Perimeter area and volume Fraction decimal and percentage Numeracy 1 	Topic Assessment 2 <ul style="list-style-type: none"> Algebraic equations and formula Numeracy 2 Angles and geometrical reasoning 	Topic Assessment 3 <ul style="list-style-type: none"> Data handling Straight line graphs Ratio and proportion 	End of year synoptic assessment Week 6 of term	

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