MATHS LONG TERM PLAN 2023-2024

YEAR 1 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Number and Place**	**Number and Place**	**r and Place value(6)**	**Number and Place**	**Addition and**	**Addition and**	**Subtraction**	**Subtraction within**
	Sorting objects/ Counting objects to 10/Counting and writing numbers to 10[forward and backward]	Identify one more and one less/ Comparing groups and comparing numbers of objects. [up to 10]	Comparing numbers/ Ordering objects and numbers.[up to 10]/number line	Parts and wholes/The part-whole model/ Write number sentences/Facts families-addition facts.	number bonds/ Find number bonds number bonds to 10	add together/ add more/ addition problems Find the missing number	How many are left	Fact families /subtraction on a number line/add or subtract 1 or 2/solve word problems-addition and subtraction
Term 1- Block 2	**2D and 3D shapes**	**Addition and Subtractionwithin 20 (12)**		**Addition and Subtraction within 20 (18)**			**Revision(12)**	
	Recognise and name common 2D shapes /Making patterns with shapes.(6)	Count to 20/understand 10/11,12 and 13/ 14,15 and 16/17,18 and 19/Understand 20/One more and one less/The number line to 20/Label number lines/ Estimate on a number line/Compare numbers to 20/Order numbers to 20		Adding by counting on within 20/Add ones using number bonds/Find and make number bonds to 20/doubles/near	Subtract ones using number bonds/Subtraction-count back/find the difference/Related facts-fact	Subtracting tens and ones/Solving word and picture problems – subtraction.	Reinforce all the concepts taught and discuss the worksheets for first summative exam	

YEAR 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 6	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Measurement-**	**MULTIPLICATION AND DIVISION (12)**		**FRACTIONS (12)**		**Measurement/Money(**	**Measurement/Ti**	**Number and Place**
	Non-standard units of measure -length and height/comparing length and height/ solving word problems.	Count in 2s/ count in 10s/count in 5s/ Equal groups		Recognise and find a half of a shape/Recognise a		Recognising coins/Recognising notes./Counting with coins/notes.	Before and after/Days of the week/ Months of the year/Telling time to the hour/to the half hour.	Count to 50/ Numbers to 50/ 20, 30, 40 and 50/Count by making groups of 10s/ Groups of 10s and 1s/ Partition into 10s and 1s/ One more and one .
Term 2- block 2	**Measurement-mass and capacity (6)**		**Position and direction (6)**		**Number and Place value within 100(6)**		**Revision(12)**	
	Heavier and lighter/ Measure mass/ Compare mass/ Full and empty/ Measure capacity/Compare capacity/word problems.		Describing position-left and right/forwards and backwards/Describe position-above and below/ ordinals		Counting to 100 /Exploring number patterns/Partitioning numbers /Comparing numbers /Ordering numbers/Bonds to 100.		Reinforce all the concepts taught and discuss the worksheets including revision topics .	

YEAR 2 LONG TERM PLAN with CURRICULUM STANDARDS

1	**Number – Number and Place value (18)**			**Number – Addition and Subtraction–2 (12)**		**Number – Addition and Subtraction–2 (18)**		

Term 1- Block	Numbers to 20/Count in 10s/Count in 10s and 1s/Recognise 10s and 1s/Build a number from 10s and 1s Use a place value grid/ Partition numbers to 100/Partition flexibility within 100within 100/Write numbers to 100 in expanded form/10s on a number line to 100/10s and 1s on a number line to 100/Estimate numbers on a number line/13)Compare numbers (1)		Fact families/Learn number bonds/Add and subtract two multiplies to 10 /Complements to 100 (tens)/ Add and subtract 1s/Add by making 10 Add using a number line/Add three 1- digit numbers/Add to the next 10/ Add across a		10 more, 10 less/Add and subtract 10s/Add two 2-digit numbers- add 10s and 1s/ Add two 2-digit numbers-add 10s then more 1s/Subtract a 2-digit number from a 2-digit number- not across 10/ Subtract a 2-digit number from a 2-digit number- across 10/How many more? How many fewer?/Subtraction-find the			
Term 1- Block 2	**Geometry – Properties of Shapes (12)**		**Measurements – Money (12)**		**Multiplication and Division(12)**		**Revision(12)**	
	Identify and describe the properties of 2D/ 3D shapes, including the number of sides/ vertices/ faces and lines of symmetry. Making patterns with 2D/ 3D shapes.		Recognise and use signs for pounds (£) and pence (p); combine amounts to make a particular value and solve word problems/ Making one pound/Find the change.		Recognise equal groups/Make and addequal grou		Reinforce all the concepts taught and discuss the worksheets for first summative exam	
YEAR 2	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**Multiplication and Division(12)**		**Measurement - Length and Height (12)**		**Number – Fractions (18)**			**Measurement - Time**
	2 times table/Divide by 2/Double and halve/Odd and even numbers/10 times table/Divide by 10 5 times table/Divide by 5/Bar modeling –grouping Bar modeling -sharing		Choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm)/ Compare and order lengths and heights/Four operations with lengths and heights.		Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. Counting in halves and quarters.			Telling and writing time to the hour, the half hour and to the quarter hour. Telling time to 5 minutes. Finding and
Term 2- Block 2	**Statistics (12)**		**Measurement - Mass,capacity and**		**Measurement -Position and direction (12)**		**Revision(12)**	
	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.		Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity(litres/ml). Compare and order mass, volume/capacity and record the results using >, < and =.		Language of position/Describing movement/ Describe turns/Describe movement and turns/Make patterns by turning shapes		Reinforce all the concepts taught and discuss the worksheets including revision topics for final exam.	

YEAR 3 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 3	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 1- Block 1	**Number – Number and Place value (12)**		**Number – Addition and Subtraction–1 (12)**		**Number – Addition and Subtraction–2 (12)**		**Number – Multiplication and Division–1 (12)**	
	Recognise the placevalue of a 2digit number (10s , 1s) and partition 2 digit number.Use the number line to 100 (find half way between two numbers).Count in 100s.Identify , represent and partition 3 digit numbers to 1000 flexibily using different		.Use the number bonds.Add and subtract 1s,10s, 100s.Recognise the pattern.Add and subtract1s across 10, 10s across100.Add and subtract numbers by connecting with 10 and 100.		Add and subtract two numbers. Add and subtract two numbers across 10 and 100.Add a 3digit number and a 2- digit number.Subtract a 2-digit number from a 3-digit number.Compliments to 100.Estimate and use inverse operations to check the		Multiples of 2, 5, 10.Share and group. Multiply and divide by 3.The 3 times table. Multiply and divide by 4. The 4 times table.Multiply and divide by 8.The 8 times table.Understand divisibility1 &2. Problem solving 1 &2.	
Term 1- Block 2	**Number – Multiplication and Division–2 (12)**		**Measurements – Length and Perimeter (12)**		**Number- Fractions (12)**		**Revision(12)**	
	Multiples of 10 and their related calculations.Reasoning about multiplication.Multiply 2 digit number by 1 digit number - no exchange , by exchange.Expanded written method.Link		Measure in metre, centimetre and millimetre.Equivalent lengths (m and cm), (mm and cm).Compare, add and subtract lengths.Measure perimeter. Calculate perimeter		. Understand the denominator of unit fractions.Compare and order unit fractions. Understand the numerator of non unit fractions.Understand the whole. Compare		Reinforce all the concepts taught and discuss the worksheets for first summative exam	

T	multiplication and division.Divide 2- digit number by 1- digit number, no			and order non unit fractions.Divisions on a number line.Count in fractions on a number				

YEAR 3	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Measurement - Mass & Capacity (18)**			**Number – Fractions (18)**			**Geometry - Angles and Properties of**	
	Use scales.Measure mass in kilograms and grams.Equivalent masses.Compare,add and subtract masses.Measure capacity and volume in litres and millilitres.Equivalent capacities and volumes in litres and millilitres.Compare, add and subtract capacity and volume.			Add and subtract fractions. Partition the whole.Unit and non unit fractions of a set of objects.Reasons with fractions of an amount.			Turns and angles.Right angles in shapes.Compare angles. Measure and draw accurately.Horizontal and vertical lines.Parallel and perpendicular lines.Recognise and describe 2D &3Dshapes. Make 3D shapes.	
Term 2- Block 2	**Measurement -**	**Measurement - Time.(!8)**			**Statistics (12)**		**Revision(12)**	
	Pounds and Pence.Convert pounds and pence.Add and subtract money.Find change.	Roman numerals. Tell the time to the minute/ 5 minutes.Read time on a digital clock.Use am & pm.Years , months and days.Days and hours.Hours and minutes-start and end times, durations.Compare durations.Minutes and seconds Solve problems with time.			Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables.		Reinforce all the concepts taught and discuss the worksheets including revision topics for final exam.	

YEAR 4 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Number & Place Value (24)**				**Addition & Subtraction (12)**		**Measurement - Area (6)**	**Multiplication & Division (6)**
	* Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s and 1s) and partition 4-digit numbers. * Use the number line to 1,000. * Identify the multiples of 1000, and skip count in 1,000s.	* Identify, represent and estimate 4 digit numbers using different representations. * Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s and 1s) and partition 4-digit numbers. * Find 1, 10, 100, 1000 more or less than a given number.	* Use the number line to 10,000 to represent 4-digit numbers. * Identify numbers in between two given numbers. * Find the previous or next multiple of a number. * Estimate numbers on a number line to 10,000. * Count backwards through 0 to include negative numbers.	* Order and compare numbers 10,000. * Round numbers to the nearest 1000, 100 or 10. * Write Roman numerals to 100 and know that over time, the numeral system changed to include the concept of zero and place value.	* Add and subtract in 1s,10s, 100s and 1000s. * Add and subtract two 4-digit numbers using the formal written methods of columnar addition and subtraction with and without exchanges.	* Estimate and use inverse operations to check answers to a calculation. * Solve addition and subtraction problems involving one/ two/ multi-steps and comparison in contexts, deciding which operations and methods to use and why.	* Find the area of rectilinear shapes by counting squares.	* Recall multiplication and division facts for multiplication tables up to 12×12. * Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1 and multiplying three numbers.
k 2	**Multiplication & Division (12)**		**Measurement - Length & Perimeter (12)**		**Fractions (12)**		**Revision (12)**	
	* Recognise and use factor pairs and	* Multiply two-digit and three-digit	* Convert between different units of	* Calculate the perimeter of a	* Count beyond 1 in fractions.	* Convert mixed numbers to improper	Reinforce all the concepts taught for the first summative exam.	

Term 1- Block	commutativity in mental calculations. * Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	numbers by a one-digit number using formal written layout. * Solve problems involving multiplying and dividing.	measure (cm-m / m-km) Work out missing lengths. * Calculate the perimeter of a rectangle, rectilinear shapes and polygons.	rectangle, rectilinear shapes and polygons. * Find the missing lengths in rectilinear shapes.	* Partition mixed numbers and use number lines to represent mixed numbers. * Compare and order mixed numbers.	fractions and improper fractions to mixed numbers. * Recognise and show, using diagrams, families of common equivalent fractions.		
YEAR 4	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**Fractions (12)**		**Decimals (24)**				**Measurement - Money (12)**	
	* Add and subtract fractions with the same denominator. * Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	* Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	* Recognise and write fraction and decimal equivalents of any number of tenths and represent it in place value grids and on number lines. * Find the effect of dividing a one- or two-digit number by 10, identifying the value of the digits in the answer as tenths and hundredths.	* Recognise and write fraction and decimal equivalents of any number of hundredths and represent it in place value grids and on number lines. * Find the effect of dividing a one- or two-digit number by 100, identifying the value of the digits in the answer as tenths and hundredths.	* Recognise making wholes using decimal numbers. * Partition decimal numbers identifying the value of the digits in the as tenths and hundredths.	* Compare and order decimals with the same number of decimal places up to 2 decimal places. * Round decimals with 1 or 2 decimal place to the nearest whole number. * Recognise and write decimal equivalents to ¼; ½; ¾.	* Convert between pounds and pence and write money values using decimal numbers. * Estimate, compare and calculate using money in pounds and pence.	* Estimate, compare and calculate using money in pounds and pence. * Solve simple measure and money problems involving decimals to 2 decimal places.
Term 2- block 2	**Measurement - Time (12)**		**Geometry - Angles & 2D Shapes (12)**		**Statistics (6)**	**Geometry - Position & Direction (6)**	**Revision (12)**	
	* Find relations in years, months, weeks, days, hours, minutes and seconds. * Read, write and convert time between analogue and digital 12-hour clocks.	* Read, write and convert time between analogue and digital 12 and 24-hour clocks. * Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.	* State the types of angles and compare and order angles. * Identify, compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	* Identify, ompare and classify polygons based on their properties. * Identify lines of symmetry in 2-D shapes. *Complete a simple symmetric figure with respect to a specific line of symmetry.	* Interpret and present data using appropriate graphical methods. * Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and time/line graphs.	* Describe positions using coordinates in the first quadrant. * Plot specified points and draw to complete a given polygon. * Describe movements between positions as translations of a given unit to the left/ right and up/ down.	Reinforce all the concepts taught for the final exam	

YEAR 5 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 5	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Block 1	**Number:Place value (5)**	**Number: Place value (5)**	**Addition and Subtraction (5)**	**Addition and Subtraction (5)**	**Statistics:Graphs and Tables (5)**	**Statistics:Graphs and Tables (5)**	**Multiplication and Division (5)**	**Multiplication and Division (5)**
	•Read, write, order and compare numbers	•Interpret negative numbers in context,	•Add and subtract whole numbers with	•Solve addition and subtraction multi-step	•Solve comparison, sum and difference	•Complete, read and interpret information in	•Identify multiples and factors,	•Multiply and divide whole numbers and

Term 1-	to at least 1,000, 000 and determine the value of each digit •Count forwards or backwards in steps of	count forwards and backwards with positive and negative whole numbers, including through 0	more than 4 digits,including using formal written methods (columnar addition and	problems in contexts, deciding which operations and methods to use and why.	problems using information presented in a line graph	tables, including timetables.	including finding all factor pairs of a number and common factors of two numbers.	those involving decimals by 10, 100 and 1,000 •Recognise and use square numbers and
Term 1- Block 2	**Multiplication and Division (5)**	**Multiplication and Division (5)**	**Measure: Perimeter and Area (5)**	**Measure: Perimeter and Area (5)**	**Fractions (5)**	**Fractions (5)**	**Revision(12)**	
	•Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers	•Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context •Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes	•Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres •Calculate and compare the area of rectangles (including squares) including using standard units, square centimetres (cm2) and square metres (m2) and calculate the area of rectilinear shapes	•Calculate and compare the area of rectangles (including squares) including using standard units, square centimetres (cm^2) and square metres (m^2) and calculate the area of rectilinear shapes.	•Compare and order fractions whose denominators are all multiples of the same number •Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.	•Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.	Reinforce all the concepts taught and discuss the worksheets for first summative exam	
YEAR 5	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**Fractions (5)**	**Fractions (5)**	**Fractions (5)**	**Decimals and Percentages (5)**	**Decimals (5)**	**Decimals (5)**	**Decimals (5)**	**Geometry: Properties of shape (5)**
	•Add and subtract fractions with the same denominator and denominators that are multiples of the same number	•Add and subtract mixed fractions •Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams •Find fractions of an amount	•Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams •Find fractions of an amount.	•Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction •Solve problems which require	•Read and write decimal numbers as fractions •Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	•Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place •Read, write, order and compare numbers with up to 3 decimal places	•.Solve problems involving number up to 3 decimal places.	•Know angles are measured in degrees: Estimate and compare acute, obtuse and reflex angles •Draw given angles, and measure them in degrees (º)
	Geometry: Properties of shape (5)	**Geometry: Properties of shape (5)**	**Geometry: Position and Direction (5)**	**Geometry: Position and Direction (5)**	**Measure: Converting units (5)**	**Measure: Volume and capacity (5)**	**Revision(12)**	
	•Identify:	•Identify 3-D shapes,	•Plot and find	•Identify, describe and	•Convert between	• Estimate volume and		

Term 2- Block 2	□Angles at a point and 1 whole turn (total 360º) □Angles at a point on a straight line and half a turn (total 180º) □Other multiples of 90º	including cubes and other cuboids, from 2-D representations •Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	coordinates of a reflected point on a grid.	represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	different units of metric measure •Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	capacity •Calculate volume		

YEAR 6 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 6	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Number and Place value (5)**	**Four Operations: Addition, Subtraction, Multiplication &**	**Four Operations: Addition, Subtraction, Multiplication &**	**Four Operations: Addition, Subtraction, Multiplication &**	**Fractions (5)**	**Fractions (5)**	**Fractions (5)**	**Decimals (5)**
	•Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit •Round any whole number to a required degree of accuracy •Use negative numbers in context, and calculate intervals across 0	•Perform mental calculations, including with mixed operations and large numbers. •Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	•Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication •Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the	•Use their knowledge of the order of operations to carry out calculations involving the 4 operations •Solve problems involving addition, subtraction, multiplication and division	•Use common factors to simplify fractions; use common multiples to express fractions in the same denomination •Compare and order fractions, including fractions >1	•Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	•Multiply simple pairs of proper fractions, writing the answer in its simplest form •Divide proper fractions by whole numbers	•Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction. •Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers are up to three decimal places.
Term 1- Block 2	**Decimal (5)**	**Percentage (5)**	**Percentage (5)**	**Geometry: Properties of shape(5)**	**Geometry: Properties of shape(5)**	**Geometry: Properties of shape(5)**	**Revision(12)**	
	•Multiply one-digit numbers with up to 2 decimal places by whole numbers.	•Recall and use equivalences between simple fractions, decimals and percentages,	•Find percentages of an amount.	•Compare and classify geometric shapes based on their properties and sizes and find unknown	•Illustrate and name parts of circles, including radius, diameter and circumference and	•Draw 2-D shapes using given dimensions and angles. •Recognise, describe and build simple 3-D	Reinforce all the concepts taught and discuss the worksheets for first summative exam	

Term 1- Bloc		including in different contexts.		angles in any triangles, quadrilaterals, and regular polygons. •Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	know that the diameter is twice the radius.	shapes, including making nets.		
YEAR 6	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Block 1	**Algebra (5)**	**Algebra (5)**	**Algebra (5)**	**Algebra (5)**	**Meaurement: Converting units (5)**	**Measurements: Area, Perimeter & Volume(5)**	**Measurements: Area, Perimeter & Volume(5)**	**Measurements: Area, Perimeter & Volume(5)**
	•Express missing number problems algebraically.	•Use simple formulae. "	• Generate and describe linear number sequences.	•Find pairs of numbers that satisfy an equation with two unknowns.	•Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 2 decimal places where appropriate. • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places. •Convert between	•Recognise that shapes with the same areas can have different perimeters and vice versa.	•Calculate the area of parallelograms and triangles.	•Recognise when it is possible to use formulae for area and volume of shapes •Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units
Term 2- Block 2	**Ratio and Proportion (5)**	**Ratio and Proportion (5)**	**Ratio and Proportion (5)**	**Statistics (5)**	**Statistics (5)**	**Geometry: Position and Direction (5)**	**Revision(12)**	
	•Solve problems involving the relative sizes of two quantities where missing values can be found by using	•Solve problems involving unequal sharing and grouping using knowledge of fractions and	•Solve problems involving similar shapes where the scale factor is known or can be found.	•Interpret and construct pie charts and line graphs and use these to solve problems	•Calculate and interpret the mean as an average.	•Describe positions on the full coordinate grid (all 4 quadrants) •Draw and translate simple shapes on the	Reinforce all the concepts taught and discuss the worksheets for final exam	

Term 2- block	integer multiplication and division facts.	multiples.				coordinate plane, and reflect them in the axes.		

YEAR 7 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 7	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Unit2-Number Skills(5)**	**Unit2-Number Skills(5)**	**Unit3-Equations, functions and formulae(5)**	**Unit3-Equations, functions and formulae(5)**	**Unit3-Equations, functions and formulae(5)**	**Unit7-Equations(5)**	**Unit4-Fractions(5)**	**Unit4-Fractions(5)**
	Factors,primes and multiples.HCF & LCM using venn diagram. Using negative numbers. (2.1 and 2.2)	Roman Numerals,Squares and square roots.More powers and roots.(2.4 and 2.5)	Simplifying algebric expressions. Writing algebric expressiosn. (3.1 and 3.2)	Writing formulae. STEM:Using formulae. Brackets and powers. (3.3, 3.4 and 3.5)	Factorising expressions. Solving one-step equations. (3.6 and 7.1)	Solving two-step equations. More complex equations. (7.2 and 7.3)	Working with fractions, Adding & subtracting fractions. Fractions, decimals and percentages. (4.1, 4.2 and 4.3)	Multiplication and division of fraction, Working with mixed numbers.(4.4 and 4.5)
Term 1- Block 2	**Unit5-Angles and shapes(5)**	**Unit5-Angles and shapes(5)**	**Unit1- Analysing and Displaying data(5)**	**Unit1- Analysing and Displaying data(5)**	**Unit9-Perimeter,area and volume(5)**	**Unit9-Perimeter,area and volume(5)**	**Revision**	
	Angles and parallel lines,Use the properties of triangles to work out unknown angles(5.1 and 5.2)	Quadrilaterals, Interior and exterior angles of a Polygons, Geometrical proofs(5.3 and 5.4)	Two way tables,Compare the sets of data using averages and range and Grouped data.(1.1,1.2 and 1.3)	Interpret and draw line graphs and pie charts. (1.4 and 1.5)	Area of triangles, parallelograms & trapezium, Area and perimeter of compound shapes(9.2 and 9.3) Revision:Properties of 3D solids. (9.1)	Surface area & Volume of cube, cuboid and triangular prism.(9,4 and 9.5)	Reinforce all the concepts taught and discuss the worksheets for first summative exam	
YEAR 7	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8

Term 2- Block 1	**Unit3-3D solids(5) (delta2)**	**Unit6-Decimals(5)**	**Unit6-Decimals(5)**	**Unit8-Multiplicative Reasoning(5)**	**Unit8-Multiplicative Reasoning(5)**	**Unit10-Sequences and graphs(5)**	**Unit10-Sequences and graphs(5)**	**Unit10-Sequences and graphs(5)**
	Area and circumference of a circle,Area and perimeter of quarter circle and semi circle. (3.4 and 3.5)	Ordering decimals, Rounding decimals, Addition and subtraction of decimals. (6.1, 6.2 and 6.3)	Multiplying decimals, Division of decimals and recurring decimals. Fractions, decimals and percentage. (6.4, 6.5 and 6.6)	Writing ratios, Share a quantity in 2 or more parts in a given ratio, Proportion. (8.2, 8.3 and 8.4)	Direct and inverse proportion/Using the unitary method. (8.5 and 8.6)	Work out the term to term rule in the sequences, The nth term. (10.1 and 10.2)Pattern sequences. Coordinates and line segments. (10.3 and 10.4)	Pattern sequences. Coordinates and line segments. (10.3 and 10.4)	Coordinates and line segments, Straight line graphs parallel to the x-axis. (10.4 and 10.5)
Term 2- block 2	**Unit8-Probability(5) (delta2)**	**Unit8-Probability(5) (delta2)**	**Unit7-Constructions(5) (delta2)**	**Unit7-Constructions(5) (delta2)**	**Unit 5-Transformations(5) (delta2)**	**Unit 5-Transformations(5) (delta2)**	**Revision**	
	Comparing probabilities, Mutually exclusive events, Estimating probability. (8.1 and 8.2)	Experimental probability, Probability diagrams. (8.4 and 8.5)	Accurate drawings, Construct triangles using a ruler and compasses(SAS, SSS, ASA) (7.1 and 7.2)	Construct perpendicular bisector and Angle bisector using a ruler and compasses. (7.3 and 7.4)	Describe and carry out Translations/ Describe and carry out Reflections. (5.1)	Enlarge a shape and desribe an enlargement.Enlargements a shape using a positive, negative scale factor and fractional scale factor (5.3 and 5.4).	Reinforce all the concepts taught and discuss the worksheets including revision topics	

YEAR 8 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 8	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**UNIT 1: Factors and powers (Delta2)-Revision(5)**	**UNIT 1: Factors and powers (Delta2)-Revision(5)**	**UNIT 1: Factors and powers (Delta2)UNIT 1:Powers and Roots(Delta 3)(5)**	**UNIT 2 :Working with powers(Delta 2) Unit2: Quadratics(2.2) (Delta 3)**	**UNIT 3:(3.2)Using index law (Delta 3)UNIT 2 :Working with powers(Delta 2)(5)**	**UNIT 2 :Working with powers(Delta 2)(5)**	**UNIT 3: Inequalities,equations and formulae(Delta 3)(5)**	**UNIT 6:Fractions,Percentages and Decimals (Delta 2)(5)**
	Prime factor decomposition of a number.To find HCFand LCM using venn diagrams.Solving word problem in HCFand LCM and with powers.	To work out laws of indices for positive powers.To use laws of indices from multiplying and dividing.To use and understand powers of 10.	To calculate with powers. Round to a number of significant figures.To write the numbers using Standard form.	Simplifying algebraic expressions involving powers and brackets.To multiply pairs of brackets(Expanding brackets).Square a linear expression.Using quadratic identities.	To use the index laws in algebraic calculations and expressions. Using Index Laws with zero and negative powers.	Factorise an algebraic expressions.To substitute integers into expressions with powers.To construct and solve equations.	To construct and solve complex equations. Changing the subject of a formulae. Fractions add& subract	Fractions multiply & divide and word problems. Change a recurring decimal into a fraction.To calculate percentages.
ck 2	**UNIT**	**UNIT**	**UNIT**	**UNIT**	**Unit 3:3D**	**Unit 3:3D Solids(Delta**	**Revision(12)**	
	To work out an original quantity	To calculate the effect of repeated	Constructing perpendicular	Draw locus.Use loci to solve problems.	Volume of prisms,Circumferen	Surface area of Cylinders,Volume of	Reinforce all the concepts taught and discuss the worksheets for first	

Term 1- Bloc	before percentage increase and decrease.To calculate percentage change.	percentage changes. Accurate drawings,Construct triangles.	bisectors.Constructing angle bisectors.	Surface area of prisms	ce and Area of a circle.	Cylinders and Pythagoras Theorem.	summative exam including revision topics from year 7 -Unit 8 -Multiplicative reasoning (8.2-8.6) and Unit 10 - Sequences and graphs(10.1-10.3) -Delta 1	
YEAR 8	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**UNIT 5:Arcs and Sectors of circles(Delta 3)(5)**	**Unit 10:Graphs(Delta 2)(5)**	**Unit 10:Graphs(Delta 2)(5)**	**UNIT 4:Real life graphs (5)**	**UNIT 5:Transformations (5)**	**UNIT 5:Transformations(5)**	**Unit 9:Scale drawing and Measures(5)**	**Unit 9:Scale drawing and Measures(5)**
	Work out the length of an arc.Work out the area of a sector.Solve problem involving arc and sector.	Plotting linear graphs, The Gradient	y=mx+c, Parallel and perpendicular lines	Draw and interpret Distance-time graphs, Interpret real life graphs.	To describe and carry out reflection,translation and rotation with origin and other points.	To enlarge a shape,To describe an enlargement.To enlarge a shape using negative and fractional scale factor.	Maps and scales,Bearings	Scales and ratios,Congruent and similar shapes.
Term 2- block 2	**Unit 9:Scale drawing and Measures(5)**	**Simultaneous Equations(Delta 3)(5)**	**UNIT 8:Probability (Delta 2)(5)**	**UNIT 4: Collecting and Analysis data(Delta 3)(5)**	**UNIT 4: Collecting and Analysis data(Delta 3)(5)**	**Revision of year 7 Topics - Delta 1(5)**	**Revision(12)**	
	To use similiarity to solve problems in 2D shapes	Solve a pair of Simultaneous Equation	Revision + Estimating probability, probability diagrams	To draw stem and leaf diagrams.To construct frequency polygons.	To estimate the mean,median mode and range from a grouped frequency table.	Unit 1 -Analyzing and displaying data(1.2 - 1.5) ,Unit 5-Angles and shapes (5.1-5.4)	Reinforce all the concepts taught and discuss the worksheets for final exam.	

YEAR 9 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 9	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**UNIT 1 Number (6)**	**UNIT 1 Number Contd(6)**	**UNIT 2 Algebra (6)**	**UNIT 2 Algebra Contd (6)**	**UNIT 2 Algebra Contd (5) + Assessment 1**	**UNIT 3 Interpreting and representing data(6)**	**UNIT 3 Interpreting and representing data**	**UNIT 4 Fractions , Ratio and Percentages(6)**
	Revision (Place value and estimating/ HCF and LCM/Calculating with powers including algebraic indices)	Zero, negative and fractional indices including algebraic indices.To write a number in standard form. To calculate with numbers in standard form.	Understand the difference between rational and irrational numbers.Simplify a surd. Rationalise a denominator.(Revision :To expand brackets.To factorise algebraic expressions.	To solve equations involving brackets and numerical fractions. To use equations to solve problems.To substitute numbers into formulae. To rearrange formulae. (Revision :To solve	To solve problems using geometricsequences. To work out terms in Fibonacci like sequences.To expand the product of two brackets.To use the difference of	To construct and use back - to - back stem and leaf diagrams. To construct and use frequency polygons. To plot and interpret time series graphs. To use trends to predict what might happen in the	Moving averages. (Revision : Unit 3.5 Averages and Range)To find the modal class and the group containing the median. To plot and interpret	To compare ratios.To find quantities using ratios. To convert between currencies and measures.To use direct proportion. To convert between currencies. (Revision :Percentages and
	UNIT 5 Angles and Trigonometry (6)	**UNIT 5 Angles and Trigonometry**	**UNIT 6 Graphs (6)**	**UNIT 6 Graphs (6)**	**UNIT 6 Graphs (6)**	**UNIT 6 Graphs (6)**	**Revision (12)**	

Term 1- Block 2	(Revision : Angle properties of triangles and quadrilaterals/Interior and Exterior angles of Polygons/Pythagoras theorem) To solve problems using Pythagoras'theorem.	To use trigonometric ratios to find lengths and angle in a right angled triangle. To use trigonometric ratios to solve problems. To find angles of elevation and angles of depression. To know the exact values of the sine, cosine and	To find the gradient and y - intercept from a linear equation. To rearrange an equation into the form y = mx + c.Plot graphs with the equations ax+ by =c. To find the equation of a line given its gradient and one point on the line. Find the gradient of a line	(Revision: Distance time graphs) To understand velocity time graphs. To find acceleration and distance from velocity time graphs. To draw and interpret real- life linear graphs. To recognise direct proportion. To find the coordinates qof the	To find the gradient and length of a line segment. To find the equations of lines parallel or perpendicular to a given line. To draw quadratic graphs. To solve quadratic equations using graphs. To identify the line of symmetry	To solve cubic equations using graphs. To draw graphs of reciprocal functions. To recognise a graph from its shape. To interpret linear and non- linear real - life graphs. Draw the graph of a circle.	Reinforce all the concepts taught and discuss the worksheets for first summative exam.	
YEAR 9	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**UNIT 7 Area and Volume (6)**	**UNIT 7 Area and Volume (6)**	**UNIT 7 Area and volume (3) + Assessment 1 + UNIT 8**	**UNIT 8 Transformations and Constructions(6)**	**UNIT 8 Transformations and Constructions(6) +**	**UNIT 9 Equations and Inequalities(5) + Assessment 2**	**UNIT 9 Equations and Inequalities(6)**	**UNIT 10 Probability (6)**
	(Revision: Perimeter and Area/Prisms) To convert between metric units of area. To calculate the maximum and minimum possible values of a measurement.	(Revision : Circles/ Cylinders) To calculate arc lengths, angles and areas of sectors of circles. To calculate volume and surface area of sphere,	To calculate volume and surface area of a pyramids and cones. To draw plans and elevations of 3D solids.	(Revision : Reflection /Rotation/Translations /Enlargement) To draw and use scales on maps and scaledrawings. To solve problems involving bearings	To use loci to solve problems. To find the roots of quadratic functions. To rearrange and solve simple quadratic equations.	To solve more complex quadratic equations. To use the quadratic formula to solve a quadratic equation.(Revision : Simple Simultaneous equations)	To solve linear simultaneous equations where both equations are multiplied. To interpret real life situations involving two unknowns and solve them. To solve inequalities	To find probabilities of mutually exclusive events. Experimental Probability.Independent events. To calculate probabilities of repeated events. To draw and use probability tree diagrams.
Term 2- block 2	**UNIT 11 Multiplicative Reasoning (6)**	**UNIT 11 Multiplicative Reasoning (6)**	**UNIT 12 Similarity and Congruence (6)**	**UNIT 12 Similarity and Congruence (6)**	**UNIT 12 Similarity and Congruence (6)**	**UNIT 15 Equations and Graphs (6)**	**Revision(12)**	
	To find an amount after repeated percentage changes. To solve growth and decay problems. To calculate rates. To convert between netric speed measures. To use a formula to calculate speed and acceleration	To solve problems involving compound measures. To use relationships involving ratio. To use direct and inverse proportion.	To show that two triangles are congruent. To know the conditions of congruence. To prove shapes are congruent. To solve problems involving congruence.	To use the ratio of corresponding sides to work out scale factors. To find missing lengths on similar shapes. To use similar triangles to work out lengths in real life.	To use the link between linear scale factor and area scale factor to solve problems.	To solve simultaneous equations graphically. To represent inequalities on graphs. Tp interpret graphs of inequalities.	Reinforce all the concepts taught and discuss the revision worksheet for the final exam.	

YEAR 10 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 10	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8

Term 1- Block 1	**Unit 2.6 Algebra (4))Unit 9 Equations and inequalities(2))**	**Unit 9 Equations and inequalities(6)**	**Unit 15 Equations and Graphs(4) +Assessment 1**	**Unit 15 Equations and Graphs(6)**	**Unit 15 Equations and Graphs(4) + Assessment 2**	**Unit 12 Similarity and congruence(6)**	**Unit 12 Similarity and congruence(6)**	**Unit 12 Similarity and congruence(6)**
	.Find the nth term of a quadratic sequence (2.6).Solve quadratic equations by factorisation, use the quadratic formula (9.1,9.2)	Solve quadratic equations using completing the square, word problems on solving.(9.3)	Recognise and draw quadratic functions. Find approximate solutions to quadratic equations graphically.(6.6,15.3-15.4)	Recognise and draw quadratic functions. Find approximate solutions to quadratic equations graphically.(6.6,15.3-15.4	To draw cubic and reciprocal graphs.Interpret linear and non linear real life graphs.(6.7& 6.8)	To show that two triangles are congruent.To know the conditions of congruence.To prove shapes are congruent.To solve problems involving congruence(12.1-12.2)	To use the ratio of corressponding sides to work out scale factors.To find missing lengths on similar shapes (12.3-12.4 till Q9	Use the link between linear scale factor and area scale factor to solve problems. Use the link between scale factors for length, area and volume to solve problems
Term 1- Block 2	**Equations and inequalities (6)**	**Equations and inequalities (6)**	**Equations and inequalities (6)**	**Unit 16 Circle theorems(6)**	**Unit 16 Circle theorems (Continue) (6)**	**Unit 16 Circle theorems (Continue) (6)**	**Revision(12)**	
	Solve linear and quadratic simultaneous equations algebraically (9.6)	To solve linear and quadratic simultaneous equations graphically.(15.1)	To Solving linear inequalities (9.7). Solving inequalities graphically(15.2	Understand about tangents at a point and from a point. Prove and use facts about angles subtended at the centre and the circumference, angle in a semicircle and angles subtended at the circumference of a circle(16.1,16.2	Understand, prove and use facts about cyclic quadrilaterals and alternate segment theorem.Solve angle problems using circle theorems. equation of the tangent to a circle at a given point.(16.3,16.4)	Understand, prove and use facts about cyclic quadrilaterals and alternate segment theorem.Applying circle theorems.(16.5)	Reinforce all the concepts taught and discuss the worksheets for first summative exam	
YEAR 10	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Block 1	**Vectors and geometric proof (6)**	**Vectors and geometric proof (6)**	**Vectors and geometric proof (6)**	**Further statistics (4) Assessment 1**	**Further statistics (6)**	**Further statistics (4)+ Assessment 2**	**Probability(6)**	**Probability(6) (contd)**
	Understand and use vector notation. Calculate using vectors and represent the solutions	Solve problems using vectors. Use the resultant of two vectors to solve vector	Prove lines are parallel. Prove points are collinear Solve	Understand simple random sample and stratifi ed sample. Draw and interpret cumulative frequency	Work out the median, quartiles and interquartile range from a cumulative	Draw and interpret box plots. (14.1 - 14.3Draw and interpret box plots. (14.1 - 14.3	Draw and use tree diagrams without replacement. Use two-way tables to calculate	Draw and use tree diagrams without replacement. Use Venn diagrams to

Term 2- E	graphically. Calculate the resultant of two vectors. .	problemsExpress points as position vectors .	geometric problems in two dimensions using vector methods. Apply vector methods for simple geometric proofs.	tables.	frequency diagram. Draw and interpret box plots. (14.1 - 14.3		conditional probability	calculate conditional probability. Use set notation
Term 2- block 2	**Unit 13 More Trigonometry(6)**	**Unit 13 More Trigonometry(6)**	**Unit 13 More Trigonometry(6)**	**Multiplicative reasoning(6)**	**Multiplicative reasoning(6)**	**Multiplicative reasoning(6)**	**Revision(12)**	
	Find the area of a triangle and a segment of a circle. Use the sine rule to solve 2D problems. (13.5)	Use the sine rule to solve 2D problems. (13.5)Use the cosine rule to solve 2D problems.(13.6)	Use the cosine rule to solve 2D problems. Solve bearings problems using trigonometry. (13.6	Find an amount after repeated percentage changes. growth and decay, rates.	.Convert metric speed measures. Compound measures.	Solve problems involving compound measures. Use relationships involving ratio. Use direct and indirect proportion	Reinforce all the concepts taught and discuss the worksheets including revision topics of year 9 for final exam	

YEAR 11 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7 AND WEEK 8
Term 1- Block 1	**Unit 13More**	**More**	**More**	**Unit19Proportion**	**Unit 13 More**	**Unit6Graphs(5)**	**Unit 19 Proportion and Graphs(8)**
	Use upper and lower bounds in calculations, Calculating areas and the sine rule, The cosine rule and 2D trigonometric problems	Solving problems in 3D	Graphs of sine, cosine and tangent functions. Assessment - 1 Unit 13 and Revision topics Unit 5	Translating, Reflecting and Stretching graphs of functions	Reflecting, translating and stratching Trigonometric curves, Solve equations. Assessment - 2 Transformation	D/T, V/T and More real life graphs	Calculate the gradient of a tangent at a point, Estimate the area under a non linear graph. Assessment 3
lock 2	**Unit 15 Equations**	**Unit 14 Further**	**Further Statistics(5)**	**Unit 17More**	**Unit11Multiplicati**	**Unit 7Area and**	**Revision**
	To find an accurate root of a quadratic and cubic equation by using iterative process. Assessment -	Sampling, cumulative frequency, box plots	Drawing and interpreting cumulative frequency curve, Histograms, comparing and	Algebraic fractions, surds, solving algebraic fraction equations , functions	Growth, decay, compound measures, ratio and proportion	Prisms, circles, sectors of circles, cylinders and spheres, pyramids and cones	Reinforcing all the concepts done and discussion of past papers.

Term 1- B	revision unit 9 and unit 15		describing population Assessment revision units - 1,2,4,					
YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Unit16Circle**	**Unit18Vectors and**	**Unit10Probability(5)**	**Unit12Similarity and**	**Similarity and**	**Unit3Interpreting and**	**Unit8Transform**	**Transformation and**
	To prove and apply all the circle theorems	Vector Arithmetic, Parallel and collinear vectors, Solving geometric problems Assessment 1	Mutually exclusive, Independent events, Experimental probbaility, conditional probability, venn diagrams and set notation	Similar , Congruent triangles,	similarity in 3D shapes. Assessment 2	Time series, scatter diagrams, line of best fit, averages and range	Reflection, Translation, enlargement and Rotation, Bearings and scale drawings	Constructions and loci
Term 2- block 2	**Revision**							
	Reinforcing all the concepts taught. Disussion of sample papers and mock papers.							

YEAR 12 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 12	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Algebraic**	**Quadratics(3)**	**Quadratics(1) &**	**Equations and**	**Graphs and**	**Graphs and**	**Straight Line**	**Cirlces(3)**
	Expanding Brackets and Factorising, Index Laws, Negative and Fractional Indices, Surds and Rationalising denominators	Solving Quadratic Equations by (i) Factorising (ii) Quadratic Formula, Completing the square, Functions and Sketching Quadratic graphs	Finding the nature of roots using Discriminant, Modelling with quadratics, Solving Linear simultaneous equations, Solving Quadratic Simultaneous	Representing simultaneous equations on graphs, Solving Linear Inequalities, Solving Quadratic inequalities, Inequalities on graphs, Regions	Sketching cubic graphs, Sketching Reciprocal Graphs, Sketching Quartic Graphs, Sketching curves to find point of intersection	Translation of graphs, Stretching and reflecting Graphs, Transforming functions & Gradient and Equation of the line	Parallel and Perpendicular lines, Length and area, Modelling with straight lines & Midpoint and Perpendicular Bisectors, Equation of a	Intersection of straight lines and circles, Use tangent and Chord Properties, Circles and triangles
	Data collection(3)	**Measures of**	**Measures of location**	**Measures of location**	**Representation of**	**Representation of**	**Correlation(3)**	**Correlation(3)**
	Population and samples, Sampling, Non random sampling, Types of	Measure of central tendency: Mean Median Mode and Quartiles.	Percentile, Measures of spread, Variance and standard deviation.	Variance and standard deviation and Coding.	Outliers, Box plots and Cumulative frequency.	Histogram with unequal intervals and Comparing data.	Scatter Diagram and Correlation, Linear regression	Interpretation of regression line and gradient.

	data, Large data set.							
YEAR 12	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 1- Block 2	**Algebraic**	**Algebraic**	**Binomial**	**Trigonometric**	**Trigonometric**	**Trigonometric**	**Revision**	**Revision**
	Algebraic fractions, Dividing polynomials, Factor theorem, Mathematical Proof	Methods of proof & Pascal's triangle, Factorial Notation and Binomial Expansion	Solving binomial problems, Binomial Estimation & Cosine Rule , Sine Rule	Area of triangle, Solving triangle problems, Graphs of Sine, Cosine, Tangent, Transforming trigonometric graphs	Angles in all four quadrants, Exact value of trigonometrical ratios, Trigonometric identities	Simple trigonometric equations, Harder trigonometric equations, Equations and Identities		
	Probability(3)	**Probability(3)**	**Probability(3)**	**Statistical**	**Statistical**	**Statistical**	**Revision**	**Revision**
	Calculating Probabilities and Venn Diagrams.	Mutually exclusive and Independent events.	Tree diagrams and Conditional Probability	Probability Distributions	Binomial Distribution	Cumulative Probabilities		
YEAR 12	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**Vectors(3)**	**Vectors(2) &**	**Differentiation (3)**	**Differentiation (3)**	**Differentiation (3)**	**Integration(3)**	**Integration(3)**	**Integration(3)**
	Vector notation, Representing as column vectors, Magnitude and direction and Position vectors.	Solving geometric problems, modelling with vectors & Gradient of curve, Finding the derivative, Differentiating xn	Differentiating quadratics, functions with two or more terms, Tangents and normals	Increasing and decreasing functions, Second order derivatives, Stationary points, Maximum and minimum points	Sketching gradient functions, Modelling with differentiation.	Integrating xn, Indefinite integrals, Finding functions using integration	Definite integrals, Areas under the curve, Areas under the x axis	Area between curve and line & Exponential Functions
	Hypothesis	**Hypothesis**	**Hypothesis**	**Regression,**	**Regression,**	**Conditional**	**Conditional**	**Conditional**
	Test Statistic, Null and Alternative Hypothesis and Finding Critical Values.	One tailed test, Comparing significance level and finding critical region.	Two tailed test, Comparing significance level and finding critical region.	Exponential Models and Measuring correlation.	Hypothesis Testing for zero correlation.	Set Notation, Conditional Probability.	Conditional Probabilities in Ven diagrams.	Probability Formulae
YEAR 12	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
lock 2	**Exponentials and**	**Exponentials and**	**Exponentials and**	**Algebraic**	**Radian Measure(3)**	**Binomial Expansion**	**Revision**	**Revision**
	Graph of y = ex, Exponential modelling, Logarithms,	Laws of logarithms , Solving equations using logarithms.	Working with natural logarithms, Logarithms and non linear data.	Algebraic fractions, Partial Fractions, Repeated Factors and Algrbraic division & Radian Measure, Arc length.	Area of sector and segment, Solving trigonometric equations and Small Angle Approximation.	Expanding (1+x)^n and (a+bx)^n, Using partial fraction.		

Term 2- Bl	**Conditional**	**Normal**	**Normal**	**Normal**	**Normal**	**Normal**	**Revision**	**Revision**
	Conditional Proabilities in Tree Diagrams.	Understanding normal distribution and its characteristics and Finding probabilities for normal distribbutions.	Inverse normal distribution function and Standard Normal Distribution.	Finding μ and σ	Approximating a Binomial Distribution.	Hypothesis Testing with the Normal Distribution.		

YEAR 13 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Algebraic**	**Functions and**	**Functions and**	**Functions and**	**Sequences and**	**Sequences and**	**Trigonometric**	**Trigonometric**
	Proof by contradiction & The modulus fuction	Functions and mappings, Sketching modulus functions	Composite functions, inverse functions and Combining transformations.	Solving modulus problems & Arithmetic Sequence and series	Geometric sequence and series, Sum to infinity.	Sigma Notation, recurrence relation and Modelling with series	Using Partial Fractions to simplify the Binomial Expansion & Sketching and using Graphs of Sec x, Cosec x and Cot x in	Inverse trigonometric functions & Using Angle Addition Formula and Double angle formula.
	Modelling in	**Constant**	**Constant**	**Forces and**	**Forces and**	**Forces and Motion(3)**	**Variable**	**Variable**
	Constructing a model and modelling assumptions, Quantities and units and working with vectors.	Displacement-time graph, Velocity-time graph.	Constant Acceleration Formula 1 and 2, Vertical motion under gravity.	Force diagrams, Forces and vectors, Force and Acceleration.	Motion in 2 dimensions, Connected Particles.	Connected Particles and Pulleys.	Functions of time using differentiation, Maxima and Minima problems.	Using Integration and constant acceleration formula.

YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 2	**Trigonometry and**	**Trigonometry and**	**Parametric**	**Parametric**	**Differentiation (3)**	**Differentiation(3)**	**Revision**	**Revision**
	Solving trigonometric equations. Simplifying a cos x ± b sin x, Proving trigonometric identities	Modelling with trigonometric functions.	Parametric Equations, Using trigonometric identities.	Curve Sketching, Points of intersection and modelling with parametric equations.	Differentiating exponentials and logarithms and trigonometric funtions. Chain rule, Product rule, Quotient rule	Parametric Differentiation, Implicit Differentiation using second derivatives, Rates of change.		
	Moments(3)	**Moments(3)**	**Moments, Forces(2)**	**Forces and**	**Forces and**	**Projectiles(3)**	**Projectiles(3)**	**Projectiles(1) &**
	Moments, Resultant Moments.	Equilibrium and Centre of mass.	Tilting & Resolving Forces	Inclined Planes and Friction	Friction & Horizontal Projection	Horizontal and Vertical Components, Projection at any angle.	Projection at any angle and Projectile Motion Formulae.	Projectile Motion Formulae & Module Test.

YEAR 13	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**Integration(3)**	**Integration(3)**	**Integration(3)**	**Numerical**	**Vectors(3)**	**Vectors(3)**	**Revision**	**Revision**
	Integrating standard functions, f(ax+b), Using trigonometric identities, reverse chain rule	Integration by substitution, Integration by parts, Partial fractions,	Finding areas, trapezium rule, solving differential equations, modelling with differential equations.	Locating roots, Iteration, The Newton Raphson method, Applications to modelling.	3D coordinates, vectors in 3D, Solving geometric problems.	Application to Mechanics.		
	Applications of	**Applications of**	**Applications of**	**Applications of**	**Further**	**Further Kinematics(3)**	**Further**	**Further**
	Static Particles, Modelling with statics.	Friction and Static Particles, Static Rigid Bodies.	Static Rigid Bodies, Dynamics and inclined Planes.	Dynamics and inclined Planes and Connected Particles.	Vectors in Kinematics and Vector Methods and projectiles.	Vector Methods and projectiles and Variable Acceleration in one dimension.	Variable Acceleration in one dimension and Differentiating Vectors.	Integrating Vectors & Module Test.
YEAR 13	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 2	**Revision**	**Revision**						
	Revision	**Revision**						