MATHS LONG TERM PLAN 2020-2021

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 value/**	**Number and Place value**	**Number and Place value**	**Addition and Subtraction**	**Addition and Subtraction**	**Number and Place value**	**Addition and Subtraction**	**Measure/ Position**
	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.	Comparing numbers/ Ordering objects and numbers.	The part-whole model/ Related facts – number bonds/Comparing number bonds.	Finding the whole – adding together/Finding a part.	Finding and making number bonds/ Finding addition facts/ Solving word problems – addition.	Subtraction – counting back/ finding the difference/ Solving word problems – subtraction.	Naming 2D shapes /Making patterns with shapes.
Term 1- Block 2	**Number and Place value**	**Number and Place value/ Measure**	**Number and Place value/ Addition and Subtraction**	**Number and Place value/ Addition and Subtraction**	**Addition and Subtraction**	**Addition and Subtraction**	**Revision**	
	Recognise and name common 3-D shapes.	Counting and writing numbers to 20 Tens and ones.	Counting one more/ less Comparing numbers of objects/Ordering objects and numbers.	Adding ones Finding number bonds Add by making 10.	Solving word problems – addition and subtraction	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 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Number and Place value**	**Number and Place value**	**Number and Place value**	**Number – multiplication and**	**Measure/ Statistics**	**Measure/ Statistics**	**Number – multiplication and**	**Number – multiplication and**
	Counting to 50 Tens and ones.	Comparing numbers of objects/ numbers Ordering objects and numbers.	Counting in 2s Counting in 5s Counting in 10 s.	Counting in 10s, 5s and 2s Making equal groups/Sharing equally.	Non-standard units of measure -length and weight Comparing weight .	Measuring capacity Solving word problems capacity/length/weight	Making doubles/half Solving word problems – multiplication.	Making equal groups /Sharing equally /Solving word problems – division.
Term 2- block 2	**Number fractions**	**and direction/measure**	**Number and Place value**	**Measurement**	**Measurement/Addi tionand**	**Measurement**	**Revision(12)**	
	Finding halves and quarters/halves and quarters- word problems	Describing turns/positions/Days of the week(Using before and after)/Using a calendar.	Counting to 100 /Exploring number patterns/Partitioning numbers /Comparing numbers /Ordering numbers/Bonds to 100.	Telling time to the hour/to the half hour.	Writing time/ Comparing time/Solving word problems – time.	Recognising coins/Recognising notes./Counting with coins/notes.	Reinforce all the concepts taught and discuss the worksheets including revision topics .	

YEAR 2 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 2	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 (10)**		**Number – Addition and Subtraction–1 (12)**		**Number – Addition and Subtraction–2 (12)**		**Measurements – Money (12)**	
	Recognise the place value of each digit in a 2-digit number. Compare and order numbers; use <, > and = signs. Count in steps of 2, 3, 5 and 10s forward and backward.		Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s and two 2-digit numbers.		Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving 1-digit and 2-digit numbers.		Recognise and use signs for pounds (£) and pence (p); combine amounts to make a particular value and solve word problems.	
Term 1- Block 2	**Number – Multiplication and Division–1 (12)**		**Number – Multiplication and Division–2 (12)**		**Statistics (12)**		**Revision(12)**	
	Calculate mathematical statements for multiplication and division within the multiplication tables 2,5 and 10 and write them using the multiplication (×), division (÷) and equals (=) signs.		Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.		Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.		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	**Measurement -**	**Geometry – Properties of Shapes (12)**		**Number – Fractions (18)**			**Geometry –**	**Revision (6)**
	Choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm).	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, 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.			Describe position, direction and turns in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	Reinforce all the concepts taught.
Term 2- block 2	**Number – addition and subtraction (12)**		**Measurement - Time (12)**		**Measurement - Weight, volume and**		**Revision(12)**	
	Solve problems involving all the four operations, using concrete objects, pictorial representations, arrays, mental methods, number facts, including problems in contexts.		Telling and writing time to the hour, the half hour and to the quarter hour. Telling time to 5 minutes. Finding and comparing durations of time. Finding the start time and end time.		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 =.		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 and place value (12)**		**Addition and Subtraction (12)**		**Multiplication and Division (12)**		**Measurements Time (6)**	**Measurements Length**
	Recognise the place value of each digit in a 3-digit number; expanded form; read, write and compare 3-digit numbers; number lines; rounding to the nearest 10 and 100.		Adding and Subtracting numbers using the bonds to 10, 20 or 100. Choosing an appropriate strategy to solve problems.		Doubling and halving odd and even numbers. Multiplying and dividing by 2, 3, 4, 5 and 10. Choosing an appropriate strategy to solve problems.		State the anlogue and digital time. Finding and comparing durations of time.	Choose and use appropriate standard units to estimate and measure length (cm, m) and capacity (litres/ml).
Term 1- Block 2	**Fractions (12)**		**Geometry - Shapes (12)**	**Statistics (12)**	**Multiplication and Division (12)**		**Revision(12)**	
	Finding fractions of shapes and amounts; identifying fractions and their values and comparing fractions.		Identify and describe the properties of 2D/3D shapes; recognising and relating angles and turns; finding the perimeter.	Interpret and construct simple pictograms, tally charts, block graphs/ bar charts and simple tables.	Multiplying and dividing by 4 and 8; division with remainders; multiplying using grid method. Choosing an appropriate strategy to solve problems.		Reinforce all the concepts taught and discuss the worksheets for first summative exam.	

YEAR 3	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Addition and Subtraction (12)**		**Measurements - Money (12)**		**Multiplication (12)**		**Fractions (12)**	
	Addition and Subtraction of two 3-digit numbers with and without regrouping (carry-over/ borrowing). Choosing an appropriate strategy to solve problems.		Recognise and use signs for pounds (£) and pence (p); combine amounts to make a particular value and solve word problems related to finding the total and change.		Multiplying two and three-digit numbers with one-digit number using the column/ grid method. Solving word problems involving multiplication.		Comparing and ordering fractions; finding the equivalent fractions and tenths fraction of given numbers.	
Term 2- block 2	**Addition and Subtraction (12)**		**Division (12)**		**Measurements - Weight/ Mass (12)**		**Revision(12)**	
	Solving problems using the column method. Solving two step word problems by choosing appropriate operations and showing the working.		Dividing two and three-digit numbers by one-digit number using the long division method. Solving word problems involving division.		Choose and use appropriate standard units to estimate and measure mass (kg/g). Compare and order mass and record the results using >, < and =.		Reinforce all the concepts taught and discuss the worksheets including revision 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	**ADDITION/SUBTR**	**NUMBERS/PLACE**	**NUMBERS/PLACE**	**FRACTIONS/DECI**	**NUMBERS/PLACE**	**DECIMALS/FRACTIO**	**DECIMALS**	**MEASURE/DECIMA**
	Know number bonds to 100 and Add and subtract integers with up to and including four digits, using mental or formal written methods of column addition and subtraction, where appropriate.	Read, write and say aloud numbers written in figures from 1000 to 10 000. Recognise the place value of each digit in a 4-digit number (1000, 100s, 10s, 1s)write numbers in expanded form.	Recall and use multiplication and division facts for the 2, 3, 4, 5 and 10 multiplication tables including multiples and factor pairs. Multiply 2-digit and 3-digit numbers by a 1-digit number using a	Know that 1/10 is written 0·1 as a decimal. Measure lengths (mm, cm and m), weights/masses (g and kg) and capacity (ml and l) with standard units. Conversions, comparing,	Recognise the place value of each digit in a 4-digit number. Add and subtract integers with up to and including four digits, using mental or formal written methods of column addition and subtraction,	Recognise, find and name unit fractions of a shape, compare and order fractions(denominators up to and including 10). Recognise, find, name equivalent fractions, finding fractions in everyday contexts and solve problems	Recognise patterns when counting across 1000s boundaries to 10 000. Add and subtract integers with up to and including four digits using appropriate mental methods. Add	Solve problems involving measure, including conversions, comparing, rounding and the four operations (integer measure only). Interpret and represent data in bar
Term 1- Block 2	**ROUNDING NUMBERS/ADD/SUBT/3D SHAPES**	**ROUNDING/ADD/SUBT**	**FOUR OPERATIONS/PROBLEM SOLVING**	**FRACTIONS/MULTI/DIV**	**ANGLES/LINES/2-D SHAPES/SYMMETRY/COORDINATE**	**MULTI/DIV/MONEY**	**Revision**	
	Round any number to the nearest 10, 100 or 1000. Add and subtract integers with up to and including four digits using appropriate mental methods	Count from 0 in multiples of 6, 8, 25 and 100. Read, write, recognize the place valve, compare, order and round a 4-digit number to the nearest 10, 100 or 1000. Add and subtract integers four digits,	Add and subtract fourdigit integers four digits. Multiply 2-digit and 3-digit numbers by a 1-digit number. Read and write amounts of local money using 2 decimal places. Solve problems involving money	Recognise, find and name equivalent fractions (for fractions with denominators up to and including 10)using pictorial representations and on a number line. Recall and use multiplication and division facts for the	Identify acute, obtuse and reflex angles; pairs of perpendicular, parallel and equal length lines, triangles, rectangles, squares, parallelograms and rhombuses. Recognise symmetry in 2D	Recall and use multiplication and division facts for the 2, 3, 4, 5, 6, 8 and 10 multiplication tables, including multiples and factor pairs. Multiply 2-digit and 3-digit numbers by a 1-digit number. Divide 3-digit numbers by 1-digit numbers.	Revise for first term exam	

YEAR 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**FOUR OPERATIONS/FRACTIONS/DECIMALS**	**ADD/SUBT/WORD PROBLEMS-MONEY**	**MEASURE/PROBLEM SOLVING/PERIMETER**	**NUMBERS/ADD/SUBT**	**NUMBERS/MULT/ PROBLEM SOLVING**	**NUMBERS/TEMPERATURE**	**MULTI/DECIMALS**	**MULTI/DIV/FACTORS/DOUBLE/HALVE/MONEY**
	Add and subtract integers with up to and including four digits, multiply by multiples of 10 and 100.	Read and write amounts of local money using 2 decimal places. Solve problems involving money	Work out equivalents of measure for mm, cm and m (integer answers only). Solve	Recognise the place value of each digit in a 4-digit number (1000s, 100s, 10s, 1s) and write numbers in	Multiply 2-digit and 3-digit numbers by a 1-digit number using a formal written method.	Compare, order, describe and record temperature (positive and negative integers of degrees Celsius). Read, write, say aloud	Use known multiplication facts to multiply by multiples of 10 and 100. Know that 1/10 is	Understand when to multiply and when to divide and the relationship between multiplication and
Term 2- block 2	**3D SHAPES/2D SHAPES/PERIMETER/AREA/SYMMETRY**	**FRACTIONS(ADD/SUB)/DECIMALS**	**ADD/SUBT/MUTIPLES/FACTORS/PROBLEM SOLVING**	**ADD/SUBT/MUTIPLES/FACTORS/PROBLEM SOLVING**	**COORDINATES/BAR CHARTS/LINE GRAPHS/PICTOGRAMS**	**MULTI/MULT/DIV (with or without remainders)/FRACTIONSFRACTIONS/ADD/S**	**Revision**	
	Identify, describe and compare the simple properties of common 3D shapes; sort the shapes accordingly. Identify 2D shapes on the surface of 3D solids. Find areas of rectilinear shapes	Recognise, find and name equivalent fractions (for fractions with denominators up to and including 10) on a number line. Know that 1/10 is written 0·1 as a decimal and relate tenths to place	Add several 2-digit number and four digits, using mental or formal written methods of column addition and subtraction, where appropriate. Use place value, known facts and partitioning to	Understand when to add and when to subtract and the relationship between addition and subtraction. Add several 2-digit numbers. Recall and use multiplication and division facts for the	Read, write and use coordinates in the first quadrant. Interpret and represent data in bar charts and line graphs to show changes over time. Solve a variety of problems using data in tables and	Multiply 2-digit and 3-digit numbers by a 1-digit number, Divide 2-digit and 3-digit numbers by a 1-digit number wirh or without remainder. Add and subtract fractions with the same denominators (for fractions	Reinforce all the concepts taught and revise for 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
Term 1- Block 1	**Number skills(5)**	**Number skills (5)**	**Number skills (5)**	**Number skills (5)**	**Number skills (5)**	**Measures (5) Time**	**Number skills (5)**	**Number skills (5)**
	N5.1B Read, write and say aloud numbers written in figures from 10 000 to 100 000. N5.1F Compare	N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal	.N5.3B Use known multiplication facts to multiply by multiples of powers of 10 up to	N5.3D Multiply numbers up to and including four digits by a 2-digit number using a formal written	N5.4B Introduce BIDMAS (order of operations) for +, –, ×, ÷ only. N6.4E Use priority of	G5.1E Read and write the time to the nearest minute on an analogue clock. G5.1F Convert between 12-hour time	N5.5L Read, write, order and compare numbers with the same number of decimal places up to and	N5.5C Compare fractions of quantities (where fractions have denominators up to and

	WEEK 9	WEEK 10	WEEK 11	WEEK12	WEEK 13	WEEK 14	WEEK 15	WEEK 16
Term 1- Block 2	**Number skills (5)**	**Number skills (5)**	**Geometry (5)**	**Geometry (5)**	**Statistics (5)**	**shapes (5)**	**Revision**	
	N5.1B Write as mixed and improper. Find fractions of an amount	N5.1D Relate 1/100s and 0·01 to the place-value table. N5.5E Identify, name and convert 1/2 and	G4.2B Identify pairs of perpendicular, parallel and equal length lines and know the	G4.2A Identify acute, obtuse and reflex angles; order angles by size.Meaasuring and drawing angles	S4.1A Interpret and represent data in bar charts and line graphs to show changes over time.S5.1B Draw	G4.2E Identify and name equilateral and right-angled triangles.G5.2B Recognise and name kite, trapezium,	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	**Number skills(5)**	**Fractions (5)**	**shape & positions**	**Shapes & positions**	**Shape(5)**	**Measures (5)**	**Area & perimeter**	**Volume**
	N5.5A Work out any unit fraction (with denominators up to and including 10)of a number or quantity and relate to division. N5.5B Work out	Addition and subtraction of unlike fraction where one denominator is a multiple of the other.	G4.3A. Read, write and use coordinates in all four quadrants. G5.3A Given the coordinates of three vertices of a rectangle or square,	Translate simple polygons by adding to and subtracting from the coordinates; Reflect simple shapes in the y-axis or in a line,	G5.2D Identify 3D solids from 2D representations. G5.2E Identify, describe and compare simple properties of common 3D	G5.1C Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (using decimal measures with the same number of decimal	G5.1H Find perimeters anf area of rectilinear shapes using formulae. Calculate the perimeter and area of composite shapes;	G5.1JBegin to understand the concept of volume; Find the volume of a cube or cuboid by counting cubes; Understand volume
	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16
Term 2- block 2	**Factors and**	**Percentages(5)**	**Percentages (5)**	**Graphs (5)**	**Number skills (5)**	**Geometry (5)**	**Revision**	
	Able to identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers. Know the prime	To know the meaning of percentage. Find equivalent fraction and decimals. Find percentage of a quantity.	Solve problems involving fraction and percentage equivalents;	S4.1C Solve a variety of problems using data in tables and presented in scaled bar charts or pictograms. Draw and interpret line graphs showing	N5.1H Use negative numbers in context of temperature and calculate temperature rise and fall, including across 0. N5.1J Order	G6.2H Draw and name parts of a circle: radius and diameter; know the relationships between the diameter and radius.	Reinforce all the concepts taught and discuss the worksheets including revision for final exam	

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 skills(5)**	**Fraction, decimal,**	**Addition,**	**Fraction,**	**Algebra (5)**	**Algebra(5)**	**Algebra(5)**	**Geometry (5)**
	N6.1F Compare and order numbers up to and including 10 000 000 and write statements	N6.5C Identify, name, convert and write common equivalent fractions,including 1/4 and 3/4 with	N6.5F Add and subtract fractions with different denominators N6.5G Multiply proper fractions	Find fractions and percentages of an amount. N6.7B Calculate percentages to solve problems	N6.8G Simplify expressions by collecting like terms or expanding those involving	Solve equations with two unknowns. Be able to substitute values into simple algebraic expressions.	N6.8F Solve simple equations with one variable.Solve problems by using simple formulae.	G6.2A Know that angles on a straight line add to 180°, and find one missing angle on a straight

	WEEK 9	WEEK 10	WEEK 11	WEEK12	WEEK 13	WEEK 14	WEEK 15	WEEK 16
Term 1- Block 2	**Geometry (5)**	**Area &**	**factors &**	**Statistics(5)**	**Coordinates(5)**	**Number skills(5)**	**Revision**	
	G6.2C Know that angles inside a triangle add up to 180° and angles in a quadrilateral add up to 360° and	G6.1F Find perimeters of regular and irregular polygons by measuring and by calculating.	N5.3K Identify prime numbers up to 100.N6.3K Find common factors, common multiples and	S6.1F Find the mean of a data set. S6.1G Find the median of a data set. S6.1H Find the range of a data set.	G6.3A Read, write and use coordinates in all four quadrants. G6.3B Draw reflections of simple	N5.4B Introduce BIDMAS (order of operations) for +, –, ×, ÷ only. N6.4E Use priority of operations for calculations including	Reinforce all the concepts taught and discuss the worksheets for first summative exam	
YEAR 6	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2- Block 1	**Ratio &**	**Sequences(5)**	**Geometry(5)**	**Division(5)**	**Volume(5)**	**Measures (5)**	**shapes(5)**	**graph(5)**
	N6.7A Use integer multiplication and division facts to solve simple ratio and proportion problems involving	N6.8C Use formal algebraic notation to express a linear sequence.	G6.2L Draw accurate triangles using practical equipment, given specific details and using	N6.3H Divide numbers up to four digits by 2-digit whole numbers using a formal written	G6.1H Recognise and use the formula for volume of a cube and cuboid.	G5.1C Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (using decimal	G6.2J Identify, describe and compare simple properties of common 2D shapes; sort the	S6.1A Interpret and construct simple dual bar charts. S6.1B Interpret and construct simple line graphs for more
	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16
Term 2- block 2	**Geometry (5)**	**Number skills (5)**	**Pie chart (3)**	**Graphs (5)**	**Revision:**	**Revision: Solve**	**Revision**	
	G6.2H Draw and name parts of a circle: radius and diameter; know the relationships between the	N5.1H Use negative numbers in context of temperature and calculate temperature rise and fall, including	Construct and interpret pie chart	S4.1C Solve a variety of problems using data in tables and presented in scaled bar charts or pictograms. Draw	N6.6D Find percentages (multiples of 5% and 10%) of quantities in multiples	Solve multi step word problems involving all four operations.	Reinforce all the concepts taught and discuss the worksheets including revision for the Board exam	

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**	**Unit2-Number**	**Unit3-Equations,**	**Unit3-Equations,**	**Unit3-Equations,**	**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)	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,	Multiplication and division of fraction, Working with mixed numbers.(4.4 and 4.5)
Term 1- Block 2	**Unit5-Angles and**	**Unit5-Angles and**	**Unit1- Analysing**	**Unit1- Analysing**	**Unit9-**	**Unit9-Perimeter,area**	**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)	Compare the sets of data using averages and range, Grouped data.(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. 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)**	**Unit6-Decimals(5)**	**Unit6-Decimals(5)**	**Unit8-Multiplicative**	**Unit8-Multiplicative**	**Unit10-Sequences and**	**Unit10-Sequences**	**Unit10-Sequences**
	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,	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)	Coordinates and line segments, Straight line graphs parallel to the x-axis. (10.4 and 10.5)
Term 2- block 2	**Unit8-Probability(5)**	**Unit8-Probability(5)**	**Unit7-**	**Unit7-**	**Unit 5-**	**Unit 5-**	**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/ Describe and carry out rotations. (5.1	Enlarge a shape and desribe an enlargement.Enlargements a shape using 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	**Factors and powers**	**Factors and powers**	**Factors and powers**	**Delta 3)UNIT 2 :Wo**	**UNIT 2 :Working**	**UNIT**	**UNIT**	**UNIT**
	Prime factor decomposition of a number.To find HCFand LCM using venn diagrams.Solving word problem in	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 algebraicexpressions. involving powers and brackets	To use the index laws in algebraic calculations and expressions. Using Index Laws with zero and negative powers.	Change a recurring decimal into a fraction.To calculate percentages.	To work out an original quantity before percentage increase and decrease.	To calculate percentage change. To calculate the effect of repeated percentage changes.
Term 1- Block 2	**UNIT 2 :Working**	**IT 2:Quadratics(Del**	**UNIT**	**UNIT**	**it 3:3D Solids(Delta**	**Unit 3:3D Solids(Delta 2**	**Revision(12)**	
	Factorise an algebraic expressions.To substitute integers into expressions. To construct and solve	To multiply pairs of brackets.Square a linear expression.Using quadratic identities.	Accurate drawings,Construct triangles.Constructing perpendicular bisectors.	Constructing angle bisectors,Draw locus.Use loci to solve problems.	Surface area of prisms,Volume of prisms,Circumference and Area of a circle.	Surface area of Cylinders,Volume of Cylinders and Pythagoras Theorem.	Reinforce all the concepts taught and discuss the worksheets for first summative exam	

YEAR 8	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**s and Sectors of circ**	**UNIT 4:RealLife**	**UNIT**	**UNIT**	**T 8:Probability(Del**	**Unit 10:Graphs(Delta**	**Unit**	**Unit 9:Scale**
	Work out the length of an arc.Work out the area of a sector.Solve problem involving arc and sector.	Draw and interpret Distance-time graphs, Interpret real life graphs.	To describe and carry out reflection,translation and rotation .	To enlarge a shape,To describe an enlargement.To enlarge a shape using negative and fractional scale factor.	Revision + Estimating probability, probability diagrams	Plotting linear graphs,The Gradient	y=mx+c,Parallel and perpendicular lines	Maps and scales,Bearings
Term 2- block 2	**Unit 9:Scale**	**Unit 9:Scale**	**UNIT 3:**	**UNIT 4: Collecting**	**UNIT 4: Collecting**	**Simultaneous Equations**	**Revision(12)**	
	Scales and ratios,Congruent and similar shapes.	To use similiarity to solve problems in 2D shapes	To construct and solve complex equations.Changing the subject of a formulae.	To draw stem and leaf diagrams.To construct frequency polygons.	To estimate the mean and range from a grouped frequency table.	Solve a pair of Simultaneous Equation	Reinforce all the concepts taught .	

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	**Number (6)**	**Number Contd (6)**	**Number Contd (5)**	**Algebra (6)**	**Algebra Contd (6)**	**Algebra Contd (6)**	**Algebra Contd (5)**	**Fractions,ratio and**
	Place value and estimating,HCF and LCM. Calculating with powers (indices).	Calculating with powers (indices).Zero, negative and fractional 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	To solve sums involving algebraic indices.To expand brackets.To factorise algebraic expressions.	To solve equations involving brackets and numerical fractions.To substitute numbers into formulae	To rearrange formulae.To solve sums on linear sequences.To solve problems using non - linear sequences.To work out terms in Fibonacci like	To expand the product of two brackets.To use the difference of two squares.To factorise quadratics of the form ax^2+bx+c	To add subtract multiply divide fractions and mixed numbers.To compare ratios.To find quantities using ratios.
Term 1- Block 2	**Fractions,ratio and**	**Fractions,ratio and**	**Interpreting and**	**Angles and**	**Angles and**	**Angles and**	**Revision (12)**	
	To convert between currencies and measures.To use direct proportion.To work out percentage increase and decrease.	To solve real - life problems involving percentages. Calculate using fractions,decimals and percentages.To convert a recurring	Estimate the mean and range from a grouped frequeency table.To find the modal class and the group containing the median.To construct	To use angle properties of triangles,quadrilateral and exterior angle of triangle.To calculate the sum of the interior angles	To solve problems involving Pythagoras theorem. Introduction of trigonometric ratios	To use trignometric ratios to find the lengths and angles in a right angled triangle.To find angles of elevation and depression.	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	**Interpreting and**	**Interpreting and**	**Interpreting and**	**Graphs (6)**	**Graphs Contd (6)**	**Graphs Contd (6)**	**Graphs Contd (6)**	**Area and volume**
	To construct and use back -to-back stem and leaf diagrams. Construct and use frequency polygons.	To plot and interpret time series graphs.To use trends to predict what might happen in the future.Moving Averages	To plot and interpret scatter graphs. To draw a line of best fit on a scatter graph. To use the line of best fit to predict values.	To find the gradient and y intercept from a linear equation.To rearrange an equation into the form y=mx+c.To plot graphs with equations ax+by+c.	To find the equation of a line given its gradient and one point.To draw and interpret distance-time graphs.To calculate average speed from a	To understand velocity - time graphs.To find acceleration and distance from velocity - time graphs.To draw and iterpret real - line linear graphs.	To find the coordinates of the midpoint of a line segment.To find the gradient and length of a line segment.To find the equations of lines parallel or	To find the perimeter and area of compound shapes.To calculate volumes and surface areas of prisms
Term 2- block 2	**Area and volume**	**Area and volume**	**Transformations**	**Transformations**	**Probability (6)**	**Equations and**	**Revision(12)**	
	.To calculate the area and circumference/ perimeter of a circle,semicircles and quarter circles.To calculate arc lengths,angles	To calculate volume and surface area of a cylinder and a sphere. To calculate volume and surface area of a pyramids and cones.	Reflection and Rotation.Enlarge shapes by fractional and negative scale factors about a centre of enlargement.	To draw scales on maps.To solve problems involving bearings. Construction of angle bisector and perpendicular bisector.To draw a	To find probabilities of mutually exclusive events. Experimental Probability.Independent events.To draw and use probability tree diagrams.	To solve simple simultaneous equations algebraically and graphically.	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 6 Graphs (6)**	**Unit 6 Graphs**	**Unit 9 Equations**	**Unit 15 Equations**	**Equations and**	**Equations and**	**Unit 8.5 Bearings.**	**Unit 13 More**
	.Find the equation of a line,given gradient and one pt on the line. Eqn of lines parallel and perpendiculr to a given line.(6.1,6.2,6.5)	Draw and interpret distance-time , velocity time graph and real-life graphs[6.3,6.4]	Solve quadratic equations by factorisation, use the quadratic formula and by completing the square. (9.1 - 9.3)	Recognise and draw quadratic functions. Find approximate solutions to quadratic equations graphically.(15.3-15.4)	Solve simultaneous equations algebraicallyy and graphycally Solve quadratic simultanious. (9.4 - 9.6,15.2)	Solving linear inequalities and shading region. Solving quadratic inqualities. (9.7, 15.2)	Draw and use scales on maps and scale drawings. Solve problems involving bearings .Revision on Pythagoras theorm and Trigonometry	Find the area of a triangle and a segment of a circle. Use the sine rule to solve 2D problems. (13.5)
Term 1- Block 2	**More Trigonometry**	**Unit 12 Similarity**	**Similarity and**	**Similarity and**	**Unit 16 Circle**	**Circle theorems**	**Revision(12)**	
	Use the cosine rule to solve 2D problems. Solve bearings problems using trigonometry. (13.6)	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	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	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.	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
Term 2- Block 1	**Vectors and**	**Vectors and**	**Vectors and**	**Further statistics**	**Further statistics**	**Probability(6))**	**Probability(6)**	**Probability(6)**
	Understand and use vector notation. Calculate using vectors and represent the solutions graphically. Calculate the resultant of two vectors.	Solve problems using vectors. Use the resultant of two vectors to solve vector problemsExpress points as position vectors .	Prove lines are parallel. Prove points are collinear Solve geometric problems in two dimensions using vector methods. Apply vector methods for simple geometric proofs.	Understand simple random sample and stratifi ed sample. Draw and interpret cumulative frequency tables.	Work out the median, quartiles and interquartile range from a cumulative frequency diagram. Draw and interpret box plots. (14.1 - 14.3	Use the product rule for finding the number of outcomes for two or more events. Identify mutually exclusive outcomes and events.	Work out the expected results for experimental and theoretical probabilities. Compare real results with theoretical expected values to decide if a game is fair.	Draw and use tree diagrams without replacement. Use two-way tables to calculate conditional probability Venn diagrams to calculate conditional probability. Use set notation
Term 2- block 2	**Unit 2Algebra (6)**	**Unit 8.1 3D solids**	**Unit 7 Area and**	**Unit 8 Revision on**	**Multiplicative**	**Multiplicative**	**Revision(12)**	
	Solve problems using geometric sequences. Work out terms in Fibonnaci-like sequences. Find the nth term of a quadratic sequence (2.6).	Draw plans and elevations of 3D solids. Draw a locus. Use loci to solve problems	Calculate volume and surface area of cylinders,spheres, pyramids and cones(7.6,7.7)	Revision on Reflection,rotation, Enlargement,Transformations and combinations.(8.2-8.4)	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 [Unit 1- Unit 7] 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**	**More**	**Unit6Graphs(5)**	**Proportion and Graphs(8)**
	Use upper and lower bounds in calculations, Calculating areas and the sine rule, The cosine rule and	Solving problems in 3D	Graphs of sine, cosine and tangent functions. Assessment - 1 Unit 13 and Revision topics Unit	Translating, Reflecting and Stretching graphs of functions	Reflecting, translating and stratching Trigonometric curves, Solve equations.	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
Term 1- Block 2	**Unit 15 Equations**	**Unit 14 Further**	**Further**	**Unit 17More**	**Unit11Multiplicati**	**Unit 7Area and**	**Revision**
	To find an accurate root of a quadratic and cubic equation by using iterative process. Assessment - revision unit 9 and	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.

YEAR 10	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Unit16Circle**	**Unit18Vectors and**	**Unit10Probability(**	**Unit12Similarity**	**Similarity and**	**Unit3Interpreting and**	**Unit8Transformati**	**Transformation**
	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.							

IGCSE YEAR 11 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1- Block 1	**Shape and space**	**Shape and space**	**Shape and space 9**	**Graphs 8 (8.2 - 8.3)**	**Graphs 8 (8.4)**	**Graphs 9 (9.1 - 9.4) (5)**	**Graphs 6 (6.1,**	**Graph 7 (7.1 - 7.3)**
	Sine rule Cosine rule	Calculating Area of triangle; 3D Trigonometry	3D Trigonometry Assessment 1 - Revision topic: Bk 1 Number 5 (5.1 - 5.3), Shape and space 1(1.1 - 1.3)	Translating graphs; Reflecting graphs;	Stretching graphs; Graphs of sine, cosine and tangent.	The gradient of a function; Differentiation; Stationary points; Motion of a particle in a straight line.	Cubic graphs; Reciprocal graphs; Gradient of a curve at a point. Assessment 2 Graphs 8 / Revision	Using graphs to solve quadratic functions, other equations, non linear simultaneous equations.
Term 1- Block 2	**Shape and space 6**	**Bk 1 Handling**	**Handling Data 6**	**Algebra 10 (10.1 -**	**Bk 1 Number 4**	**Shape and space 7 (7.1**	**Revision**	
	Intersecting Chord Theorems; Assessment 3 - Revision Topic: Algebra 1; Algebra 3, Algebra 5, Algebra 7, Algebra 9(9.1), Graphs 4(4.1 - 4.2), Graphs 7(7.1)	Measures of dispersion; quartiles; cumulative frequency.	Drawing histograms; Interpreting histogram. Assessment 4 - Revision Topic: Number 1 (1.1 - 1.3) ; Number 2 (2.1 - 2.3) Number 3(3.1 - 3.3), Number 10(10.1 - 10.2), Sequences.	Algebraic fractions: Simplifying, Adding, Subtracting, Multiplying, Dividing and Solving equations; Functions; Domain and range; composite functions; Inverse functions;	Compound and Inverse percentages; Direct and inverse proportion; compound measures; proportion.	Circles; Solids; Conversion: Units of length, area and volume.	Reinforcing all the concepts done and discussion of past papers.	

YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	**Bk1 - Shape and**	**Shape and space 8**	**Bk 1 - Handling**	**Sets 1 (1.1 - 1.2),**	**Bk 1 - Shape and**	**Bk 1 - Handling Data 1**	**Shape and space 5**	**Shape and space 1**
	Circle Theorems 1; Circle Theorems 2; Alternate segment theorems.	Vectors and vector notation; Multiplication of a vector by a scalar; vector geometry. Using formula;	Probability - single events, experitmental and theoretical; Laws of probability; Combined and	Set notation; venn diagrams; Three set and practical problems; shading sets; set builder notation;	Similar triangles; Similar shapes. Indices; Recurring decimal; Advanced calculator; solving equations with roots	Statistical investigation; presenting and misleading data; averages for discrete data; frequency tables; discrete and continuous	Transformations; Translations; Reflections and rotations; Enlargements; Combined	Constructions; straight line graphs; sketching straight line graps; straight line conversion graphs; gradient of a
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 &**	**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 equations	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 circle	Intersection of straight lines and circles, Use tangent and Chord Properties, Circles and triangles
	Data collection(3)	**Measures of**	**Measures of**	**Measures of**	**Representation of**	**Representation of**	**Correlation(3)**	**Correlation(3)**
	Population and samples, Sampling, Non random sampling, Types of data, Large data set.	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(3)	Interpretation of regression line and gradient.

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	Angles in all four quadrants, Exact value of trigonometrical ratios, Trigonometric	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 x^n	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 x^n, 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**
Term 2- Block 2	**Exponentials and**	**Exponentials and**	**Exponentials and**	**Algebraic**	**Algebraic**	**Radian Measure(3)**	**Revision**	**Revision**
	Graph of $y = e^x$, Exponential modelling, Logarithms,	Laws of logarithms , Solving equations using logarithms.	Working with natural logarithms, Logarithms and non linear data.	Proof by contradiction, 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.		
	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**	**Binomial**	**Binomial**
	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	Expanding $(1+x)^n$ and $(a+bx)^n$.	Using Partial Fractions to simplify the Binomial Expansion & Sketching and using Graphs of Sec
	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	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	**Trigonometric**	**Trigonometry and**	**Trigonometry and**	**Parametric**	**Differentiation(3)**	**Differentiation(3)**	**Revision**	**Revision**
	Inverse trigonometric functions & Using Angle Addition Formula and Double angle	Solving trigonometric equations. Simplifying a cos x ± b sin x, Proving trigonometric	Modelling with trigonometric functions & Parametric Equations, Using trigonometric	Curve Sketching, Points of intersection and modelling with parametric equations.	Differentiating exponentials and logarithms and trigonometric funtions. Chain rule, Product rule.	Parametric Differentiation, Implicit Differentiation using second derivatives, Rates of change.		
	Moments(3)	**Moments(3)**	**Moments,**	**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 Forces(3)	**Applications of Forces(3)**	**Applications of Forces(3)**	**Applications of Forces(3)**	**Further Kinematics(3)**	**Further Kinematics(3)**	**Further Kinematics(3)**	**Further Kinematics(1) &**
	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**						