# MATHS LONG TERM PLAN 2022-2023

# 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(6) Sorting objects/ Counting objects to 10/Counting and writing numbers to 10[forward and backward]	Number and Place value(6) Identify one more and one less/ Comparing groups and comparing numbers of objects. [ up to 10]	Number and Place value(6) Comparing numbers/ Ordering objects and numbers.[ up to 10]/first,second, third[ ordinals]	Number and Place value(6) Sorting objects/ Counting objects to 20/Counting and writing numbers to 20[forward and backward]	Number and Place value(6) Counting one more/ less Comparing numbers of objects/Ordering objects and numbers to 20	Number and Place value(6) The part-whole model/ Related facts – number bonds/Comparing number bonds.	Addition and Subtraction(6) Finding the whole – adding together/Finding a part.	Addition and Subtraction(6) Finding and making number bonds/ Finding addition facts/ Solving word problems – addition.
Term 1- Block 2	Addition and Subtraction(6) Subtraction – how many are left/ breaking apart(1&2)	Addition and Subtraction(6) Subtraction – counting back/ finding the difference/ Solving word problems – subtraction.	Geometry:shape(6) Recognise and name common 2D shapes /Making patterns with shapes.(6)	Geometry:shape( 6) Recognise and name common 3- D shapes.	Addition and Subtraction(6) Solving word problems – addition and subtraction	Addition and Subtraction(6) Subtracting tens and ones/Solving word and picture problems – subtraction.	<b>Revisi</b> Reinforce all the c discuss the wor summati	on(12) oncepts taught and ksheets for first ve 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(6) Counting to 50 Tens and ones.	Number and Place value(6) Comparing numbers of objects/ numbers Ordering objects and numbers.	Number and Place value(6) Counting in 2s/ Counting in 5s/ solving word problems.	Measurement- length/height(6) Non-standard units of measure -length and height/comparing length and height/ solving word problems.	Measurement- weight/capacity(6) Comparing and measuring weight/Comparing and Measuring capacity Solving word problems .	Number – multiplication and Counting in 10s, 5s and 2s Making equal groups/Sharing equally.	Number – multiplication and Making doubles/half Solving word problems – multiplication.	Number – multiplication and Making equal groups /Sharing equally /Solving word problems – division.
Term 2- block 2	Number fractions(6) Finding halves and quarters/halves and quarters- word problems	and direction/Measuremen Describing turns/positions/Days of the week(Using before and after)/Using a calendar.	Measurement/Time( 6) Telling time to the hour/to the half hour.	Measurement/Ad ditionand Writing time/ Comparing time/Solving word problems – time.	Measurement/Money (6) Recognising coins/Recognising notes./Counting with coins/notes.	Number and Place value within 100(6) Counting to 100 /Exploring number patterns/Partitioning numbers /Comparing numbers /Ordering numbers/Bonds to 100.	Revis Reinforce all the c discuss the work revision	on(12) oncepts taught and sheets including 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
1	Number – Numb	er and Place value (10)	Number – Addition and	Subtraction-1 (12)	Number – Addition	and Subtraction-2 (12)	Measurement	s – Money (12)

Term 1- Block	Recognise the place value of each digit in a       Add and subtract numbers using concrete         2-digit number. Compare and order       objects, pictorial representations, and         numbers; use <, > and = signs. Count in       mentally, including: a 2-digit number and         steps of 2, 3, 5 and 10s forward and       ls and two 2-digit numbers.         backward.       Number. Multiplication and Division 1 (12)		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.	
	Number – Multiplication and Division–1 (12)	Number – Multiplication and Division–2 (12)	Statistics (12)	Revision(12)	
Term 1- Block 2	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	
VEADO	WEEK 1 WEEK 2 WEEK 3 WEE				
YEAR Z	WEEK 1 WEEK 2	WEEK 3 WEEK 4	WEEK 5 WEEK 6	WEEK 7 WEEK 8	
Term 2- Block 1	WEEK 1     WEEK 2       Measurement - Length and Height (6)       Choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm).	WEEK 3WEEK 4Geometry – Properties of Shapes (12)Identify and describe the properties of 2D/3D shapes, including the number of sides/vertices/ faces and lines of symmetry.Making patterns with2D/ 3D shapes.	WEEK 5     WEEK 6       Number – Fractions (18)       Recognise, find, name and write fractions 1/3, 1/4       length, shape, set of objects or quantity. Counting       halves and quarters.	WEEK 7WEEK 8Geometry –4, 2/4 and 3/4 of aininDescribe position, direction and turns in terms of right angles for quarter, half and three- quarter turns	
2 Term 2- Block 1	WEEK 1       WEEK 2         Measurement - Length and Height (6)       Choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm).         Number – addition and subtraction (12)	WEEK 3WEEK 4Geometry – Properties of Shapes (12)Identify and describe the properties of 2D/3D shapes, including the number of sides/vertices/ faces and lines of symmetry.Making patterns with2D/ 3D shapes.Measurement - Time (12)	WEEK 5       WEEK 6         Number – Fractions (18)         Recognise, find, name and write fractions 1/3, 1/4         length, shape, set of objects or quantity. Counting         halves and quarters.         Measurement - Weight, volume and	WEEK 7WEEK 8Geometry –4, 2/4 and 3/4 of ainindirection and turns in terms of right angles for quarter, half and three- quarter turnsRevision(12)	

# 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 – AdditRecognise the place value of each digit in a 2-digit number. Identify and represent numbers using different representations. Compare/order numbers. Count in multiples of 4, 8, 50 and 100.Add and subt concrete obje and mentally. involving oneNumber – Multiplication and Division–2 (12)Measurements		Number – Addition and Sul Add and subtract 3-dig concrete objects, pictor and mentally. Solve rel involving one or more s	btraction–1 (12) it numbers using ial representations, ated word problems steps.	Number – Addition and Subtraction–2 (12) Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. Find the answer to a calculation and use inverse operations to check answers.		Number – Multiplication and Division–1 (12) Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Solve related word problems involving one or more steps.	
Term 1- Block 2	Number – Multiplication and Division–2 (12) Write and calculate mathematical statements for multiplication and division using the multiplication tables, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.		Measurements - Money (12)StAdd and subtract amounts of money to give change, using both £ and p in practical contexts. Solve related word problems involving one or more steps.St		Statistics (12) 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.		Revision(12) 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
	Measurement - Length (18)			Number – Fractions	s (18)		Measurement - Time (12)	

Term 2- Block 1	Measure, compare, a m/cm/mm. Measure simple 2-d shapes. S more steps.	add and subtract lengths using the units the perimeter of olve related word problems involving one or	Recognise and use f fractions with small and fractions with th with the same denor problems involving	fractions as numbers: unit fractions and non-unit denominators. Compare and order unit fractions, he same denominators. Add and subtract fractions minator within one whole. Solve related word one or more steps.	Read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.
Term 2- Block 2	Measurement - Tell and write the time from an analogue clock, including using Roman numerals - 12 and 24 hour clocks. Compare durations of events.	Geometry – Angles & Properties of Shapes (18 Recognise angles as a property of shape. Identif whether angles are greater than or less than a rig horizontal and vertical lines and pairs of perpen lines. Draw 2D shapes and make 3D shapes usin materials; recognise 3D shapes in different orien describe them.	) y right angles; and ght angle. Identify dicular and parallel ng modelling ntations and	Measurement - Mass & Capacity (12) Measure, compare, add and subtract mass in the units kg/g and volume/capacity in the units l/ml. Solve related word problems involving one or more steps.	Revision(12) 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
		Number & Place Value (	18)	Addition & S	Subtraction (12)	Measurement - Length	& Perimeter (12)	Multiplication &
	Identify, represent	Use number line to	Round any number to	Add and subtract	Solve addition and	Convert between	Measure and	Recall
	and estimate 4 digit	10,000	the nearest 1,000	in 1s,10s, 100s and	subtraction two-step	different units of measure	calculate the	multiplication and
	numbers using	Order and compare	Solve practical	1000s. Add	problems in contexts,	(cm-m / m-km) Work	perimeter of a	division facts for
	different	numbers beyond 1,000	problems that involve	and subtract	deciding which	out missing lengths.	rectilinear figure	multiplication
1	representations.	Write Roman numerals	all of the above and	numbers with up to	operations and		(including squares)	tables up to $12 \times$
ck	Recognise the	to 100 (I to C) and	with increasingly	4 digits using the	methods to use and		in centimetres and	12
Blo	place value of each	know that over time,	large positive	formal written	why.		metres. Solve	
1-1	digit in a four-digit	the numeral system	numbers.	methods of			problems involving	Use place value,
B	number (1,000s,	changed to include the	Count backwards	columnar addition			perimeter.	known and derived
ſer	100s, 10s and 1s)	concept of 0 and place	through 0 to include	and subtraction				facts to multiply
E F	Round any number	value.	negative numbers.	where appropriate.				and divide
	to the nearest 10 or	Find 1,000 more or	Count in multiples of	Estimate and use				mentally,
	100 <mark>.</mark>	less than a given	25 and 1,000	inverse operations				including:
		number		to check answers to				multiplying by 0
				a calculation.				and 1; dividing by
								1; multiplying
	Multiplicatio	on & Division (12)	Measurement - Area	Fract	ions (12)	Fractions - Decimals 1	Revisi	on (12)
			(6)			(6)		
	Recognise and use	Solve problems	Find the area of	Recognise and	Solve problems	Recognise and write	Reinforce all the con	ncepts taught for the
	factor pairs and	involving multiplying	rectilinear shapes by	show, using	involving increasingly	decimal equivalents of	first summative example	n.
	commutativity in	and adding, including	counting squares	diagrams, families	harder fractions to	any number of tenths or		
k 2	mental calculations	using the distributive		of common	calculate quantities,	hundredths		
oc		law to multiply two		equivalent	and fractions to divide			

Term 1- Bl	Multiply two-digit and three-digit numbers by a one- digit number using formal written layout	digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.		fractions Count up and down in hundredths; recognise that hundredths arise when dividing an object by a 100 and dividing tenths by 10.	quantities, including non-unit fractions where the answer is a whole number Add and subtract fractions with the same denominator	Recognise and write decimal equivalents to ¼; ½; ¾		
YEAR 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	Decir	nals 2 (12)	Measurement -	Money (12)	Measureme	ent - Time (12)	Statist	ics (12)
Term 2- Block 1	Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths Round decimals with 1 decimal	Compare numbers with the same number of decimal places up to 2 decimal places Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Estimate, compare and calculate different measures, including money in pounds and pence	Estimate, compare and calculate different measures, including money in pounds and pence. Round amounts, Solve word problems on money	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	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
						Review-Statistics,		
			_			Shapes, Position &		
		Properties of Shape (18	<b>3)</b>	Position &	Direction(12)	Direction (6)	Revisi	on (12)
(2	Compare and	Identify acute and	Identify lines of	Describe positions	Plot specified points	Reinforce - Statistics,	Reinforce all the co	ncepts taught for the
ock	shapes including	compare and order	shapes presented in	coordinates in the	complete a given	properties of shape, position & direction		
ld -	quadrilaterals and	angles up to 2 right	different orientations	first quadrant	polygon.	position & direction		
n 2	triangles, based on	angles by size		1	1 .0			
leri	their properties and		Complete a simple	Describe				
L	sizes		symmetric figure with	movements				
			respect to a specific	between positions				
			line of symmetry.	as translations of a given unit to the				
				left/right and				

## 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
	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)
ck 1	•Read, write, order	•Interpret negative	•Add and subtract	•Solve addition and	•Solve comparison,	•Complete, read and	•Identify multiples	•Multiply and
3loc	and compare	numbers in context,	whole numbers with	subtraction multi-	sum and difference	interpret information in	and factors,	divide whole
1-1	numbers to at least	count forwards and	more than 4	step problems in	problems using	tables, including	including finding	numbers and those
m	1,000, 000 and	backwards with positive	digits, including using	contexts, deciding	information presented	timetables.	all factor pairs of a	involving decimals
ſer	determine the	and negative whole	formal written	which operations	in a line graph		number and	by 10, 100 and
F	value of each digit	numbers, including	methods (columnar	and methods to use			common factors of	1,000
	•Count forwards or	through 0	addition and	and why.			two numbers.	<ul> <li>Recognise and use</li> </ul>

	Multiplication and Division (5)	Multiplication and Division (5)	Measure: Perimeter and Area (5)	Measure: Perimeter and Area (5)	Fractions (5)	Fractions (5)	Revisi	on(12)
Term 1- Block 2	•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	<ul> <li>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</li> <li>Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes</li> </ul>	•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 <sup>2</sup> ) and square metres (m <sup>2</sup> ) and calculate the area of rectilinear shapes.	<ul> <li>Compare and order fractions whose denominators are all multiples of the same number</li> <li>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</li> </ul>	•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 c discuss the wor summati	oncepts taught and ksheets for first ve exam
YEAR 5	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	Fractions (5)	Fractions (5)	Fractions (5)	Decimals and Percentages (5)	Decimals (5)	Decimals (5)	Decimals (5)	Geometry: Properties of shape (5)
Term 2- Block 1	•Add and subtract fractions with the same denominator and denominators that are multiples of the same number	<ul> <li>Add and subtract mixed fractions</li> <li>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> <li>Find fractions of an amount</li> </ul>	<ul> <li>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> <li>Find fractions of an amount.</li> </ul>	•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	<ul> <li>Read and write decimal numbers as fractions</li> <li>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> </ul>	<ul> <li>Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place</li> <li>Read, write, order and compare numbers with up to 3 decimal places</li> </ul>	•.Solve problems involving number up to 3 decimal places.	<ul> <li>Know angles are measured in degrees: Estimate and compare acute, obtuse and reflex angles</li> <li>Draw given angles, and measure them in degrees (<sup>0</sup>)</li> </ul>
	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)	Revisi	on(12)
Term 2- Block 2	<ul> <li>Identify:</li> <li>Angles at a point and 1 whole turn (total 360°)</li> <li>Angles at a point on a straight line and half a turn (total 180°)</li> <li>Other multiples of 90°</li> </ul>	<ul> <li>Identify 3-D shapes, including cubes and other cuboids, from 2-D representations</li> <li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> </ul>	•Plot and find coordinates of a reflected point on a grid.	•Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	<ul> <li>Convert between different units of metric measure</li> <li>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</li> </ul>	<ul> <li>Estimate volume and capacity</li> <li>Calculate volume</li> </ul>	Reinforce all the concepts taught discuss the worksheets for final ex	

	YEAR	6 LONG	TERM PI	AN wit	h CURRIC	ULUM STA	NDARD	S
YEAR 6	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	Number and Place value (5)	Four Operations: Addition, Subtraction, Multiplication & Division (5)	Four Operations: Addition, Subtraction, Multiplication &	Four Operations: Addition, Subtraction, Multiplication &	Fractions (5)	Fractions (5)	Fractions (5)	Geometry: Position and Direction (5)
Term 1- Block 1	•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	<ul> <li>Perform mental calculations, including with mixed operations and large numbers.</li> <li>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	•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 context	•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	<ul> <li>Multiply simple pairs of proper fractions, writing the answer in its simplest form</li> <li>Divide proper fractions by whole numbers</li> </ul>	<ul> <li>Describe positions on the full coordinate grid (all 4 quadrants)</li> <li>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</li> </ul>
	Decimal (5)	Decimal (5)	Percentage (5)	Percentage (5)	Algebra (5)	Algebra (5)	Revis	ion(12)
Term 1- Block 2	<ul> <li>Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.</li> <li>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.</li> </ul>	•Multiply one-digit numbers with up to 2 decimal places by whole numbers.	•Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	•Find percentages of an amount.	•Express missing number problems algebraically	•Use simple formulae	Reinforce all the c discuss the wor summat	concepts taught and cksheets for first ive exam
YEAR 6	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8

	Algebra (5)	Algebra (5)	Meaurement:	Measurements:	Measurements: Area,	Measurements: Area,	Ratio and	Ratio and
			Converting units (5)	Area, Perimeter &	Perimeter &	Perimeter & Volume(5)	Proportion (5)	Proportion (5)
				Volume(5)	Volume(5)			
1 GFIII 2- BIUCK 1	• Generate and describe linear number sequences.	•Find pairs of numbers that satisfy an equation with two unknowns.	<ul> <li>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 2 decimal places where appropriate.</li> <li>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.</li> <li>Convert between miles and kilometres</li> </ul>	•Recognise that shapes with the same areas can have different perimeters and vice versa.	•Calculate the area of parallelograms and triangles.	<ul> <li>Recognise when it is possible to use formulae for area and volume of shapes</li> <li>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units</li> </ul>	•Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.	•Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
	Ratio and Proportion (5)	Statistics (5)	Statistics (5)	Geometry: Properties of shape(5)	Geometry: Properties of shape(5)	Geometry: Properties of shape(5)	Revisi	on(12)
1 erill 2- Diock 2	•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.	<ul> <li>Draw 2-D shapes using given dimensions and angles.</li> <li>Recognise, describe and build simple 3-D shapes, including making nets.</li> </ul>	<ul> <li>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.</li> <li>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</li> </ul>	•Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.	Reinforce all the c discuss the worksh	oncepts taught and eets for final exam

#### VEAD 7 LONG TEDM DIAN WITH CUDDICULUM STANDADDS

TEAR	/ LUNG			RICULUM	JIANDARD	3		
YEAR 7	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	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)
Term 1- Block 1	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, 4.2 and 4.3)	Multiplication and division of fraction, Working with mixed numbers.(4.4 and 4.5)
	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)	Rev	ision
Term 1- Block 2	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(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 c discuss the wor summati	oncepts taught and ksheets for first ive exam
YEAR 7	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	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)
Term 2- Block 1	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)	Coordinates and line segments, Straight line graphs parallel to the x- axis. (10.4 and 10.5)
	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)	Rev	ision
2- block 2	Comparing probabilities, Mutually exclusive	Experimental probability, Probability diagrams. (8.4 and 8.5)	Accurate drawings, Construct triangles using a ruler and	Construct perpendicular bisector and Angle	Describe and carry out Translations/ Describe and carry out	Enlarge a shape and desribe an enlargement.Enlargement	Reinforce all the c discuss the work revision	oncepts taught and scheets including n topics

Ĩ.	events, Estimating	compasses(SAS, SSS, $ASA$ ) (7.1 and 7.2)	bisector using a	Reflections. (5.1)	s a shape using a
Te	and 8.2)	ASA) (7.1 and 7.2)	compasses. (7.3		factor and fractional
	und 0.2)		and 7.4)		scale factor (5.3 and 5.4).

#### 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) Prime factor decomposition of a number. To find HCFand LCM using venn diagrams. Solving word problem in HCFand LCM.	UNIT 1: Factors and powers (Delta2)- Revision(5) 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.	UNIT 1: Factors and powers (Delta2)UNIT 1:Powers and Roots(Delta 3)(5) To calculate with powers. Round to a number of significant figures. To write the numbers using Standard form.	UNIT 2 : WORKING with powers(Delta 2) Unit2: Quadratics(2.2) (Delta 3) Simplifying algebraic expressions involving powers and brackets.To multiply pairs of brackets.Square a linear expression.Using quadratic	UNIT 3:(3.2)USING index law (Delta 3)UNIT 2 :Working with powers(Delta 2)(5) To use the index laws in algebraic calculations and expressions. Using Index Laws with zero and negative powers.	UNIT 2 :Working with powers(Delta 2)(5) Factorise an algebraic expressions.To substitute integers into expressions. To construct and solve equations.	UNIT 3: Inequalities,equat ions and formulae(Delta 3)(5) To construct and solve complex equations. Changing the subject of a formulae.	UNIT 6:Fractions,Perce ntages and Decimals (Delta 2)(5) Change a recurring decimal into a fraction.To calculate percentages.
Term 1- Block 2	UNIT To work out an original quantity before percentage increase and decrease.To calculate percentage change.	UNIT To calculate the effect of repeated percentage changes. Accurate drawings,Construct triangles.	UNIT Constructing perpendicular bisectors.Constructing angle bisectors.	identities. UNIT Draw locus.Use loci to solve problems. Surface area of prisms	Unit 3:3D Volume of prisms,Circumference and Area of a circle.	Unit 3:3D Solids(Delta Surface area of Cylinders,Volume of Cylinders and Pythagoras Theorem.	Revision(12) Reinforce all the con discuss the workshee summative exam ince topics from year 7 -1 Multiplicative reason Unit 10 -Sequences 10.3) -Delta 1	ncepts taught and ets for first cluding revision Unit 8 - ning (8.2-8.6) and and graphs(10.1-
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) Work out the length of an arc.Work out the area of a sector.Solve problem involving arc and sector.	<b>Unit 10:Graphs(Delta 2)(5)</b> Plotting linear graphs, The Gradient	Unit 10:Graphs(Delta 2)(5) y=mx+c, Parallel and perpendicular lines	<b>UNIT 4:Real life</b> graphs (5) Draw and interpret Distance-time graphs, Interpret real life graphs.	<b>UNIT</b> <b>5:Transformations(5)</b> To describe and carry out reflection,translation and rotation .	<b>UNIT</b> <b>5:Transformations(5)</b> To enlarge a shape,To describe an enlargement.To enlarge a shape using negative and fractional scale factor.	Unit 9:Scale drawing and Measures(5) Maps and scales,Bearings	Unit 9:Scale drawing and Measures(5) Scales and ratios,Congruent and similar shapes.

2	Unit 9:Scale drawing and	Unit 8: Simultaneous	UNIT 8:Probability	UNIT 4: Collecting and	UNIT 4: Collecting and Analysis	Revision of year 7 Topics - Delta 1(5)	
ck	Measures(5)	<b>Equations(Delta 3)(5)</b>	(Delta 2)(5)	Analysis	data(Delta 3)(5)		Revision(12)
olo	To use similiarity	Solve a pair of	Revision + Estimating	To draw stem and	To estimate the mean	Unit 1 -Analyzing and	Reinforce all the concepts taught and
2- F	to solve problems	Simultaneous Equation	probability,	leaf diagrams.To	and range from a	displaying data(1.2 -1.5)	discuss the worksheets for final exam.
E	in 2D shapes		probability diagrams	construct	grouped frequency	,Unit 5-Angles and	
er				frequency	table.	shapes (5.1-5.4)	
F				polygons.			

### YEAR 9 LONG TERM PLAN with CURRICULUM STANDARDS

UNIT 1UNIT 1NumberUNIT 2UNIT 2UNIT 2UNIT 4UNIT 4Place value and estimating. Zero, negative and fractional indices.To calculate with form. Understand the form. Understand the attandard form.To calculate with numbers in to and irrational and irrational and irrational standard form.To calculate with form. Understand the brackets. To solve sums on sivolving brackets and numerical solve equations involving brackets and numericalUNIT 3 involving brackets and numerical and numericalUNIT 5 solve equations involving brackets and numericalUNIT 5 and rigonometry calculate tractoria and interpret polygons. To plot graphs with equation and interpreting and representing dataUNIT 5 involving brackets and numericalUNIT 5 and rigonometry calculate tractoria and exterior and exterior angle of transple.UNIT 5 and exterior angle of transple.UNIT 5 involving protenties of tragenometric ratios. To find angles of tragenometric ratios. To find angles of tragenometric ratios. To find angles of tragenometric ratios. To find angles of tragenometric ratios. To find the gradient and exterior angle of transple.To solve problems tragenometric ratios. To find angles of tragenometric ratios. To find the gradient and exterior angles of a polygon.UNIT 6 the problems theorem.To solve problems tragenometric ratios. To find the ratios. To find the gradient and one predict what the future.Nonig Averages. To potenties of tragenometric ratios. To find the gradient ratios to the interior angles of a polygon.To solve problems the problems. To<	erUNIT 2UNIT 2UNIT 2UNIT 4UNIT 4UNIT 4UNIT 3To solve sumsTo substituteTo work out terms in numbers intoTo compare ratios.To find quantities using ratios. To convertTo work outEstimate the mean and range form a grouped brackets.ToI factorise algebraicformulae.To rearrangeexpand the product of two brackets.To use the difference of solve equationsformulae.To solve sums on linearof two brackets.To use the difference of factorise quadratics of the form ax <sup>2</sup> +bx+cuse the difference of direct proportionsolve real - life problemsmodal class and the group containing the median.ToIVIT 5AnglesUNIT 5UNIT 5Angles and TrigonometryUNIT 6Revision (12)I to use angleTo solve problemsTo use trigonometricTo find the gradientReinforce all the concents tauebt and
Place value and estimating. Zero, numbers in standard fractional indices. To wite a number in standard form. <b>UNIT 3</b> <b>UNIT 3</b> <b>UNIT 3</b> <b>UNIT 3</b> <b>UNIT 3</b> <b>UNIT 3</b> <b>UNIT 5</b> <b>Angles</b> and interpreting and polygons. To plot set requency polygons. To plot set requency polygons. To plot set requency polygons. To plot set redusto <b>use</b> the dimer of the interpreting and interpret im and interpret plot and interpret plot and interpret plot and interpret set redusto <b>use</b> the duiter <b>use</b> the duiter <b>us</b>	To solve sumsTo substituteTo work out terms in risolve sumsTo compare ratios. To find quantities using ratios. To convertTo work outEstimate the mean and range form a grouped form a grouped form a grouped form a grouped formulae. To rearrangeTo work out terms in Fibonacci like sequences. To expand the product of two brackets. To use the difference of two squares. To factorise quadratics and numericalTo work out numbers into formulae. To solve sums on linearEstimate the mean and range formulae. To of two brackets. To use the difference of factorise quadratics of the form ax <sup>2</sup> +bx+cTo compare ratios. To find quantities using ratios. To convertTo work out percentage and measures. To use involving percentages.Estimate the mean and range from a grouped form a grouped decrease. To solve real - life problemsUNIT 5AnglesUNIT 5Angles and TrigonometryUNIT 6 Graphs (6)To concents taught andUNIT 5Angles and TrigonometryTo use trigonometric.To find the gradientReinforce all the concents taught and
UNIT 3UNIT 3UNIT 5Angles and TrigonometryUNIT 5Angles and TrigonometryUNIT 5Angles and TrigonometryInterpreting and representingInterpreting and representingInterpreting and representingInterpreting and representing dataUNIT 5Angles and TrigonometryUNIT 5Angles and TrigonometryUNIT 6Construct 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 graph. To use the line of best fit to predict values.To use angle properties of triangles, quadrilater al and exterior angle of triangle. To calculate the sum of the interior angles of a polygon.To use the sum of trigonometric ratios. To find the lengths and angles of a polygon.To solve problems the orem. Introduction of trigonometric ratios. To find the lengths and angles of some angles.UNIT 5Angles and Trigonometry To use trigonometric ratios. To is the interior angles of a polygon.To use the line of best fit a polygon.Reinforce discuss the summative theorem. Introduction of trigonometric ratios. To find the lengths and angles of some angles.To find the gradient and Trigonometry trigonometric ratios. To find the equations ax+by+c. To find the equation of a line given its gradient and one point.	UNIT 5     Angles     UNIT 5     Angles     UNIT 5     Angles       and Trigonometry     Angles and     and Trigonometry     Graphs (6)     Revision (12)       (6)     Trigonometry     Contd (6)     To use trigonometric.     To find the gradient     Reinforce all the concepts taught and
Interpreting and representingInterpreting and representing dataInterpreting a	and Trigonometry (6)     Angles and Trigonometry     and Trigonometry Contd (6)     Graphs (6)       To use angle     To solve problems     To use trigonometric     To find the gradient     Reinforce all the concepts taught and
Construct and use frequency polygons.To plot and interpret time series graphs.To use trends to predict what might happen in the future.	To use angle To solve problems To use trigonometric. To find the gradient Reinforce all the concepts taught and
	properties of triangles,quadrilater al and exterior angle of triangle. To tabe anglementary involving Pythagoras theorem. Introduction of trigonometric ratios. To find the lengths and angles of a polygon. Introduction of triangle. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of the interior angles of a polygon. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of trigonometric ratios. To find the lengths and angles in a right angled triangle. Introduction of trigonometric ratios. Introduction of trigon
YEAR 9     WEEK 1     WEEK 2     WEEK 3     WEEK 4     WEEK 5     WEEK 6     WEE	WEEK 3     WEEK 4     WEEK 5     WEEK 6     WEEK 7     WEEK 8
UNIT 6UNIT 6UNIT 7AreaUNIT 7AreaUNIT 8UNITGraphs ContdGraphs Contd (6)and volume (5) +Area andand volume ContdTransformations andTransformations andTransformations and(6)Assessment 1Volume(6)Assessment 2Constructions (5) +s and	UNIT 7 Area UNIT 7 UNIT 7 Area UNIT 8 UNIT 8 UNIT 8 UNIT 10 and volume (5) + Area and and volume Contd Transformations and Transformation Probability (6)
To draw and To draw and interpret To find the perimeter and area time graphs. To find the calculate average coordinates of the midpoint of a line volumes and volume and surface volume volumes and vol	Assessment 1 volume (6) Constructions (5) + s and Contd(6) Assessment 2 Constructions

Term 2-	distance - time graph.To understand velocity - time graphs.To find acceleration and distance from velocity - time graphs.	segment.To find the gradient and length of a line segment.To find the equations of lines parallel or perpendicular to the given line.	surface areas of prisms.To convert between metric units of area.	measurement. To calculate the area and circumference/ perimeter of a circle,semicircles and quarter circles.To calculate arc lengths angles	area of a pyramids and cones.	and negative scale factors about a centre of enlargement.	Construction of angle bisector and perpendicular bisector.To draw a locus.Use loci to solve problems	Probability.Indep endent events.To draw and use probability tree diagrams.
	UNIT 9 Find the roots of	UNIT 9 Solve simple	UNIT 9 Solve inequalities and	UNIT 6 Draw quadratic	UNIT 6 Draw graphs of cubic	UNIT 15 Solve simultaneous	Revisi Reinforce all the con	on(12) ncepts taught and
Term 2- block 2	quadratic functions.Rearra nge and solve simple quadratic equations. Solve more complex quadratic equations. Use the quadratic formula to solve a quadratic	simultaneous equations. Solve simultaneous equations for real-life situations. Solve linear simultaneous equations where both equations are multiplied.	show the solution on a number line and using set notation.	graphs.Solve quadratic equations using graphs. Identify the line of symmetry of a quadratic graph.	functions. Solve cubic equations using graphs.	equations graphically. Represent inequalities on graphs. Interpret graphs of inequalities.	discuss the revision final exam.	worksheet for the

### 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
	Unit 2.6 Algebra	Unit 9 Equations and	Unit 15 Equations	Unit 15 Equations	Unit 15 Equations			Unit 12 Similarity
	(4))Unit 9	inequalities(6)	and Graphs(4)	and Graphs(6)	and Graphs(4) +	Unit 12 Similarity and	Unit 12 Similarity	and
	Equations and		+Assessment 1		Assessment 2	congruence(6)	and congruence(6)	congruence(6)
-	.Find the nth term	Solve quadratic	Recognise and draw	Recognise and	To draw cubic and	To show that two	To use the ratio of	Use the link
3lock	of a quadratic	equations using	quadratic functions.	draw quadratic	reciprocal	triangles are	corressponding	between linear
	sequence	completing the square,	Find approximate	functions.	graphs.Interpret linear	congruent.To know the	sides to work out	scale factor and
Щ. 	(2.6).Solve	word problems on	solutions to quadratic	Find approximate	and non linear real life	conditions of	scale factors.To	area scale factor to
<b>2</b>	quadratic equations	solving.(9.3)	equations	solutions to	graphs.( 6.7& 6.8)	congruence.To prove	find missing	solve problems.
Ter	by factorisation,		graphically.(6.6,15.3-	quadratic equations		shapes are congruent.To	lengths on similar	Use the link
	use the quadratic		15.4)	graphically.(6.6,15.		solve problems involving	shapes	between scale
	formula			3-15.4		congruence(12.1-12.2)	(12.3-12.4 till Q9	factors for length,
	(9.1,9.2)							area and volume to
								solve problems
					Unit 16 Circle			
	Equations and	Equations and	Equations and	Unit 16 Circle	theorems (Continue)	Unit 16 Circle theorems		
	inequalities (6)	inequalities (6)	inequalities (6)	theorems(6)	(6)	(Continue) (6)	Revision(12)	
	Solve linear and	To solve linear and	To Solving linear	Understand about	Understand, prove and	Understand, prove and	Reinforce all the con	ncepts taught and
	quadratic	quadratic simultaneous	inequalities (9.7).	tangents at a point	use facts about cyclic	use facts about cyclic	discuss the workshe	ets for first
	simultaneous	equations graphically.(	Solving inequalities	and from a point.	quadrilaterals and	quadrilaterals and	summative exam	
7	equations	15.1)	graphically(15.2	Prove and use facts	alternate segment	alternate segment		
ock	algebraically (			about angles	theorem.Solve angle	theorem.Applying circle		

Term 1- Blo	9.6)			subtended at the centre and the circumference, angle in a semicircle and angles subtended at the circumference of a circle( 16.1,16.2	problems using circle theorems. equation of the tangent to a circle at a given point.( 16.3,16.4)	theorems.( 16.5)		
YEAR 10	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	Vectors and geometric proof (6) Understand and use vector notation. Calculate using vectors and represent the solutions graphically. Calculate the resultant of two vectors.	Vectors and geometric proof (6) Solve problems using vectors. Use the resultant of two vectors to solve vector problemsExpress points as position vectors	Vectors and geometric proof (6) Prove lines are parallel. Prove points are collinear Solve geometric problems in two dimensions using vector methods. Apply vector methods for simple geometric proofs.	Further statistics (4) Assessment 1 Understand simple random sample and stratifi ed sample. Draw and interpret cumulative frequency tables.	Further statistics (6) Work out the median, quartiles and interquartile range from a cumulative frequency diagram. Draw and interpret box plots. (14.1 - 14.3	Further statistics (4)+ Assessment 2 Draw and interpret box plots. (14.1 - 14.3Draw and interpret box plots. (14.1 - 14.3	Probability(6) Draw and use tree diagrams without replacement. Use two-way tables to calculate conditional probability	Probability(6) (contd) Draw and use tree diagrams without replacement. Use Venn diagrams to calculate conditional probability. Use set notation
Term 2- block 2	Unit 13 More Trigonometry(6) Find the area of a triangle and a segment of a circle. Use the sine rule to solve 2D problems. (13.5)	Unit 13 More Trigonometry(6) Use the sine rule to solve 2D problems. (13.5)Use the cosine rule to solve 2D problems.(13.6)	Unit 13 More Trigonometry(6) Use the cosine rule to solve 2D problems. Solve bearings problems using trigonometry. (13.6	Multiplicative reasoning(6) Find an amount after repeated percentage changes. growth and decay, rates.	Multiplicative reasoning(6) .Convert metric speed measures. Compound measures.	Multiplicative reasoning(6) Solve problems involving compound measures. Use relationships involving ratio. Use direct and indirect proportion	<b>Revision(12)</b> Reinforce all the condiscuss the workshe revision topics of ye	ncepts taught and ets including ar 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
	Unit 13More	More	More	Unit19Proportion	Unit 13 More		
	Trigonometry(7)	Trigonometry(contd)	Trigonometry(contd)	and Graphs(6)	Trigonometry(6)	Unit6Graphs(5)	Unit 19 Proportion and Graphs(8)
	Use upper and	Solving problems in 3D	Graphs of sine, cosine	Translating,	Reflecting, translating	D/T, V/T and More real	Calculate the gradient of a tangent at a
<b>k</b> 1	lower bounds in		and tangent functions.	Reflecting and	and stratching	life graphs	point, Estimate the area under a non
ocl	calculations,		Assessment - 1 Unit	Stretching graphs	Trigonometric curves,		linear graph. Assessment 3
B	Calculating areas		13 and Revision	of functions	Solve equations.		

Term 1-	and the sine rule, The cosine rule and 2D trigonometric problems		topics Unit 5		Assessment - 2 Transformation			
Term 1- Block 2	Unit 15 Equations and graphs(5) To find an accurate root of a quadratic and cubic equation by using iterative process. Assessment - revision unit 9 and unit 15	Unit 14 Further Statistics(5) Sampling, cumulative frequency, box plots	<b>Further Statistics(5)</b> Drawing and interpreting cumulative frequency curve, Histograms, comparing and describing population Assessment revision units - 1,2,4,	Unit 17More Algebra(5) Algebraic fractions, surds, solving algebraic fraction equations, functions	Unit11Multiplicative Reasoning(5) Growth, decay, compound measures, ratio and proportion	Unit 7Area and Volume (5) Prisms, circles, sectors of circles, cylinders and spheres, pyramids and cones	<b>Revision</b> Reinforcing all the c discussion of past pa	oncepts done and apers.
YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2- Block 1	Unit16Circle <u>Theorems(5)</u> To prove and apply all the circle theorems	Unit18Vectors and Geometric Proof(5) Vector Arithmetic, Parallel and collinear vectors, Solving geometric problems Assessment 1	Unit10Probability(5) Mutually exclusive, Independent events, Experimental probbaility, conditional probability, venn diagrams and set notation	Unit12Similarity and Similar , Congruent triangles,	Similarity and Congruence(5) similarity in 3D shapes. Assessment 2	Unit3Interpreting and representing data (5) Time series, scatter diagrams, line of best fit, averages and range	Unit8Transforma tion and Reflection, Translation, enlargement and Rotation, Bearings and scale drawings	Transformation and Constructions Constructions and loci
Ferm 2- block 2	<b>Revision</b> Reinforcing all the c Disussion of sample papers.	concepts taught.						

### 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	
	Algebraic Expressions(3)	Quadratics(3)	Quadratics(1) & Equations and	Equations and inequalities(3)	Graphs and Transformations	Graphs and Transformations (2)	Straight Line Graphs(2) &	Cirlces(3)
	Expanding	Solving Quadratic	Finding the nature	Representing	Sketching cubic	Translation of graphs,	Parallel and	Intersection of
	Brackets and Equations by (i) of root		of roots using	simultaneous	graphs, Sketching	Stretching and	Perpendicular	straight lines and
	Factorising,	Factorising (ii)	Discriminant,	equations on	Reciprocal Graphs,	reflecting Graphs,	lines, Length and	circles, Use
	Index Laws,	Quadratic Formula,	Modelling with	graphs, Solving	Sketching Quartic	Transforming functions	area, Modelling	tangent and

n 1- Block 1	Negative and Fractional Indices, Surds and Rationalising denominators	Completing the square, Functions and Sketching Quadratic graphs	quadratics, Solving Linear simultaneous equations, Solving Quadratic Simultaneous equations	Linear Inequalities, Solving Quadratic inequalities, Inequalities on	Graphs, Sketching curves to find point of intersection	& Gradient and Equation of the line	with straight lines & Midpoint and Perpendicular Bisectors, Equation of a circle	Chord Properties, Circles and triangles
Tern	Data collection(3)	Measures of location and spread(3)	Measures of location and spread(3)	Measures of location and	Representation of data(3)	Representation of data(3)	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
	Algebraic Methods(3)	Algebraic Methods(1) &	Binomial Expansion(2) &	Ratios(3)	I rigonometric Identities and	I rigonometric Identities and	Revision	Revision
1-Block 2	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		
Term	Probability(3)	Probability(3)	Probability(3)	Statistical Distributions(3)	Statistical Distributions(3)	Statistical Distributions(3)	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
	Vectors(3)	Vectors(2) & Differentiation(1)	Differentiation (3)	Differentiation (3)	Differentiation (3)	Integration(3)	Integration(3)	Integration(3)
erm 2- Block 1	Vector notation, Representing as column vectors, Magnitude and direction and Position vectors. Hypothesis Testing(3)	Solving geometric problems, modelling with vectors & Gradient of curve, Finding the derivative, Differentiating xn Hypothesis Testing(3)	Differentiating quadratics, functions with two or more terms, Tangents and normals Hypothesis Testing(3)	decreasing functions, Second order derivatives, Stationary points, Maximum and minimum points Regression, Correlation and	Sketching gradient functions, Modelling with differentiation. Regression, Correlation and	Integrating xn, Indefinite integrals, Finding functions using integration Conditional Probability(3)	Definite integrals, Areas under the curve, Areas under the x axis Conditional Probability(3)	Area between curve and line & Exponential Functions Conditional Probability(3)
F	Test Statistic, Null and Alternative Hypothesis and Finding Critical	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

	v atues.							
YEAR 12	2 WEEK 1 WEEK 2 W		WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	Exponentials and Logarithms(3)	Exponentials and Logarithms(3)	Exponentials and Logarithms(3)	Algebraic Methods(3)	Algebraic Methods(3)	Radian Measure(3)	Revision	Revision
Block 2	Graph of y = ex, 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.		
rm 2-	Conditional Probability(3)	Normal Distribution(3)	Normal Distribution(3)	Normal Distribution(3)	Normal Distribution(3)	Normal Distribution(3)	Revision	Revision
Ter	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
	Methods(2) &	Functions and graphs(3)	Functions and graphs(3)	graphs(1) &	Sequences and series(3)	Sequences and series(3)	Trigonometric Functions(3)	Functions(1) &
Term 1- Block 1	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	Inverse trigonometric functions & Using Angle Addition Formula and Double angle
	Modelling in Mechanics(3)	Constant Acceleration(3)	Constant Acceleration(3)	Forces and Motion(3)	Forces and Motion(3)	Forces and Motion(3)	Using Graphs of Sec x, Cosec x and Cot x in Variable Acceleration(3)	formula. Variable Acceleration(3)
	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

a 1- Block 2	Trigonometry and modelling(3)	Trigonometry and modelling(3)	Parametric Equations(3)	Parametric Equations(3)	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.		
Ten	Moments(3)	Moments(3)	Moments, Forces(2) and Friction(1)	Forces and Friction(3)	Forces and Friction(2), Projection(1)	Projectiles(3)	Projectiles(3)	Projectiles(1) & Module Test(2)
	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 Methods(3)	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) & Module Test(2)
	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
	Revision	Revision		[]				
Block 2								

ırm 2-	Revision	Revision			
Te					