St. Mary's Catholic High School (2017-2018)

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	Jr1/1 & 2 **Numerals 1 to 20** Read and write numerals from 1 - 20. Counting objects upto 20. Missing numbers. Number names upto 10.		Jr1/3 **Number bonds of 4 and 5** Completing additions using number bonds of 4 and 5	Jr1/4 **Number bonds of 5 and 6** Completing additions using number bonds of 5 and 6	Jr1/5 **Number bonds of 10** Writing addition bonds to 10.	Jr1/6 **Doubles to 5** Identify doubles of numbers upto 5 and begin to add numbers to find the doubles	Jr1/7 **Adding 1, 2 and 3** Write the next two numbers and complete the addition	Jr1/8 **Reinforcement**
Term 1	Jr1/9 **Adding 1 more/1 less** Writing numbers one more or one less than any given number	Jr1/10 **2D Shapes** Identify 2D shapes and properties,straight and curved sides, symmetry with 2D shapes and venn diagram	Jr1/11 **Ordering/Comparing** Ordering, Comparing and writing number between	Jr1/12 **Estimation/Ordinals** Estimating a number of objects, Identifying the teen numbers, Writing the ordinals in the correct order	Jr1/13 **Pairs to 5 and 6/ Time** Make pairs with total of 5 and 6. Reading time to 0'clock and half past.	Jr1/14 **Pairs to 7 and 10/Subtracting** Complete the addition to make 7 and 10. Subtracting numbers from 5, 6 and 10.	Jr1/15 **Problems using** Subtracting numbers from 10. solving problems using number bonds	Jr1/16 **Reinforcement**

YEAR 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	Jr1/17 **omparing length/ Counting o** Can use language of position and direction,Comparing length,Complete the addition counting on and back by 1,2 and 3	Jr1/18 **Recognising/Adding Coins** Identifying coins, Adding up coins to find the total.	Jr1/19 **1 more/1 less/2 more/ 2 less** Finding out numbers that are one more or one less/two more or two less than any given numbers	Jr1/20 **ding and subtracting bonds to** Completing the addition and subtraction sentences to find bonds to 10	Jr1/21 **Bonds to 5,6 and 7/Counting** Complete the addition and subtraction to find fonds to 5, 6 and 7	Jr1/22 **3D Shapes/Days and Months of** Recognising 3D shapes and its properties, Sorting of shapes, Write the days of the week in the correct order,Completing the months of the year	Jr1/23 **Odd and Even numbers** Identifying odd and even numbers upto 100.	Jr1/24 **Reinforcement**
Term 2	Jr1/25 **Counting in 2's, 5's and 10's** Counting on and back in 2's, 5's and 10's	Jr1/26	Jr1/27 **Quarter/half of shapes/Half** Identifying half and quarter of shapes, Finding out half of numbers	Jr1/28 **Doubles to 10/Pairs to 20** Add to find the doubles.Find the numbers that pairs to 20	Jr1/29 **O'clock/Half past/Quarter** Read and write the correct time to o'clock, half past, quarter to and quarter past.	Jr1/30 **10 more/10 less/Capacity** Adding and subtracting 10 to find the correct answer	Jr1/31 **Revision**	Jr1/32

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	Y 2/1	Y 2/2	Y 2/3	Y 2/4	Y 2/5	Y 2/6	Y 2/7	Y 2/8
	Estimate and count a number of objects up to 100; locate numbers on 0–100 beaded lines and 1–100 squares; compare pairs of numbers and find a number in between; order three numbers, order 2-digit numbers	Revise number bonds to 6, 7, 8, 9 and 10; know number bonds to 10 and begin to learn related subtraction facts; know multiple of 10 number bonds to 100, learn bonds to 20, rehearse number bonds to 10 and 20 using stories	Double numbers to double 15, use patterns in number bonds, use number bonds to solve more difficult additions, to subtract and to solve additions bridging 10	Sort 2D shapes according to symmetry properties and right angles using Venn diagrams, recognise squares, rectangles, circles, triangles, ovals and hexagons,sort shapes and objects using a two-way Carroll diagram. Recognise which shapes tessellate.	Begin to mark numbers on a number line, compare and order numbers, using signs, work systematically to find all possible inequalities, find 1 and 10 more or less using the 100-square	Know and use ordinal numbers; understand that 2-digit numbers are made from some 10s and some 1s; Understand place value using 10p and 1p coins; find and record all possible amounts using 10p and 1p coins;	Add and subtract 10, 20 and 30 to any 2-digit number; Add and subtract 11, 21, 12 and 22 to any 2-digit number; Solve addition and subtractions by counting on and back in 10s then in 1s; solve addition and subtraction problems	Understand and use terms and vocabulary associated with position, direction and movement; Measure lengths using uniform units; Begin to measure in centimetres and metres
Term 1	Y 2/9	Y 2/10	Y 2/11	Y 2/12	Y 2/13	Y 2/14	Y 2/15	
	Add and subtract 2-digit numbers; Solve addition and subtraction problems using concrete and pictorial representations; Add near doubles to double 15; Add several small numbers spotting near doubles or pairs to 10, etc.	Count in 2s, 5s and 10s from zero; Count in multiples of 2p, 5p and 10p; Number sequences of 2s, 5s and 10s; Find the totals of coins and ways to make an amount; Use coins to make given amounts of money	Place value and ordering 2-digit numbers; place value additions and subtractions; add and begin to subtract 9, 10 and 11	Revise number bonds to 10; begin to bridge 10; subtract from 10 and 20; use number facts to find the complement to ten; find a difference between two numbers by counting on	Rehearse complements to multiples of 10; find differences using a number line; find change from 10p and 20p, and from £10 to £20 by counting up and using bonds to 10 and 20; add two 2-digit numbers by counting on	Recognise and identify properties of 3D shapes; sort according to properties including number of faces; name the 2D shapes of faces of 3D shapes; tell the time to the nearest quarter on analogue and digital clocks	Order 2-digit numbers and revise the < and > signs; locate 2-digit numbers on a landmarked line and grid; round 2-digit numbers to nearest 10; estimate a quantity <100 within a range	Revision and Assessment First Term Exam

YEAR 2	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
	Y 2/16	Y 2/17	Y 2/18	Y 2/19	Y 2/20	Y 2/21	Y 2/22	Y 2/23
	Revise doubles and corresponding halves to 15; find half of numbers to 30; Recognise $^1/_2$, $^1/_4$, $^1/_3$ and $^2/_3$ of shapes; place $^1/_2$ on a number line; count in $^1/$	Count in 2s, 5s and 10s to solve multiplication problems; introduce the × sign; record the 2, 5 and 10 times-tables; write multiplications to go with	Tell the time to the nearest quarter of an hour using analogue and digital clocks; understand the relationship between seconds, minutes and hours and use a tally	Revise 2, 5 and 10 times-tables; revise arrays; multiply by 2, 3, 4, 5 and 10; arrange objects into arrays and write the corresponding multiplications; write	Recognise all coins, know their value, and use them to make amounts; recognise £5, £10, £20 notes; make amounts using coins; write amounts using £.p notation; add two amounts of	Locate, order and compare 2-digit numbers on 0-100 number lines and on the 1-100 square; use signs; introduce numbers 101 to 200 and count in 100s to 1000; add 2-digit numbers by	Use doubles and number bonds to add three 1-digit numbers; find complements to multiples of 10; understand subtraction as difference and find this by	Add and subtract 1-digit numbers to and from 2-digit numbers; add 2-digit numbers using 10p and 1p coins (partitioning, answers less than 100); add 2-digit numbers using

Term 2	number line; count in $^1/_2$ and $^1/_4$; understand and write mixed numbers	arrays, rotate arrays to show they are commutative	chart; interpret and complete a pictogram or block graph where one block or symbol represents one or two things	divisions as multiplications with holes in and use the ÷ sign	pences; add two amounts of money, beginning to cross into £s	counting on in 10s and 1s; subtract 2-digit numbers by counting back in 10s and 1s	counting up; find small differences either side of a multiple of 10	place-value cards (partitioning, answers more than 100)
Term 2	Y 2/24	Y 2/25	Y 2/26	Y 2/27	Y 2/28	Y 2/29	Y 2/30	
	Measure weight and capacity using standard or uniform non-standard units; draw a block graph where one square represents two units; weigh items using 100g weights using scales marked in multiples of 1kg or 100g; measure capacity in litres and in multiples of 100ml	Double multiples of 10 and 5 (answers less than 100); double 2-digit numbers ending in 1, 2, 3 or 4 (answers less than 100); find a quarter of numbers up to 40 by halving twice; begin to find 3/4 of numbers; find 1/2 1/4 and 1/3 of amounts (sharing)	Begin to understand that addition undoes subtraction and vice versa; add three or more small numbers using number facts; record amounts of money using £·p notation including amounts with no 10s or 1s; find more than one way to solve a money problem	Count in 3s; recognise numbers in 3 times-table; understand that multiplication is commutative and division and multiplication are inverse operations; solve divisions as multiplications with a missing number; count in 2s, 3s, 5s and 10s to solve divisions and solve division problems	Measure and estimate lengths in centimetres; tell the time involving multiples of 5 minutes past the hour and 5 minutes to the hour; tell time to 5 minutes; begin to say the time 10 minutes later	Partition to add two 2-digit numbers; find the difference between two 2-digit numbers; Addition and subtraction of 2-digit numbers using borrowing; multiply two numbers using counting in steps of 2, 3, 5 and 10; solve division problems by counting in steps of 2, 3, 5 and 10	Compare two 2-digit numbers and find bonds to 100 using thermometers; revise place value in 2-digit numbers, numbers between 100 and 200, and 3-digit numbers (including zeros in the 10s and 1s places)	Revision and Assessment 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	G3M1	G3M2	G3M3	G3M4	G3M5	G3M6	G3M7	G3M8
	Number and Place value/	**Mental addition and**	**Mental addition and**	**Mental multiplication and**	**Doubles to double 30 and**	**Time/Calender**	**3-D shapes/ Placing**	**Round to the nearest 10/100**
	Read and write numbers up to 1000 in numerals and in words. Recognise place and place value of 3-digit numbers, comparing and ordering numbers, partitioning of 3-digit numbers.	Multiples of 5 and 10 bonds to 100. Addition using bonds to 10, 20 and doubles, inverse operation.	Adding or subtracting multiples, near multiples of 10 to or from 2-digit numbers.	Multipyig and dividing by 3, 4, 5 and 10. Understand that division is the inverse of multiplication.	Doubling numbers to 30 and halving even numbers to 40. Recall doubles of numbers 1 to 20, derive the related halves and apply reasoning skills to choose numbers that will give the longest halving chains.	Telling time to quarter hour on analogue, digital clocks including using Roman numerals from I to XII. Know the number of days in each month, year and leap year	Recognise 3D shapes in different orientations and describe them. Finding and placing numbers on a number line.	Round to the nearest 10. Finding numbers on a number line and rounding to the nearest 100.
	G3M9	G3M10	G3M11	G3M12		G3M13	G3M14	
	Doubles upto double 50	**Fractions of shapes and**	**Addition and subtraction**	**Money**		**Measuring length/ capacity**	**Mental**	**Revision**
	Double 2-digit numbers to 50 and halve 2-digit numbers up to 100; odd numbers to 30.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators, e.g. 1/2 ,	Begin to add numbers with up to 3 digits, using formal written methods of columnar addition (1s greater than 10s or 10s greater than 100s).	Adding amounts of money. Solve number and practical problems using place value to add and subtract amounts of money.		Measure and compare lengths; (m/cm/mm) and capacity (ml/L)	Understand that a remainder is the amount left over after a division and begin to understand the patterns of	

Term 1		1/3sand 1/4 s of multiples of 2, 3 and 4, using visual representations.					remainders.	
YEAR 3	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	G3M15	G3M16	G3M17	G3M18	G3M19	G3M20	G3M21	G3M22
	Number and place value/	Multiplying and dividing	Fractions	Recognising angles/ 2-D	Perimeter/ Angles and turns	Subtracting money from £2,	Time and Time intervals	Multiplying multiples of 10/
	Round 3- digit numbers to the nearest 10 and 100.	Recall and use multiplication and division facts for the 4 and byheart 8 times multiplication tables. Sort multiples of 2, 3, 4, 5 and 10 using Venn diagram.	Compare and order unit fractions, and fractions with the same denominators/Add and subtract fractions with the same denominator within one whole/Mark and identify simple fractions on 0 to 1 lines.	Identify and draw 2D shapes, and describe their properties, regular and irregular polygons; quadrilaterals and different types of triangles. Use a right angle tester to identify right angles, angles that are greater than or less than a right angle.	Begin to measure the perimeter of simple 2D shapes and rectilinear shapes. Recognise the relationship between angles and turns.	Add and subtract amounts of money to give change, using both £ and p in practical contexts. Find change from £10, £5, £2.	Calculate time intervals and compare durations of events. Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours.	Multiply and divide multiples of 10 by 3, 4 and 5. Begin to use the grid method to multiply 2-digit numbers by 1-digit numbers.
Term 2	G3M23	G3M24	G3M25	G3M26	G3M27	G3M28	G3M29	
	Vertical multiplication /	Doubling and halving/	Multiplying and dividing	Handling data	Measuring	Parallel,	Problem solving	Revision
	Write and calculate mathematical statements for multiplication using multiplication tables, including 2-digit numbers. Using mental and progressing to formal written methods, for example using grid methods to multiply 2-digit numbers by 3, 4, 5, and 8.	Relating doubles and halves to multiplying and dividing by 2.	Begin to make generalisations and solve problems, including missing number problems and word problems, involving 2-digit by 1-digit multiplication or division.	Interpret and present data using bar charts, pictograms and tables. Solve 1-step and 2-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts, pictograms and tables.	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (L/ml).	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	Choose an appropriate strategy (mental or written) to solve problems involving different operations(addition, subtraction, multiplication, division, fractions, doubles and halves, pound and pence and measures.	

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
	Numbers	Numbers	Numbers	Numbers	Numbers	Fractions	Fractions	Measurement
	Addition and subtraction	Number and place value	multiplication and division	Written addition and	multiplication and division	Fractions, ratio and proportion	Fractions	Time

Term 1	Finding pairs with a total of 100	Read, write 4-digit numbers and know what each digit represents;	Learn × and ÷ facts for the 6 and 9 times-table and identify patterns; multiply multiples of 10 by single-digit numbers; multiply 2-digit numbers by single-digit numbers (the grid method); find fractions of amounts	Add two 3-digit numbers using column addition; subtract a 3-digit number from a 3-digit number using an expanded column method	Double 3-digit numbers and halve even 3-digit numbers; revise unit fractions	identify equivalent fractions; reduce a fraction to its simplest form; count in fractions (each fraction in its simplest form)	Use mental multiplication and division strategies; find non-unit fractions of 2-digit and 3-digit numbers; find equivalent fractions and use them to simplify fractions (halves, thirds, quarters), learn the 7× table.	Tell and write the time to the minute on analogue and digital clocks; calculate time intervals;
Term 1	Numbers	Decimals and percentages	Decimals and percentages	Measurement	Numbers	Numbers	Numbers	
	Rounding numbers	Decimals	Decimals	Length	Addition and subtraction	Written multiplication and	Written multiplication and	
	Place 4-digit numbers on landmarked lines; 0–10 000 and 1000–2000; round 4-digit numbers to the nearest 10, 100 and 1000; subtract 3-digit numbers using the expanded written version and the counting up mental strategy	Compare numbers with up to 2 decimal places, identify the valueof the digits as ones, tenths and hundredths, and round decimal numbers to the nearest whole.	Recognise that tenths and hundredths arise when dividing by 10 and 100; multiply decimal numbers by10 and 100, Count up and down in tenths and hundredths.	Measure in metres, centimetres and millimetres; convert lengths between units; record using decimal notation Solve simple measure problems	Mentally add and subtract to/from 4-digit and 3-digit numbers using place-value; count on and back in multiples of 10, 100 and 1000; count on in multiples of 25 and 50; add and subtract multiples of 10 and 100 to/from 4-digit numbers	Use the grid method to multiply 3-digit by single-digit numbers and introduce the vertical algorithm; begin to estimate products; divide numbers (up to 2 digits) by single-digit numbers with no remainder, then with a remainder	Divide 2-digit and 3-digit numbers by 1-digit numbers using place value and mental strategies; identify factor pairs and use these to solve multiplications and divisions with larger numbers	Revision
YEAR 4	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2	Geometry	Geometry	Geometry	Measurement	Measurement	Measurement	Measurement	Measurement
	Angles and lines	2D shapes	Symmetry	Mass and capacity	Money	Time	Perimeter	Area
	Recognise and compare acute, right and obtuse angles;	Sort 2D shapes according to their properties; draw shapes with given properties and explain reasoning.	Identify perpendicular and parallel lines, recognise and draw line symmetry in shapes; ; draw the other half of symmetrical shapes	Convert multiples of 100 g into kilograms; convert multiples of 100 ml into litres; read scales to the nearest 100 ml; estimate capacities;	Add amounts of money using written methods and mentally using place value and number facts; choose to add and subtract using the appropriate strategy: mental or written;	Tell the time on a 24 hour clock, using am and pm correctly; convert pm times to 24 hour clock and vice versa; use 24 hour clock in calculating intervals of time;	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	Find the area of rectilinear shapes.
Term 2	Number and place value	Number and place value (NPV);	Geometry	Statistics	Numbers	Numbers	Numbers	
	Negative numbers	Roman Numerals	Coordinates	Handaling data	Percentages	Multiplication and division	Addition and subtraction	
	Read, write and compare 5-digit numbers; read, use and compare negative numbers in the context of temperature	Recognise and read Roman numerals to 100; begin to know the history of our number system including 0;	Use coordinates to draw polygons; find the coordinates of shapes after translation; Describe movements between positions as translations ofa unit left/right and up/down	Draw and interpret bar charts and pictograms; draw line graphs and understand that intermediate points have meaning	Understand percentages, equivalene between percentages and fractions and finding percetages of amounts.	Learn 11 and 12× tables; use a vertical written method to multiply 3-digit numbers by 1-digit numbers; use a written method to multiply 3-digit numbers, multiply 2-digit and 3-digit numbers by 1-digit numbers	Solve written addition of two 4-digit numbers; add amounts of money (pounds and pence) using column addition; solve 4-digit minus 4-digit and 4-digit minute 3-digit subtractions using written column method	Revision

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**
	GR5/1		**GR5/2**	**GR5/3**		**GR5/4**	**GR5/5**	
	Number Skills(1)		**Geometry(1)**	**Number Skills(2)**		**Geometry (2)**	**Number Skills(3)**	

Term 1	Place Value of 6-digit numbers, Compare, order & rounding 5-digit numbers, Add and Subtract 4-digit numbers with multiplies of 10 & counting method		Measure & Draw angles in degrees of acute, obtuse and reflex.Angle in a line and around a point.	Multiply 4 digit*2 digit and Divide 4 digit/2 digit, Dividing by 2, 3, 4, 5, 9 and 10.		Draw Circles,Identify radius and circumference, Relate angles to turns	Comparing & finding equivalent fractions, Proper,Improper and mixed fractions and conversions	
Term 1	**GR5/6**	**GR5/7**		**GR5/8**			**GR5**	
	Geometry(3)	**Number Skills(4)**		**Geometry(4)**			**WEEK 15 & WEEK 16**	
	12-hour clock times and 24-hour clock times,Calculate time past & time intervals	3-digit Decimals, Place Value, Rounding and Ordering decimals, Addition and Subtraction of decimals, multiplying and dividing by multiplies of 10.		Units of length, mass, capacity, Identifying 2D &3D shapes, Area and perimeter,Volume and Capacity.			REVISION	
YEAR 5	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	**GR5/9**		**Gr5/10**	**Gr5/11**	**Gr5/12**		**GR5/13**	**GR5/14**
	Number Skills(5)		**Geometry(5)**	**Number Skills(6)**	**Number Skills(6)cont.**		**Number Skills(7)**	**Number Skills(7)cont.**
	Prime numbers,multiplies and factors,Square and cube numbers		Properties of Triangles and polygons, metric and Imperial units	Percentages.Converting to decimals,fraction.	Adding and Subtracting fractions,multiplying proper fractions by whole numbers, comparing fractions.		Ratio and Proportions(not in text book), Dividing the ratios.	Probability
Term 2	**GR5/15**			**GR5/16**		**GR5/17**	**GR5**	
	Geometry(6)			**Number Skills(8)**		**Number Skills(9)**	**WEEK 31 & WEEK 32**	
	Drawing and interpreting Graphs, Scaling, Translations and Reflections			Negative numbers, Roman Numerals, BODMAS, inverse operations		Finding change, add and subtract money	REVISION	

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	Fractions,decimals & Percentages (10)		Algebra (10)		Constructions(10)		Handling Data(5)	Probability (5)
	Learning Objective		**Learning Objective**		**Learning Objective**		**Learning Objective**	**Learning objective**
	Consolidate and extend mental methods of calculation to include decimals,fractions and percentages, solve word problems.		Use letter symbols to represent unknown numbers and variables. Know the meaning of 'term', expression and equation.		Construct all angles including reflex angle, construct triangles(ASA,SAS). Calculate missing angles on a straight line, around a point, in a traingle and in a quadrilateral.		Collecting data and Recording data	Use probability scale with words. Find the probability of equally likely outcomes. Revise the topics done.
Term 1	Sequences & Patterns (10)		Area Perimeter (10)		Transformations(10)		Cordinates and linear graphs (10)	
	Learning Objective		**Learning Objective**		**Learning Objective**		**Learning Objective**	
	Work out Area and perimeter of squares, rectangles and other compound shapes made of squares and rectangles.		Work out Area and perimeter ofsquares, rectangles and other compound shapes made of squares and rectangles.		understand and use the language and notation associated with ratations, translations and reflections.Transform 2-D shapes by simple cominations of rotations, reflections and translations.		Read and plot coordinates in all four quadrants, generate coordinate pairs, that satisfy a simple lenear functions, where y is given specifically in terms of x, recognise straight line graphs parallel to the x- axis and y-axis.	
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AR 6	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	Statistics(10)		Measures(10)		Time (5)		Money(5)	
	Learning objective		**Learning Objective**		**Learning objective**		**Learning objective**	
	To calculate mean, median, mode and range from sets of discrete data and grouped frequency table.		Convert from one unit of measure to another & answer questions about scales,Compare readings from different scales		reading time, analogue and digital clock, time duration.		Conversion of pounds to pence and back, solving money word problems	
Term 2	Ratio Proportion (10)		Shapes(10)					
	Learning Objective		**Learning Objective**		REVISION		PRE MOCK EXAMS	MOCK EXAMS
	Solve simple problemsusing ideas of ratio and proportions,use percentages to compare simple proportions		Show relationships involving Quadrilaterals & polygons,Classify shapes using properties such as parallel & perpendicular,Using Venn diagrams. Properties of 3-D shapes, identifying their nets		Revise Grade 3,4,&5 portion			

YEAR 7 LONG TERM PLAN with CURRICULUM STANDARDS

YEAR7	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	GR7/1	GR 7/2	GR7/3	GR/4	GR7/5	GR7/6	GR7/7	GR7/8
	Unit2.Number Skills(8)	**Contd Number skills**	**Unit3.Equations /formulae**	**Unit7. Equations(3)**	**Unit4-Fractions(7)**	**Contd Unit4-Fractions**	**Unit5-Angles and shapes(1**	**Contd Unit5-Angles and shape**
	Factors,primes and multiples.HCF & LCM.Using directed numbers (2.1 & 2.2)	Squares and square roots.More powers and roots.Simplifying algebraic expressions (2.4,2.5 & 3.1)	Writing algebraic expressions/Using formulae Writing formulae/Brackets and powers (3.2 - 3.5)	Factorising expressions/ Solving one step/two step equations (3.6,7.1 & 7.2)	Working with Fractions/ Addition and subtraction of fractions/Multiplication and division of fraction (4.1 - 4.3)	Working with mixed numbers(all four operations)/Angles and Parallel lines (4.5 & 5.1)	Angles and parallel lines/Triangles/Quadrilaterals (5.1 - 5.3)	Quadrilaterals/Polygons. Geometrical proofs (5.3 & 5.4)
Term 1	GR7/9	GR 7/10	GR7/11	GR7/12	GR7/13	GR7/14	GR7/15	
	Analysing and Displaying	**d Analysing and Displaying**	**t10 Sequences and Graphs**	**ontd Sequences and Graph**	**Unit9. Perimeter,area and vo**	**Unit9. Perimeter,area and vo**	Revision	
	Averages and range, Grouped data (1.2 & 1.3)	More graphs/Pie -charts (1.4 & 1.5) + assessment	Sequences/nth term/pattern sequences (10.1, 10.2 & 10.3)	Coordinates and line segments/straight line graphs (10.4 & 10.5)	Triangles/parallelograms/trapezium/Area and perimeter of compound shapes (9.1 & 9.2)	Properties of 3D solids/Surface area/Volume (cube and cuboid) - (9.3,9.4 & 9.5)	Reinforce all the concepts taught and discuss the worksheets.	

YEAR 7	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	GR7/16	GR7/17	GR7/18	GR7/19	GR7/20	GR7/21	GR7/22	GR7/23
	Unit6.Decimals(5)	**Contd.Decimals(5)**	**Contd.Decimals(5)**	**:8 Multiplicative Reasoning**	**Unit8-Contd Ratios.**	**2- Unit 3.2D shapes and 3Dso**	**ntd Unit 3.2D shapes and 3**	**Contd Unit 3.2D shapes and 3**
	Ordering decimals/Rounding decimals/Addition and subtraction of decimals (6.1 - 6.3)	Multiplication and Division of decimals + assessment (6.4 & 6.5)	Conversion of fractions,decimals and percentages.+assessment (6.6)	Writing ratios/sharing a given ratio/Proportion (8.2 & 8.3)	Direct and inverse proportion/Using the unitary method (8.4 & 8.5)	Surface area of prisms/Volume of prisms (triangular prism only) (3.2 & 3.4)	Circumference and Area of circles/ semicircles/ quadrants (3.4)	Circumference and Area of circles/ semicircles/ quadrants (3.5)
Term 2	GR7/24	GR7/25	GR7/26	GR7/27	GR7/28	GR7/29	GR7/30	
	elta2 Unit8 Probability(1	**Contd probability**		**it 5 Delta2 Transformation**	**Contd Transformations(5)**	**Contd Transformations(5)**	Revision	
	Comparing probabilities/Mutually exclusive events/	Experimental probability/Probability diagrams/ assessment (8.4	Construction of triangles(SAS,SSS.ASA)/Perpendicular bisector/Angle	Describe and carry out Translations/Describe and carry out Reflections (5.1)	Describe and carry out rotations. Enlarge a shape and desribe an	Enlargements a shape using negative scale factor and fractional scale factor (5.3 &	Reinforce all the concepts taught and discuss the worksheets.	

	estimating probability (8.1 - 8.3)	& 8.5)	bisector		enlargement((5.2 & 5.3)	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	**GR8/ 1**	**GR8/ 2**	**GR8 /3**	**GR 8/4**	**GR8/5**	**GR 8/6**	**GR 8 /7**	**GR 8 /8**
	UNIT 1: Factors and powers (D	**UNIT 1: Factors and powers (con**	**UNIT 2 :Working with powers(De**	**UNIT 2 :Working with powers(De**	**UNIT5:Transformations(Delta 2**	**UNIT5:Transformation(contd)(5)**	**UNIT 7: Construction and Loc**	**UNIT 7: Construction and Loci (co**
	Recap decimals. HCFand LCM Powers and roots,prime factors. To find the square root and cube root.	To find the square root and cube root. Powers of 10, Law of indices . Calculating and estimating	Simplifying expressionswith powers and brackets.Use index laws in algebraic calculations.	Write and simplify expressions involving brackets and powers.Factorise an algebraic expression,construct and solve equations.	Describe and carry out translations.To describe and carry out reflections.To describe and carryout rotations.	Enlarge a shape (negative and fractional scale factor)Describe an enlargement	Draw diagrams to scale,construct triangles using ruler and compasses, construct nets of 3D solids using ruler and compasses.	Bisect a line using ruler and compasses, construct perpendicular lines,Draw accurate diagrams to solve problems, draw locus.
Term 1	**GR 8 /9**	**GR 8/10**	**GR 8 /11**	**GR 8 /12**	**GR 8 /13**	**GR 8 /14**	**GR 8 /15**	
	UNIT6:Fractions,Percentage	**Unit 6 (Contd) (5)**	**Unit 8 Probability (Delta 2) (5**	**Unit 4 Real life graphs (Delta**	**Unit 3 2D shapes and 3D solids**	**Unit 3 (Contd)(5)**	**Revision(10)**	
	Convert recurring decimals to fractions and viceversa, Calculate percentages, finding the original quantity before a percetage change	Calculate percentage change, finding simple interest and compound interest. Give reasons for angle sizes using mathematical language. Find the equation of the tangent to a circle at a given point	Finding the probability of mutually exclusive events, Calculate the relative frequency of a value, Use relative frequency to estimate the probability of an event, Probability diagrams	Plot graphs and read values to solve problems, draw and interpret distance time graphs,interpret real life graphs	To find Area and circumfrence of circles, surface area and volume of prisms	To calculate volume and surface area of cyinders, Use pythagoras theorem in right angled triangles.	Reinforce all the concepts taught and discuss the worksheets.	

YEAR 8	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	**GR 8 /16**	**GR 8 /17**	**GR 8 /18**	**GR 8 /19**	**GR 8 /20**	**GR 8/21**	**GR 8 /22**	**GR 8 /23**
	Unit 9 Scale drawings and m	**Unit 9 (contd)**	**Unit 10 Graphs(Delta 2) (5)**	**Unit 10 Graphs(Contd) (5)**	**Unit 1 Powers and roots (Delta**	**Unit 3 Inequalities,equations and**	**Unit 4 Collecting and**	**Unit 4 (Contd)(5)**
	Use and interpret maps, Measure and use bearings,draw diagrams to scale using bearing	Draw diagrams to scale, use and interpret scale drawing, identify conqruent and similar shapes, use conqruency and similarity to solve problems. Apply vector methods for simple geometric proofs.	Plot straight line graphs, finding the y intercept and gradient, Plot the graph using gradient and y intercept.	Finding the equation of a st. line graph, Identify parallel and perpendicular lines and to write equations.	Finding reciprocal of a number, working with negative indices, writing numbers in standard form	Use index laws with zero and negative powers, construct and solve complex equations, changing the subject	Identift sources of primary and seconary data, identify how to reduce bias in sampling and questionnaire,draw and interpret stem and leafdiagrams	Construct and interpret fequency polygons,Estimate mean and range from a grouped frequency table
Term 2	**GR 8 /24**	**GR 8 /25**	**GR 8 /26**	**GR 8 /27**	**GR 8 /28**	**GR 8 /29**	**GR 8 /30**	
	Unit 5 Multiplicative reasor	**Unit 5 (contd)**	**Unit 2 Quadratics (5)**	**Unit 2 (Contd)**	**Unit 7 Accuracy and measures(5**	**Unit 7 (contd)**	**Revision(10)**	
	Recognize data sets that are in proportion, Set up equations to show direct	Workout the length of an arc, find the area of a sector, find the perimeter of a sector.	To find the nth term of an AP and GP, To multiply pairs of brackets, Square a linear	Factorise Quadratic expressions, Solve Quadratic equations.	Solve problems involving rates of change, conversion of units in compound measures,	Understand the effect o rounding, Finding upper and lower bounds.	Reinforce all the concepts taught and discuss the worksheets.	

Term	proportion, Use algebra to solve problems involving direct proportion.	Calculate volume and surface area of compound shapes	expression.		Calculate density and pressure.			

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	GR 9 /1	GR 9/2	GR 9/3	GR 9/4	GR 9/5	GR 9/6	GR 9/7	GR 9 /8
	Number (6)	Number Contd (5) + Assessment(1)	Algebra (6)	Algebra Contd (5) + Assessment(2)	Transformations and Constructions (6)	Transformations Contd (6)	Area and volume (6)	Area and volume Contd (5) + Ast(3)
	Place value and estimating,HCF and LCM. 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 surd. Rationalise a denominator.	To solve sums involving algebraic indices.To factorise algebraic expressions.To solve equations involving brackets and numerical fractions.To substitute numbers into fomulae.	To rearrange formulae.To solve sums on linear sequences.To expand the product of two brackets.To use the difference of two squares.To factorise quadratics of the form ax^2+bx+c.	3D solids.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.To draw a locus.Use loci to solve problems.	To find the perimeter and area of compound shapes.To convert between metric units .To calculate the maximum and minimum possible values of a measurement.	To calculate volumes and surface areas of prisms.To calculate the area and circumference of a circle,semis circles and quarter circles.
Term 1	GR 9 /9	GR 9/10	GR 9/11	GR 9/12	GR 9/13	GR 9/14	GR 9/15 & GR9/16	
	Area and volume Contd (6))	erpreting and representing data Conto	erpreting and representing data Conto	erpreting and representing data Conto	Angles and Trigonometry (6)	Angles and Trigonometry Contd (6	Revision	
	To calculate arc lengths,angles and areas of sectors of circles.To calculate volume and surface area of a cylinder and a sphere and solve problems.To solve problems involving pyramids and cones.	To construct and use back -to-back stem and leaf diagrams,frequency polygons.Pie charts.	To plot and interpret time series graphs and scatter graphs.Draw a line of best fit on a scatter graph.Moving Averages	Estimate the mean and range from a grouped frequeency table.To find the modal class and the group containing the median.To construct and use two-- way tables.	To derive and use angle properties of triangles,quadrilateral and exterior angle of triangle.To calculate the sum of the interior angles and exterior angles of a polygon to solve problems.	To solve problems involving Pythagoras theorem.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 revision work	

YEAR 9	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	GR 9 /17	GR 9/18	GR 9/19	GR 9/20	GR 9/21	GR 9/22	GR 9/23	GR 9 /24
	Fractions (6)	Fractions Contd (6)	Fractions Contd (5)+ Assessment(1)	Graphs (6)	Graphs Contd (6)	Graphs Contd (6)+ Assessment(2)	Graphs Contd (6)	Equations and Inequalities (6)
	To add subtract multiply divide fractions and mixed numbers.To compare ratios.To find quantities using ratios.To solve	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	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	To draw and interpret distance-time graphs.To calculate average speed from a distance - time graph.To understand velocity - time graphs.	To find acceleration and distance from velocity - time graphs.To draw and iterpret real - line linear graphs.To solve simultaneous equations	To find the coordinates of the midpoint of a line segment.To find the gradient and length of a line segment.To find the	To solve quadratic equations by factorising.To solve simple simultaneous equations.

Te	problems involving ratio.		recurring decimal to a fraction	equations ax+by+c.To find the equation of a line given its gradient and one point.		graphically.	equations of lines parallel or perpendicular to the given line.	
Term 2	GR 9 /25	GR 9/26	GR 9/27	GR 9/28	GR 9/29	GR 9/30	GR 9/31 & GR 9/32	
	Probability (6)	Similarity and congruence(6)	Similarity and congruence(6)	Circle Theorems(6)	Circle Theorems(6)	Circle Theorems(6)	Revision	
	To solve problems on combined events.To find probabilities of mutually exclusive events. Experimental Probability.Independent events.To draw and use probability tree diagrams.	To show that two triangles are congruent.To know the conditions of congruence.To prove shapes are congruent.To solve problems involving congruence.	To use the ratio of corresponding sides to work out scale factors.To find missing lengths on similar shapes	To solve problems involving chords and radii.To prove facts about angles in circles.To find mising angles using theorems.	To understand and use tangents at a point and from a point.Give reasons for angle and length calculations involving tangents.	To understand prove and use facts about angles subtended at the circumference of a circle.To solve problems using circle theorems.	Reinforce all the concepts taught and discuss the revision work	

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	GR 10 /1	GR 10 /2	GR 10 /3	GR 10 /4	GR 10 /5	GR 10 /6	GR 10 /7	GR 10 /8
	Equations and inequalities(6)	Equations and graphs	uations and inequalities (Continue	uations and inequalities (Continue	Similarity and congruence(4)	Similarity and congruence(6)	Similarity and congruence(6)	Circle theorems (6)
	Solve quadratic equations by factorisation, use the quadratic formula and by completing the square. (9.1 - 9.3)	Find coordinates of maximum point. Understand maximum and minimum points. Find roots of an equation by completing the square and using the quadratic formula (6.6,15.3,15.4)	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)	To show that two triangles are congruent.To know the conditions of congruence.To prove shapes are congruent.To solve problems involving congruence.	To use the ratio of corressponding sides to work out scale factors.To find missing lengths on similar shapes.	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 subtended at the circumference of a circle.
Term 1	GR 10 /9	GR 10 /10	GR 10 /11	GR 10 /12	GR 10 /13	GR 10 /14	GR 10 /15	
	Circle theorems (Continue) (6	Circle theorems (Continue) (6)	Further statistics (6)	More Trigonometry	More Trigonometry (Continued) (6)	More trigonometry (Continued)	Revision(12)	
	Understand, prove and use facts about cyclic quadrilaterals and alternate segment theorem. Give reasons for angle sizes using mathematical language. Find the equation of the tangent to a circle at a given point.	Solve angle problems using circle theorems. Give reasons for angle sizes using mathematical language. Find the equation of the tangent to a circle at a given point	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 trigonometric ratios to solve problems. Know exact values of the sine, cosine and tangent of some angles. Upper and lower bounds in trigonometry.Find the area of a triangle and a segment.	Find the area of a triangle and a segment of a circle. Use the sine rule to solve 2D problems.	Use the cosine rule to solve 2D problems. Solve bearings problems using trigonometry	Reinforce all the concepts taught and discuss the worksheets.	

YEAR 10	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	GR 10 /16	GR 10 /17	GR 10 /18	GR 10 /19	GR 10 /20	GR 10 /21	GR 10 /22	GR 10 /23
	Vectors and geometric proof (6)	Vectors and geometric proof (6)	Number (6)	Probability(6)	Multiplicative reasoning(6)	Multiplicative reasoning.(Continue)(6	Algebra (6)	Area and volume(6)
	Understand and use vector notation. Calculate the resultant of two vectors, to solve vector problems, position vectors. Prove lines are parallel. Prove points are	Solve geometric problems in two dimensions using vector methods. Apply vector methods for simple geometric proofs.	Work out the total number of ways of performing a series of tasks. (1.1)	Draw and use frequency trees. Draw and use probability tree diagrams. use tree diagrams, two-way tables and Venn diagrams to calculate conditional probability	Find an amount after repeated percentage changes. growth and decay, rates.Convert metric speed	Solve problems involving compound	Solve problems using geometric sequences. Work out terms in Fibonnaci-like sequences. Find the nth term of a quadratic sequence (2.6)	Calculate the perimeter and area of semicircles and quarter circles. Calculate arc lengths, angles and areas of sectors of circles. Calculate volume and surface area of a cylinder and a sphere

	parallel. Prove points are collinear.			probability. Use set notation	measures. Compound measures, ratio,direct and indirect proportion.	measures. Use relationships involving ratio. Use direct and indirect proportion	quadratic sequence (2.6)	cylinder and a sphere.
Term 2	GR 10 /24	GR 10 /25	GR 10 /26	GR 10 /27	GR 10 /28	GR 10 /29	GR 10 /30	
	Area and volume(Continue)(6)	Area and volume(Continue)(6)	Transformations and constructions (6	Transformations and constructions (6	Interpreting and representing data	Graphs(6)	Revision(12)	
	Solve problems involving volumes and surface areas. Calculate volume and surface area of pyramids and cones.	Solve problems involving volumes and surface areas. Calculate volume and surface area of compound shapes	Describe combinations of transformations, scale drawings, bearings.Construct triangles using a ruler and compasses, shortest distance from a point to a line.	Draw a locus. Use loci to solve problems.	Plot and interpret time series graphs. Use trends to predict the future. Construct and use two-way tables. Choose appropriate diagrams to display data. Recognise misleading graphs.	Draw and interpret distance–time graphs. Average speed from a distance–time graph. Velocity–time graphs. Acceleration and distance from velocity–time graphs	Reinforce all the concepts taught and discuss the worksheets.	

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	GR11/1	GR11/2	GR11/3	GR11/4	GR11/5	GR11/6	GR11/7	
	Unit 13More Trigonometry(7	More Trigonometry(contd) (3)	More Trigonometry(contd)(5)	Unit19Proportion and Graphs(6	More Trigonometry(6)	Unit6Graphs(5)	Proportion and Graphs(8)	
	Use upper and lower bounds in calculations, Calculating areas and the sine rule, The cosine rule and 2D trigonometric problems	Solving problems in 3D	Graphs of sine, cosine and tangent functions. Assessment - 1 Unit 13 and Revision topics Unit 5	Translating, Reflecting and Stretching graphs of functions	Reflecting, translating and stratching Trigonometric curves, Solve equations. Assessment - 2 Transformation	D/T, V/T and More real life graphs	Calculate the gradient of a tangent at a point, Estimate the area under a non linear graph. Assessment 3	
Term 1	GR11/8	GR11/9	GR11/10	GR11/11	GR11/12	GR11/13	GR11/14	
	Unit 15 Equations and	Unit 14 Further Statistics(5)	Further Statistics(5)	Unit 17More Algebra(5)	Unit11Multiplicative Reasoning(5	Unit 7Area and Volume (5)	Revision	
	To find an accurate root of a quadratic and cubic equation by using iterative process. Assessment - revision unit 9 and unit 15	Sampling, cumulative frequency, box plots	Drawing and interpreting Histograms, comparing and describing population Assessment revision units - 1,2,4,	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 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	GR11/15	GR11/16	GR11/18	GR11/19	GR11/20	GR11/21	GR11/21	GR11/22
	Unit16Circle Theorems(5)	:18Vectors and Geometric Proc	Unit10Probability(5)	iit12Similarity and Congruence	Similarity and Congruence(5)	3Interpreting and representing dat	Unit8Transformation and	Transformation and Constructions
	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	GR11/							
	Revision							
	Reinforcing all the concepts taught. Disussion of sample papers and mock papers.							

GRADE 12 LONG TERM PLAN with CURRICULUM STANDARDS

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YEAR 12	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	**Y12 / 1 (3)**	**Y12 / 2 (3)**	**Y12 / 2 (2) & 3 (1)**	**Y12 / 3 (3)**	**Y12 / 4 (3)**	**Y12 / 4 (2) & 5 (1)**	**Y12 / 5 (2) & 6 (1)**	**Y12 / 6 (3)**
	Algebraic Expressions	Quadratics	Quadratics, Equations and inequalities	Equations and inequalities	Graphs and Transformations	Graphs and Transformations, Straight Line Graphs	Straight Line Graphs, Cirlces	Cirlces
	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	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, Transformation of Graphs, Gradient and Equation of the line, Review Exercise 1	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
Term 1	**Y12S / 1 (3)**	**Y12S / 1 (3)**	**Y12S / 1 (1) & 2 (2)**	**Y12S / 2 (3)**	**Y12S / 2 (3)**	**Y12S / 2 (3)**	**Y12S / 3 (3)**	**Y12S / 3 (3)**
	Data collection	Data collection	Data collection, Measures of location and spread	Data collection, Measures of location and spread	Data collection, Measures of location and spread	Data collection, Measures of location and spread	Representation of data	Representation of data
	Population and samples, Sampling	Non random sampling, Types of data	Large data set, Measure of central tendency: Mean and Mode	Measure of central tendency: Median, Other measures of location: Quartiles	Other measures of location: Percentile, Measures of spread	Variance and standard deviation, Coding	Outliers, Box plots	Cumulative frequency, Histogram
YEAR 12	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	**Y12 / 7 (3)**	**Y12 / 7 (1) & 8 (2)**	**Y12 / 8 (2) & 9 (1)**	**Y12 / 9 (3)**	**Y12 / 10 (3)**	**Y12 / 10 (3)**		
	Algebraic Methods	Algebraic Methods, Binomial Expansion	Binomial Expansion, Trigonometric Ratios	Trigonometric Ratios	Trigonometric Identities and Equations	Trigonometric Identities and Equations	Revision	Revision
	Algebraic fractions, Dividing polynomials, Factor theorem, Mathematical Proof	Methods of proof, Pascal's triangle, Factorial Notation and Binomial Expansion	Solving binomial problems, Binomial Estimation, Cosine Rule , Sine Rule	Area of triangle, Solving triangle problems, Graphs of Sine, Cosine, Tangent, Transforming trigonometric graphs	Angles in all four quadrants, Exact value of trigonometical ratios, Trigonometric identities	Simple trigonometric equations, Harder trigonometric equations, Equations and Identities, Review Exercise 2f		
Term 1	**Y12S / 3 (3)**	**Y12S / 4 (3)**	**Y12S / 4 (2) & 5 (1)**	**Y12S / 5 (3)**	**Y12S / 5 (3)**	**Y12S / 5 (2) & 6 (1)**		
	Representation of data	Correlation	Correlation, Probability	Probability	Probability	Probability, Statistical Distributions	Revision	Revision
	Histogram with unequal intervals, Comparing data	Scatter Diagram and Correlation, Linear regression	Using regression line , Calculating Probabilities	Venn Diagrams, Mutually exclusive events	Independent Events, Tree diagrams	Conditional Probability, Probability Distributions		
YEAR 12	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	**Y12 / 11 (3)**	**Y12 / 11 (3)**	**Y12 / 12 (3)**	**Y12 / 12 (3)**	**Y12 / 12 (3)**	**Y12 / 12 (3)**	**Y12 / 13 (3)**	**Y12 / 13 (3)**
	Vectors	Vectors	Differentiation	Differentiation	Differentiation	Differentiation	Integration	Integration
	Vector notation, Representing as column vectorsMagnitude and direction	Position vectors, Representing as column vectors, Magnitude and direction	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 xn, Indefinite integrals	Finding functions using integration, Definite integrals

Term 2	**Y12S / 6 (3)**	**Y12S / 6 (2) & 7 (1)**	**Y12S / 7 (3)**	**Y12S / 7 (3)**	**Y12S / (3)**	**Y12S / (3)**	**Y12S / (3)**	**Y12S / (3)**
	Statistical Distributions	Statistical Distributions, Hypothesis Testing	Hypothesis Testing	Hypothesis Testing	**S 2**	**S 2**	**S 2**	**S 2**
	Binomial Distributions, Cumulative Probabilities	Cumulative Probabilities for Binomial Distribution, Hypothesis testing	Finding critical values, One tailed test	Two tailed test, Review Exercise	Population, census and sample. Sampling unit, sampling frame, Other methods of sampling: stratified, systematic, quota	stem and leaf diagrams, Continuous random variables and their probability density functions	Skewness. Concepts of outliers.	The concept of a discrete and continuous random variable.
YEAR 12	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 2	**Y12 / 13 (3)**	**Y12 / 13(1) & 14 (2)**	**Y12 / 14 (3)**	**Y12 / 14 (3)**	**Y12 / 14 (3)**	**Y12 / 14 (3)**		
	Integration	Integration, Exponentials and Logarithms	Exponentials and Logarithms	Exponentials and Logarithms	Exponentials and Logarithms	Exponentials and Logarithms	Revision	Revision
	Areas under the curve, Areas under the x axis	Area between curve and line, Exponential Functions	Graph of $y = e^x$, Exponential modelling	Logarithms, Laws of logarithms	Solving equations using logarithms, Working with natural logarithms	Logarithms and non linear data, Review Exercise 3		
Term 2	**Y12S / (3)**	**Y12S / (3)**	**Y12S / (3)**	**Y12S / (3)**	**Y12S / (3)**	**Y12S / (3)**		
	S 2	**S 2**	**S 2**	**S 2**	**S 2**	**S 2**	Revision	Revision
	Use tables to find probabilities in the standard normal distribution Z	The Poisson distributions.	Hypothesis tests for the proportion p of a binomial distribution and hypothesis tests for the mean λ of a Poisson distribution?	Hypothesis tests for the proportion p of a binomial distribution and hypothesis tests for the rate λ of a Poisson distribution using critical reasons	Concept and interpretation of a hypothesis test.	Null and alternative hypotheses		

YEAR 13 LONG TERM PLAN (PURE PURE) with CURRICULUM STANDARDS

YEAR 13	**WEEK 1**	**WEEK 2**	**WEEK 3**	**WEEK 4**	**WEEK 5**	**WEEK 6**	**WEEK 7**	**WEEK 8**
Term 1	**C4 Module 1(4)**	**C 4 Module 2(4)**	**(Contd.)C 4 Module 3(4)**	**C 4 Module 4(4)**	**C 4 Module 5(6)**	**C 4 Module 6(6)**		
	PARTIAL	)-ORDINATE GEOMET	BINOMIAL EXPANSION	DIFFERENTIATION	VECTORS	INTEGRATION		
	Express fraction into its partial fractions	Use Parametric equations to find area under a curve	Use Partial fractions to expand more complex fractional expressions	Differentiating relations which are implicit & rates of change	The scalar product of two vectors	Integrate standard functions as antiderivatives & using reverse of the chain rule		
Term 1	**C 4 Module 2(2)**	**C 4Module 3(2)**	**C4 Module 4(2)**	**C 4Module 5(2)**		**C 4 Module 6**		
	CO-ORDINATE GEOMETRY	BINOMIAL	DIFFERENTIATION	VECTORS (2)		INTEGRATION		
	Find cartesian equation from parametric form	Use binomial expansion when n-negative/rational	Find the gradient of a curve whose equation is given in Parametric form	Cartesian components of vectors in 2 D	Find the vector equation of a line	To use trigonometric identities to integrate expressions		
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YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	**C 4 Module 6(6)**	**C 4 Module 6(4)**	**C 4 Module Test(2)**	**FP1 Module 2(4)**	**FP1 Module 5(4)**	**FP1 Module 4(4)Contd**		
	INTEGRATION	INTEGRATION		NUMERICAL	SERIES	MATRIX ALGEBRA		
	Use subtitution to integrate expressions	To solve first order differential equations with separable variables	To solve exam style questions	To use interval bisection, linear interpolation and the Newton-Raphson methods to find approximations to	To use standard formulae & sum more complex series	Using Matrices to represent combinations of transformations		
Term 1		**FP1 Module 1(2)**	**FP1 Module 1(4)Contd.**	**FP1 Module 3(2)**	**FP1 Module 4(2)**	**FP1 TEST(2)**		
	INTEGRATION (CONTD)	COMPLEX NUMBERS	COMPLEX NUMBERS	COORDINATE	MATRIX ALGEBRA			
	Use Parts to integrate expressions	To add ,subtract, multiply and divide complex numbers	To find the modulus & argument of a complex number	Work with Cartesian and parametric equations of a parabola & a rectangular hyperbola	To add , subtract & multiply two matrices.	To solve questions 1-5 chapter 4 upto 4.7		
Term 1								
	INTEGRATION		COMPLEX NUMBERS		COMPLEX NUMBERS			
	Find areas & volumes using integration		To solve equations that has complex roots		Using matrices to represent rotations, reflections & enlargements			

YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	**FP1 Module 4(4)**	**FP1 Module 6(6)**	**FP2 Module 1(3)**	**FP2 Module 3(6)**	**FP-2Module 3(6)**	**FP-2 Module 4(6)**		
	MATRIX ALGEBRA	PROOF BY	INEQUALITIES	FURTHER COMPLEX	FURTHER COMPLEX NUMBER	FIRST ORDER DIFFERENTIAL		
	To find the inverse of a 2 x2 matrix when it exists	To prove summation of series using induction	Solve modulus & rational inequalities	Use de Moivre's theorem to find roots	Use complex numbers to describe locus & transformations	Solve first order D.E. Using integrating factor		
Term 2	**FP1 Module 4**	**FP1 Module 6**	**FP2 Module 2(3)**	**FP-2 Module 3**	**FP-2Module 3**	**FP2 Module 4**		
	MATRIX ALGEBRA	PROOF BY MATHEMATICAL	SERIES	FURTHER COMPLEX NUMBER	FURTHER COMPLEX NUMBER	FIRST ORDER		
	Use Matrices & their inverses to solve linear simultaneous equations	To use induction to prove an expression is divisible by a certain integer	Sum series using method of differences	Use de moivre's theorm to prove trigonometic identities	Apply transformations from the z-plane to the w-plane	To use a given substitution to reduce a differentiail equation to a familiar form		
Term 2								
		Using induction to prove general statements involving matrix multiplication						

AR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	FP-2 Module 5(6)	FP-2 Module 5(6)	FP-2 Module 6(6)	FP-2 Module 6(6)	**FP-2 Module 7(6)**	FP-2 Module 7(4) + FP2		
	SECOND ORDER	SECOND ORDER	MACLAURIN &	MACLAURIN & TAYLORS'	POLAR CO-	POLAR CO-ORDINATES		
	Solve a second order D.E for different type of roots to the auxiliary quadratic equation	To use boundary conditions to find a specific solution	Express functions as infinite series using Maclaurin & Taylors' expansions	Finding a series solution to a D.E using Taylor series method	Sketch polar curves & find area	To find the equation of tangents parallel & perpendicular to the initial line		
Term 2	FP-2 Module 5(6)							
	SECOND ORDER DIFFERENTIAL EQUATIONS							
	y= C.F + P.I	Use a given substitution to transform a second order D.E into a familiar form						
Term 2								

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	C3 Module 1(4)	C 3 Module 2(4)	(Contd.)C 3 Module 2(2)	C 3 Module 3(4)	C 3 Module 4(4)	C 3 Module 5(4)		
Term 1	ALGEBRAIC	FUNCTIONS	FUNCTIONS	THE EXPONENTIAL & LOG	NUMERICAL METHODS	TRANSFORMING		
	Apply remainder & factor theorem	Understand the terms function, domaim and range	To find the inverse of a funtion & understand the relationship between the graphs of f & inverse	Solve equations involving ex & lnx	Use graphical method to find the number of roots of f(x)=0	Sketch the graph of y= /f(x)/ & y= f(/x/)		
Term 1	**M 2 Module 1(2)**	**C 3Module 2**	**C3 Module 3(2)**	**C 3 Module 3(4)**	**C 3 Module 4**	**C 3 Module 5**		
	KINEMATICS OF A	FUNCTIONS	THE EXPONENTIAL	EXPONENTIALS &	NUMERICAL METHODS	TRANSFORMING GRAPHS OF		
	To solve problems involving motion of projectiles	Combine two or more functions to make a composite function	Sketch simple transformations of y=ex &y= lnx	Solve real life examples of exponential growth & decay	Use iteration to find approximation to the root	Solve equations involving the modulus function		
Term 1			**M2 Module 1(2)**	**M 2Module 1(2)**	**M 2 Module 2(2)**	**M 2 Module 2(2)**		
			KINEMATICS OF A PARTICLE	KINEMATICS OF A	CENTRES OF MASS	CENTRES OF MASS		
		know the difference between a one-one and many to one functions	Solve problems when acceleration varies with time	Use calculus & vectors to solve problems involving motion in two dimensions	Find the centre of mass of a system of particles in two dimensions	Use knowledge of standard results to find centre of mass of a plane lamina		
		M 2 Module 1 (2)Contd						
		KINEMATICS OF A PARTICLE						

Term 1		To solve problems involving motion of projectiles						
YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	**C 3 Module 5(2)**	**C 3 Test chap 1 - 5**	**C 3 Module 6(4)**	**C 3 Module 6(4)**	**C 3 Module 7(4)**	**C3 Module 7(4)**		
	TRANSFORMING GRAPHS		TRIGONOMETRY	TRIGONOMETRY	FURTHER	FURTHER TRIGONOMETRIC		
	Solve equations involving the modulus function	Solve exam style questions from these chapters	To solve equations & prove identities involving sec θ, cosec θ and cot θ	To prove and use the identities 1+ tan2θ= sec 2 θ & 1= Cot2 θ = cosec 2 θ	Prove & Use the addition formulae & double angle formule	Use alternative form to solve trigonometric equations		
Term 1	**M 2 Module 2(2)**	**C3 Module 6(2)**	**M 2 Module 3(2)**	**C3 Module 6**	**M 2 Module 3(2)**	**C 3 Module 7**		
	CENTRES OF MASS	TRIGONOMETRY	WORK, ENERGY & POWER	TRIGONOMETRY	WORK, ENERGY & POWER	FURTHER TRIGONOMETRIC		
	Solve problems involving equilibrium of a lamina suspended or placed on an inclined plane	Sketch the graphs of sec x, cosec x and cot x	To use principle of conservation of energy and the W-E principle to solve problems involving a moving particle	Graph reciprocal & inverse trigonometric functions	Solve problems about moving vehicle including calculating the power developed by its engine.	To prove and apply the factor formulae		
Term 1		**M 2 TEST CHAP 1-2**		**M 2 Module 3(2)**		**M 2 Module 4(2)**		
				WORK, ENERGY & POWER		COLLISIONS		
		Solve exam style questions from these chapters		To use principle of conservation of energy and the W-E principle to solve problems involving a moving particle		Use the impulse- momentum principle & the principle of conservation of momentum in vector form		
YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	**C 3 TEST ON CHAP 6,7**	**C 3Module 8(4)**	**C3 Module 8(2)**	**C 4 Module 1(2)**	**C 4 Module 2(4)**	**C 4 Module 3(4)**		
		DIFFERENTIATION	DIFFERENTIATION	PARTIAL	O-ORDINATE GEOMETR	BINOMIAL		
	Solve exam style questions from these chapters	Differentiate expressions using the product rule and the quotient rule	Apply the various methods of Differentiation	Express fraction into its partial fractions	Sketch the graph of a curve given its Parametric equation	Use binomial expansion when n-negative/rational		
Term 2	**C 3 Module 8(2)**	**C 3Module 8**	**C4 Module 1(2)**	**C 4 Module 2(2)**	**C 4 Module 2**	**C 4 Module 3**		
	DIFFERENTIATION	DIFFERENTIATION	PARTIAL FRACTIONS	CO-ORDINATE GEOMETRY	CO-ORDINATE GEOMETRY	BINOMIAL EXPANSION		
	Differentiate a composite function using the chain rule	Diffedrentiate expressions involving exp, log and trigonometry	Express fraction into its partial fractions	Find cartesian equation from parametric form	Use Parametric equations to find area under a curve	Use Partial fractions to expand more complex fractional expressions		
Term 2	**M 2 Module 4(2)**	**M 2 Module 4(2)**	**M 2 Module 4(2)**	**M 2 Module 4(2)**	**M2 TEST Chap 4**	**M 2 Module 5(2)**		
	COLLISIONS	COLLISIONS	COLLISIONS	COLLISIONS	COLLISIONS	STATICS OF RIGID BODIES		
	Apply conservation of	Apply conservation of			Solve exam style			

Ter	momentum & Newton's law of restitution to solve problems involving direct impacts	momentum & Newton's law of restitution to solve problems involving direct impacts	Model and solve problems involving successive impacts	Model and solve problems involving successive impacts	Solve exam style questions from these chapters	To find the sum of moments of the forces acting on a rigid body		
YEAR 13	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	**C 4 Module 4(4)**	**C 4 Module 4(2)**	**C4 Module 5(4)**	**C 4 Module 6(4)**	C 4 **Module 6(4)**	**C4 Module 6(4)**		
	DIFFERENTIATION	DIFFERENTIATION	VECTORS	INTEGRATION	INTEGRATION	INTEGRATION		
	Find the gradient of a curve whose equation is given in Parametric form	Differentiating relations which are implicit & rates of change	The scalar product of two vectors	Integrate standard functions as antiderivatives & using reverse of the chain rule	Useartial fractions subtitution to integrate expressions	Find areas & volumes using integration		
Term 2	**C 4 Module 4**	**C 4 Module 5(2)**	**C4 Module 5**	**C 4 Module 6**	**C4 Module 6**	**C4 Module 6**		
	DIFFERENTIATION	VECTORS	VECTORS	INTEGRATION	INTEGRATION	INTEGRATION		
	Differentiating relations which are implicit & rates of change	Cartesian components of vectors in 2 D & 3 D	Find the vector equation of a line & to determine whether two lines intersect or not in 3 - D	To use trigonometric identities to integrate expressions	Use Parts to integrate expressions	To solve first order differential equations with separable variables		
Term 2	**M-2 Module 5(2)**	**M-2 Module 5(2)**	**M-2 Module 5(2)**	**M-2 Module 5(2)**	**M-2 REVISION**	**M-2 MODULE TEST**		
	STATICS OF RIGID BODIES	STATICS OF RIGID BODIES	STATICS OF RIGID BODIES	STATICS OF RIGID BODIES				
	To find the sum of moments of the forces acting on a rigid body	To find the sum of moments of the forces acting on a rigid body	Solve problems about the equilibrium of a rigid body	Solve problems about the equilibrium of a rigid body	To solve exam style questions			