

Oral/Mental starter: mental strategies, rapid recall, estimating, visual imagery, problem solving, explaining methods etc. are all covered in the left-hand page for each spread and enhanced by teacher input (with relevant mental questions in the Teacher's Resource). ***The calculations policy is to be covered regularly in lessons in the form of starters/plenaries and embedded into other topics***

CHAPTE R	TOPIC	CONTENT	OBJECTIVES: pupils will be taught to . . .
	SUMMER BOOKLET	GO THROUGH THE SUMMER BOOKLET	IDENTIFY AREAS OF DEVELOPMENT AND STARTING POINT FOR NUMERACY WORK
1	Whole numbers and decimals Topic 5 Place value, ordering and rounding of integers, powers and roots. Topic 1 Mental and Written Calculations.	Place value and decimals Multiply and divide by 10,100 & 1000 Negative numbers Mental methods of addition & subtraction Written methods of addition & subtraction Calculator methods 1	<ul style="list-style-type: none"> Write numbers in words and figures. Arrange decimal numbers in order. Multiply and divide by 10, 100 and 1000. Arrange negative numbers in order Add and subtract using negative numbers Add and subtract using mental, written and calculator methods
2	Measures, perimeter and area Topic 1 Mental and Written Calculations. Topic 5 Place value, ordering and rounding of integers, powers and roots.	Length Units of measurement Converting between metric units Perimeter Area Area of a rectangle Area of a triangle Area of a parallelogram	<ul style="list-style-type: none"> Read a scale on a measuring instrument (ruler) Measure lengths in cm and mm Convert between metric units Calculate perimeters Calculate areas of : rectangle, triangles and parallelograms Calculate areas made from rectangles (composite shapes)
Revision and Half Term Assessment 1 To be completed after chapter 3 . 1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback. Homework to be used for revision.			
HALF TERM			
3	Expression and formulae	Algebraic symbols Expressions Collecting like terms Using a formula Writing a formula Expressions and formulae	<ul style="list-style-type: none"> Use letters to stand for unknown values Simplify an expression with one, or more, variables Use a formula Write a formula
4	Fractions, decimals and percentages Topic 9 Fractions, decimals, percentages, ratio and proportion.	Fractions Equivalent fractions Addition and subtraction of fractions Decimals and fractions Fraction of a quantity Percentages	<ul style="list-style-type: none"> Use fractions to describe parts of a whole Simplify fractions and find equivalent fractions Add and subtract fractions Change between fractions, decimals and percentages Find a fraction of a quantity Find a percentage of a quantity

		Percentages of an amount Fraction, decimals and percentages	
5	Angles and 2D shapes	Angle measure Measuring Angles Drawing lines and angles Calculating angles Properties of triangles Properties of quadrilaterals Properties of polygons	<ul style="list-style-type: none"> Recognise and name different types of angles Measure, and draw, angles to the nearest degree and lines to the nearest mm. Use angle facts to work out unknown angles Recognise and name different types of triangles Recognise and name different types of quadrilaterals Draw shapes accurately using a ruler and protractor
Revision and Half Term Assessment 2 To be completed after chapter 6. . 1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback. Homework to be used for revision.			
CHRISTMAS			

MYMATHS: BOOK 1B - YEAR 7 SCHEME OF WORK

LEVELS 3 TO 6

SPRING

CHAPTER	TOPIC	CONTENT	OBJECTIVES: pupils will be taught to . . .
6	Graphs	Coordinates Tables of values Plotting straight-line graphs Real-life graphs	<ul style="list-style-type: none"> Read, and plot, coordinates in four quadrants Use a formula to complete a table of values Plot points from a table of values Draw a graph and use it to estimate and unknown value
7	Whole number Calculations Topic 1 Mental and Written Calculations. Topic 5 Place value, ordering and rounding of integers, powers and roots.	Rounding Order of operations Written methods of multiplication Written methods of division Calculator methods 2	<ul style="list-style-type: none"> Round to whole numbers and to decimal places Calculate using the order of operations Multiply and divide whole numbers without a calculator Use a calculator for complex calculations
8	Statistics	Bar charts Reading and interpreting pie charts Line graphs Mode, median and range The mean Interpreting graphs and charts Tally charts and frequency tables Comparing data	<ul style="list-style-type: none"> Understand and draw different kinds of bar chart Understand pie charts Understand and draw line graphs Find averages and range from a list of data Collect data using tally charts and frequency tables Compare data from lists or represented in diagrams

Revision and Half Term Assessment 3 **To be completed after chapter 9.** **1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback..**
Homework to be used for revision.

HALF TERM

9	Transformations and symmetry	Reflection Reflectional symmetry Rotation Rotational symmetry Translation Tessellations	<ul style="list-style-type: none"> • Reflect shapes in a mirror line • Rotate shapes about a point • Recognise and describe line and rotation symmetry • Recognise and describe translations • Tessellate shapes
10	Equations	Multiplying and dividing terms Balancing calculations Simple equations More simple equations Two-step equations	<ul style="list-style-type: none"> • Multiply and divide numbers and letters in algebra • Find the values needed to balance equations • Solve an equation by adding or subtracting on both sides • Solve an equation by multiplying or dividing on both sides • Solve two-step equations

Revision and Half Term Assessment 4 **To be completed after chapter 11.** **1 lesson on revision techniques, 1 lesson on test, 1 lesson feedback. Homework to be used for revision.**

EASTER

MYMATHS: BOOK 1B - YEAR 7 SCHEME OF WORK

LEVELS 3 TO 6

SUMMER

CHAPTE R	TOPIC	CONTENT	OBJECTIVES: pupils will be taught to . . .
11	Factors and Multiples Topic 1 Mental and Written Calculations. Topic 5 Place value, ordering and rounding of integers, powers and roots.	Factors and multiples Square numbers Square roots Prime numbers LCM and HCF	<ul style="list-style-type: none"> • Find factors and multiples of a number • Find squares and square roots • Recognise prime numbers • Find the LCM and HCF of a pair of numbers
15	Ratio and proportion Topic 9 Fractions, decimals, percentages, ratio and proportion.	Proportion Direct proportion Ratio Ratio and proportion problems	<ul style="list-style-type: none"> • Write a proportion as a fraction or percentage • Increase or decrease two quantities using direct proportion • Use ratio to compare two quantities • Simplify a ratio • Solve problems involving ratio and proportion
13	Sequences	Sequences	<ul style="list-style-type: none"> • Continue a sequence

		Sequence rules Term-to-term rules Position in a sequences	<ul style="list-style-type: none">Find a rule to describe a sequence of numbersUse a rule to find the terms in a sequenceGenerate sequences from patterns of shapes
Revision and Optional Assessment (<i>end of year exams</i>) 7		1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback.	
HALF TERM			
14	Decimal Calculations Topic 1 Mental and Written Calculations. Topic 5 Place value, ordering and rounding of integers, powers & roots.	Mental methods with decimals Written methods of multiplying decimals Written methods of dividing decimals Interpreting a calculator display	<ul style="list-style-type: none">Use mental methods to multiply and divide decimal numbersUse a standard written method to divide a decimal numberUse a calculator for calculationsInterpret the answer given on a calculator
16	Probability	The probability scale More probability Theoretical probability Experimental probability Sets	<ul style="list-style-type: none">Use words to describe different probabilitiesKnow the meaning of the words trial, outcome and eventUse the scale 0 to 1 for placing probabilitiesUse equally likely outcomes to find a theoretical probabilityUse an experiment to estimate an experimental probabilityIdentify a setComplete and interpret a Venn diagram
12	Constructions and 3D shapes Topic 1 Mental and Written Calculations. Topic 5 Place value, ordering and rounding of integers, powers and roots.	Constructing triangles1 Constructing triangles2 Scale drawings Properties of 3D shapes Isometric drawings Nets of 3D shapes Volume	<ul style="list-style-type: none">Draw triangles and quadrilaterals accurately using a ruler and protractorUse and construct a scale drawingKnow various 3D shapes and their namesCount the vertices, faces and edges of a 3D shapeUse isometric paperFind the Surface area and volume of a shape made from centimetre cubes
17	Everyday maths	The swimming gala The diving pool and ticket sales Getting ready The diving competition and the cafe	<ul style="list-style-type: none">Problem solving
SUMMER HOLIDAY			