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 or embedded into the topics*

CHAPTER	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 Ordering whole numbers Decimals and money Adding decimals Temperature Rounding and estimating Order of operations	• Use place value and decimal notation in different context, including money • Compare and order whole numbers • Add decimals using ~~mental and~~ written methods • Understand and order negative numbers in the context of temperature • Round and number to the nearest 10,100,1000 • Use and estimate to check a result • Use the order of operations
2	Measures, Perimeter and Area **Topic 1 Mental and Written Calculations.** **Topic 5 Place value, ordering and rounding of integers, powers & roots.**	Measuring lines Reading scales Time Shapes <mark>Perimeter</mark> <mark>Area</mark> ~~Metric units~~	• Measure lengths in centimetres and millimetres • Read and interpret scales in different contexts, including time • Classify 2D shapes by their properties • Calculate the perimeter of simple shapes • Calculate or estimate the area of a shape by counting squares • Choose and use standard metric units of measure

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.

		H A L F T E R M	
3	Expressions and Formulae	Using letters 1 Using letters 2 Adding with symbols Simplifying expressions Substitution ~~Creating a formula~~	• Use letters to represent unknown numbers • Simplify algebraic expressions by collecting like terms • Substitute whole numbers into expressions and formulae • ~~Derive a simple formula~~
4	Fractions, Decimals and Percentages **Topic 9 Fractions, decimals, percentages, ratio and proportion.**	Writing fractions Equivalent fractions Improper fractions Fractions of an amount 1 Fractions of an amount 2 Percentages Finding percentages Fractions, decimals and	• Use fractions to describe parts of a whole, including improper fractions • Identify equivalent fractions • Find fractions of a quantity • Calculate simple percentages, including problems involving money • Express a proportion as a fraction, a decimal or a percentage

		percentages	
5	Angles and 2D Shapes	Angles Adding angles Measuring angles Finding angles at a point Calculating angles Properties of triangles Angles in a triangle ~~Compass turns~~	• Estimate angles and use a protractor to measure them • Distinguish between acute, obtuse and reflex angles • Use the sum of angles at a point, on a straight line and in a triangle • Classify triangles by their properties • Find missing angles in a triangle • ~~Understand and use the points of a compass~~

Revisions 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

C H R I S T M A S

MYMATHS: BOOK 1A - YEAR 7 SCHEME OF WORK   LEVELS 3 TO 5   SPRING

CHAPTER	TOPIC	CONTENT	OBJECTIVES: pupils will be taught to. . .
6	Graphs	Coordinates Coordinates with negative numbers Reading graphs Line graphs 1 Line graphs 2	• Identify and plot coordinates in all four quadrants • Construct and interpret line graphs in context
7	Adding and Subtracting **Topic 1 Mental and Written Calculations.**	Mental methods of addition Mental methods of subtraction Written addition and subtraction 1 Written addition and subtraction 2	• Strengthen and extend mental methods of addition and subtraction • Use efficient written methods to add and subtract whole numbers
8	Statistics	~~Planning and collecting data~~ Organising data ~~Reading lists and tables~~ Reading and drawing pictograms Reading and drawing bar charts Reading pie charts Averages - the mode Averages – the median Comparing data – range and average	• ~~Plan how to collect and~~ organise small sets of data from surveys and experiments • Solve problems by interpreting data in lists and tables • Construct and interpret statistical diagrams, including pictograms, bar charts, pie charts and line graphs • Calculate statistics for small sets of data, including the mode, median and range

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	Lines of symmetry Reflection Translation Rotation Tessellations	• Identify lines of symmetry in a 2D shape • Transform a shape by reflection in a mirror line • Transform a shape by translation and describe a translation • Transform a shape by rotation about a point • Create tessellations using reflections, rotations and translations
10	Equations	Operations Inverse operations Using letters 3 Equations 1 Equations 2	• Represent functions as sequences of operations • Understand and use inverse operations • Use letters to represent unknown numbers • Construct and solve simple equations • Solve two step equations

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

EASTER

MYMATHS: BOOK 1A - YEAR 7 SCHEME OF WORK   LEVELS 3 TO 5   SUMMER

CHAPTER	TOPIC	CONTENT	OBJECTIVES: pupils will be taught to. . .
11	Factors and Multiples **Topic 5 Place value, ordering and rounding of integers, powers and roots.**	Factors Multiples Tests of divisibility Square numbers	• Recognise and list factors and multiples • Use simple tests of divisibility • Recognise squares of numbers up to 10 x 10
15	Ratio and Proportion **Topic 5 Place value, ordering and rounding of integers, powers and roots.**	Ration and proportion Ration and proportion problems Solving arithmetic problems Scale drawings	• Write and use rations and proportions • Solve simple problems involving ratio and proportion • Solve arithmetic problems in context • Construct and interpret scale drawings
13	Sequences	Sequences Describing sequences Using rules	• Find patterns and sequences of numbers • Describe a sequence using a rule to find the next term

		Sequences with negative numbers	• Generate terms in sequence using a rule • Use negative numbers in a sequence
Revision and Optional Assessment *(end of year exams.* Homework to be used for revision			1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback.
		HALF TERM	
14	Multiplying and dividing **Topic 1 Mental and Written Calculations.**	Multiplication Multiplying by 10 and 100 Mental methods of multiplication Written methods of multiplication Mental methods of division Division problems Written methods of division Calculator skills	• Consolidate multiplication facts up to 12 x 12 • Multiply by 10 and 100 • Multiply whole numbers using mental and written methods • Divide whole numbers using mental and efficient written methods • Use a calculator and interpret the display in different contexts, including money
12	Constructions and 3D Shapes	3D shapes Nets of cubes Nets of other 3D shapes 2D representation of 3D shapes Measuring and drawing angles Drawing a triangle Introducing circles	• Recognise and name common 3D shapes • Construct simple nets of 3D shapes • Use 2D representation to visualise 3D shapes • Use a protractor to measure and draw angles • Use a ruler and protractor to construct a triangle • Know the parts of a circle
16	Probability	Introducing probability The probability scale 1 The probability scale 2 Sorting with Venn diagrams	• Use the vocabulary and ideas of probability, drawing on experience • Understand and use the probability scale from 0 to 1 • Sort objects using a Venn diagram
		SUMMER HOLIDAY	