MATHEMATICS TARGETS (Full)

A YEAR 6 MATHEMATICIAN

GROUP RECORD

Page 1

Number, place value, approximation and estimation/rounding							
I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.							
I can read, write, order and compare numbers to at least 1,000,000.							
I can determine the value of each digit in numbers up to 1,000,000.							
I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.							
I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000.							
I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.							
I can solve number problems and practical problems with the above.							
Calculations							
I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.							
I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.							
I can identify common factors, common multiples and prime numbers.							
I can perform mental calculations, including with mixed operations and large numbers.							
I can multiply multi-digit numbers up to 4 digits by a 2 digit whole number using the formal written method of long multiplication.							
I can divide numbers up to 4 digits by a 2 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.							
I can divide numbers up to 4 digits by a 2 digit number using the formal written method of short division where appropriate.							
I can solve problems involving addition, subtraction, multiplication and division.							
I can use my knowledge of the order of operations to carry out calculations involving the four operations.							

MATHEMATICS TARGETS
(Full)

A YEAR 6 MATHEMATICIAN

GROUP RECORD

Page 2

Fractions, decimals and percentages							
I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.							
I can compare and order fractions, including fractions >1.							
I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.							
I can multiply simple pairs of proper fractions, writing the answer in the simplest form.							
I can divide proper fractions by whole numbers.							
I can associate a fraction with division to calculate decimal fractions equivalents for a simple fraction.							
I can identify the value of each digit to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.							
I can multiply 1-digit numbers with up to 2 decimal places by whole numbers.							
I can use written division methods in cases where the answer has up to 2 decimal places.							
I can solve problems which require answers to be rounded to specified degrees of accuracy.							
I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts							
Ratio and proportion							
I can solve problems involving the relative sizes of two quantities, where missing values can be found using integer multiplication and division facts.							
I can solve problems involving the calculation of percentages and the use of percentage comparisons.							
I can solve problems involving similar shapes where the scale factor is known or can be found.							
I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.							
Algebra							
I can express missing number problems algebraically.							
I can use simple formulae.							
I can generate and describe linear number sequences.							
I can find pairs of numbers that satisfy an equation with two unknowns.							
I can enumerate possibilities of combinations of two variables.							

MATHEMATICS TARGETS
(Full)

A YEAR 6 MATHEMATICIAN

GROUP RECORD

Page 3

Measurement							
I can 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 of up to 3 decimal places.							
I can convert between miles and kilometres.							
I recognise that shapes with the same areas can have different perimeters and vice versa.							
I can calculate the area of parallelograms and triangles.							
I recognise when it is possible to use the formulae for the area of shapes.							
I can calculate, estimate and compare volume of cubes and cuboids, using standard units.							
I recognise when it is possible to use the formulae for the volume of shapes.							
I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.							
Geometry – properties of shapes							
I can compare and classify geometric shapes based on the properties and sizes.							
I can describe simple 3D shapes.							
I can draw 2D shapes given dimensions and angles.							
I recognise and build simple 3D shapes, including making nets.							
I can find unknown angles in any triangles, quadrilaterals and regular polygons.							
I recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.							
I can illustrate and name parts of circles, including radius, diameter and circumference.							
I know the diameter is twice the radius.							
Geometry – position and direction							
I can draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes.							
I can describe positions on the full co-ordinate grid (all four quadrants).							
Statistics							
I can interpret and construct pie charts and line graphs and use these to solve problems							
I can calculate and interpret the mean as an average.							

MATHEMATICS TARGETS

EXCEEDING YEAR 6 EXPECTATIONS

GROUP RECORD

I can compare, order and convert between fractions, decimals and percentages, for example, in contexts related to science, history or geography learning							
I can move beyond squared and cubed numbers to calculate problems such as $X \times 10^n$ where n is positive.							
I can use $=$, $\neq$, $<$, $>$, $\leq$, $\geq$ correctly.							
I can multiply all integers, (using efficient written methods) including mixed numbers and negative numbers.							
I can recognise an arithmetic progression and find the n*th* term .							
I can use a formula for measuring the area of a shape, such as a rectangle and triangle to work out the area of an irregular shape in the school environment							
I can use the four operations with mass, length, time, money and other measures, including the use of decimal quantities.							
I can create a scaled model of an historical or geographical structure showing an acceptable degree of accuracy using known measurements.							
I can calculate the costs and time involved of a visit to a destination in another part of the world relating to on-going learning in history or geography.							
I can collect my own data on a personal project and present information in formats of my choosing, using charts, graphs and tables, and answer specific questions related to my research.							