John Fletcher of Madeley Primary School
Medium term planning – New Curriculum 2014

Year 5 Autumn Term

Mathematical aspect			Curriculum statement
U & A	Unit 1	Place value to 1,000,000	● To read, write, order and compare numbers at least to 1,000,000 and determine the value of each digit. ● To count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
U & A	Unit 2	Mental addition and subtraction	●To add and subtract whole numbers with more than 4 digits. ● To add and subtract numbers mentally with increasingly large numbers. ● To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
U & A	Unit 3	Factors of numbers and prime numbers	● To identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. ● To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. ● To solve problems involving multiplication and division where larger numbers are used by decomposing them into factors. ● To know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. ● To establish whether a number up to 100 is prime and recall prime numbers up to 19.
U & A	Unit 4	Using multiplication and division facts	● To multiply and divide numbers mentally drawing upon known facts. ● To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. ● To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.
U & A	Unit 5	Geometry: Angles	●To know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles ● To draw given angles, and measure them in degrees (º). ●To identify: ● angles at a point and one whole turn (total 360º) ● angles at a point on a straight line and 1/2 a turn (total 180º) ● other multiples of 90º.
U & A	Unit 6	Measurement: length, perimeter and area	●To convert between different units of measure (for example, kilometre and metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre). ● To understand and use equivalences between metric units and common imperial units such as inches, pounds and pints. ● To use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. ● To measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. ● To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes.
U & A	Unit 7 & 8	Multiplication and division: Written methods	●To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. ● To 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.

			●To 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. ● To multiply and divide numbers mentally drawing upon known facts. ● To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.
U & A	Unit 9	Fractions and decimals: tenths and hundredths	● To compare and order fractions whose denominators are all multiples of the same number. ● To identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. ● To read and write decimal numbers as fractions (for example, 0.71 = 71/100).
U & A	Unit 10	Decimals: tenths, hundredths, thousandths	●To read, write, order and compare numbers with up to three decimal places. ● To round decimals with two decimal places to the nearest whole numbers and to one decimal place. ● To recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents. ● To solve problems involving number up to three decimal places.
U & A	Unit 11	Geometry	● To distinguish between regular and irregular polygons based on reasoning about equal sides and angles. ● To use the properties of rectangles to deduce related facts and find missing lengths and angles. ● To identify 3D shapes including cubes and cuboids from 2D representations.
U & A	Unit 12	Statistics: tables and bar charts	●To complete, read and interpret information in tables, including timetables.