MATHEMATICS - NATIONAL CURRICULUM EXPECTATIONS – LOWER KEY STAGE 2

MATHEMATICS YEAR 3							
Number – Number and Place Value	**Number – Addition and subtraction**	**Number – Multiplication and division**	**Number – fractions inc decimals**	**Measurement**	**Geometry – Properties of shape**	**Geometry – Position and direction**	**Statistics**
Pupils should be taught to: 3.NPV.a. I can count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number 3.NPV.b. I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones) 3.NPV.c. I can compare and order numbers up to 1000 3.NPV.d. I can identify, represent and estimate numbers using different representations 3.NPV.e.I can read and write numbers up to	**Pupils should be taught to:** 3.NAS.a. I can add and subtract numbers mentally, including i. a three-digit number and ones ii. a three-digit number and tens iii. a three-digit number and hundreds 3.NAS.b. I can add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction 3.NAS.c. I can estimate the answer to a calculation and use inverse operations to check answers 3.NAS.d. I can	**Pupils should be taught to:** 3.NMD.a.I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 3.NMD.b. I can write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods 3.NMD.c. I can solve problems, including missing number problems, involving multiplication and division, including	**Pupils should be taught to:** 3.NFD.a.I can count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 3.MFD.b.I can recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators 3.NFD.c. I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators 3.NFD.d. I can recognise and show, using diagrams, equivalent fractions with small	**Pupils should be taught to:** 3.M.a. I can measure, compare, add and subtract: lengths (m/cm/mm); a. mass (kg/g); volume/capacity (l/ml) b. measure the perimeter of simple 2-D shapes 3.M.b. I can add and subtract amounts of money to give change, using both £ and p in practical contexts 3.M.c. I can tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks 3.M.d. I can estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and	**Pupils should be taught to:** 3.GPS.a. I can draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them 3.GPS.b. I can recognise angles as a property of shape or a description of a turn 3.GPS.c. I can identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle	**Pupils should be taught to:** 3.GPD.a. I can interpret and present data using bar charts,	**Pupils should be taught to:** 3.S.a.. I can count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a pictograms and tables 3.S.b. I can solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

1000 in numerals and in words 3.NPV.f. I can solve number problems and practical problems involving these ideas	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	denominators 3.NFD.e. I can add and subtract fractions with the same denominator within one whole 3.NFD.f. I can compare and order unit fractions, and fractions with the same denominators 3.NFD.g. I can solve problems that involve all of the above.	hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight 3.M.e. I know the number of seconds in a minute and the number of days in each month, year and leap year 3.M.f. I can compare durations of events [for example to calculate the time taken by particular events or tasks].	3.GPS.d. I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.		

MATHEMATICS YEAR 4							
Number – Number and Place Value	**Number – Addition and subtraction**	**Number – Multiplication and division**	**Number – fractions inc decimals**	**Measurement**	**Geometry – Properties of shape**	**Geometry – Position and direction**	**Statistics**
Pupils should be taught to 4.NPV.a. I can count in multiples of 6, 7, 9, 25 and 1000 4.NPV.b. I can find 1000 more or less than a given number 4.NPV.c. I can count backwards through zero to include negative numbers 4.NPV.d. I can recognise the place	**Pupils should be taught to:** 4.NAS.a. I can add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate 4.NAS.b. I can	**Pupils should be taught to:** 4.NMD.a.aI can recall multiplication and division facts for multiplication tables up to 12 × 12 4.NMD.b. I can use place value, known and derived facts to multiply and divide mentally, including:	**Pupils should be taught to:** 4.NFD.a. I can recognise and show, using diagrams, families of common equivalent fractions 4.NFD.b.I can count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. 4.NFD.c.I can solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide	**Pupils should be taught to:** 4.M.a. I can convert between different units of measure [for example, kilometre to metre; hour to minute] 4.M.b. I can measure and calculate the perimeter of a rectilinear figure (including	**Pupils should be taught to:** 4.GPS.a. I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes 4.GPS.b. I can identify acute and obtuse angles and compare and	**Pupils should be taught to:** 4.GPD.a. I can describe positions on a 2-D grid as coordinates in the first quadrant 4.GPD.b. I can describe movements between positions as translations of a given unit to	**Pupils should be taught to:** 4.S.a.I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. 4.S.b. I can solve

value of each digit in a four-digit number (thousands, hundreds, tens, and ones) 4.NPV.e. I can order and compare numbers beyond 1000 4.NPV.f. I can identify, represent and estimate numbers using different representations 4.NPV.g. I can round any number to the nearest 10, 100 or 1000 4.NPV.h. I can solve number and practical problems that involve all of the above and with increasingly large positive numbers 4.NPV.i. I can read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	estimate and use inverse operations to check answers to a calculation 4.NAS.c. I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	multiplying by 0 and 1; dividing by 1; multiplying together three numbers 4.NMD.c.I can recognise and use factor pairs and commutativity in mental calculations 4.NMD.d.I can multiply two-digit and three-digit numbers by a one-digit number using formal written layout 4.NMD.e. I can solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	quantities, including non-unit fractions where the answer is a whole number 4.NFD.d. I can add and subtract fractions with the same denominator 4.NFD.e. I can recognise and write decimal equivalents of any number of tenths or hundredths 4.NFD.f. I can recognise and write decimal equivalents to ¼, ½, ¾ 4.NFD.g. I can find the effect of dividing a one-or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths 4.NFD.h. I can round decimals with one decimal place to the nearest whole number 4.NFD. i. I can compare numbers with the same number of decimal places up to two decimal places 4.NFD.j. I can solve simple measure and money problems involving fractions and decimals to two decimal places.	squares) in centimetres and metres 4.M.c. I can find the area of rectilinear shapes by counting squares 4.M.d. I can estimate, compare and calculate different measures, including money in pounds and pence 4.M.e. I can read, write and convert time between analogue and digital 12- and 24-hour clocks 4.M.f. I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	order angles up to two right angles by size 4.GPS.c. I can identify lines of symmetry in 2-D shapes presented in different orientations 4.GPS.d. I can complete a simple symmetric figure with respect to a specific line of symmetry.	the left/right and up/down 4.GPD.c. I can plot specified points and draw sides to complete a given polygon.	comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.