'Assessing Without Levels' ~ *Progress & Attainment Against Expectations*			
Mathematics Curriculum 2014: Year 4			
	Emerging	**Expected**	**Exceeding**
Numbers & the number system			
• Count in multiples of 6, 7, 9, 25 and 1000.			
• Find 1000 more or less than a given number.			
• Count backwards through zero to include negative numbers.			
• Recognise the place value of each digit in a four-digit number (THTU, HTU, TU, and U).			
• Order and compare numbers beyond 1000.			
• Identify, represent and estimate numbers using different representations.			
• Round any number to the nearest 10, 100 or 1000.			
• Solve number and practical problems that involve all of the above and with increasingly large positive numbers.			
• 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.			
Calculation ~ addition & subtraction			
• Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.			
• Estimate and use inverse operations to check answers to a calculation.			
• Solve + and - two-step problems in contexts, deciding which operations and methods to use & why.			
Calculation ~ multiplication & division			
• Recall multiplication and division facts up to 12 x 12			
• Use place value, known and derived facts to multiply & divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.			
• Recognise and use factor pairs and commutativity in mental calculations.			
• Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.			
• 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.			
Calculation ~ Fractions, Decimals & Percentages			
• Recognise and show using diagrams, families of common equivalent fractions			
• Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.			
• Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.			
• Add and subtract fractions with the same denominator			
• Recognise and write decimal equivalents of any number of tenths or hundredths.			
• Recognise & write decimal equivalents to $^1/_4$; $^1/_2$; $^3/_4$			
• 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			
• Round decimals with one decimal place to the nearest whole number			
• Compare numbers with the same number of decimal places up to two decimal places			

• Solve simple measure and money problems involving fractions and decimals to two decimal places.			
Measures			
• Convert between different units of measure (e.g. kilometre to metre; hour to minute)			
• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres			
• Find the area of rectilinear shapes by counting squares.			
• Estimate, compare and calculate different measures, including money in pounds and pence.			
• Read, write and convert time between analogue and digital 12 and 24-hour clocks.			
• Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.			
Shape and Space			
• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes			
• Identify acute and obtuse angles and compare and order angles up to two right angles by size			
• Identify lines of symmetry in 2-D shapes presented in different orientations			
• Complete a simple symmetric figure with respect to a specific line of symmetry.			
Position and direction			
• Describe positions on a 2-D grid as coordinates in the first quadrant			
• Describe movements between positions as translations of a given unit to the left/right and up/down			
• Plot specified points and draw sides to complete a given polygon.			
Statistics			
• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs			
• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.			