Mathematics Key Objectives Record of Achievement/Self Assessment Sheet

Name _____ Year 4

	2	3	Year 4: main objectives (calculations)	5	6
A	When I do sums in my head, I can add a one-digit number or a multiple of 10 to any two-digit number. I can also take away a one-digit number or a multiple of 10 from any two-digit number.	When I do sums in my head, I can add or take away two or more one-digit and two-digit numbers.	**When I do sums in my head, I can add or take away pairs of two-digit whole numbers (e.g. 47 + 58, 91 – 35).**	When I do sums in my head, I can add and take away numbers up to 1000. I can also take away one near-multiple of 1000 from another (e.g. 6070 – 4097).	I can do mental addition and subtraction accurately with decimal numbers (e.g. U.t ± U.t) as well as whole numbers.
B	I can use apparatus and jottings to help me add and take away two-digit numbers.	I use written methods to add and subtract two digit and three digit numbers and to help me explain these sorts of sums.	**I use efficient written methods to add and subtract two-digit and three-digit numbers. I can also use written methods to add and subtract money in pounds and pence (e.g. £3.75 + £2.50; £3.75 - £2.50).**	I use efficient written methods to add and subtract whole numbers and decimals with up to two places.	I use efficient written methods to add and subtract integers (whole numbers) and decimals…
C		I can times one-digit and two-digit numbers by 10 and 100. I can describe what happens to the digits in numbers when I times them by 10 or 100.	**I can multiply numbers up to a thousand by 10 and 100 and divide them by 10 and 100 (when the answers are whole numbers). I understand the effect of multiplying and dividing by 10 or 100 and I can relate this to changing from centimetres to metres, from grams to kilograms etc. and vice versa.**	Using my knowledge of place value, I can multiply and divide whole numbers and decimals by 10, 100 and 1000.	
D	I can use my maths vocabulary, apparatus and jottings to help me do multiplication and division, including sums with remainders.	I can use apparatus and jottings to multiply and divide two-digit numbers (e.g. 13 × 3, 50 ÷ 4). I can round remainders up or down after thinking about the context of the question and deciding which makes sense.	**I can use written methods to work out and explain multiplication and division of two-digit numbers by a one-digit number (e.g. 15 × 9, 98 ÷ 6), including division suns with remainders**	I use efficient written methods to multiply and divide (including HTU × U, TU × TU, U.t × U and HTU ÷ U).	I use efficient written methods to … multiply and divide numbers (including decimals) by a one-digit number, and to multiply two-digit and three-digit integers by a two-digit whole number.
E	I can solve problems which need me to add, take away, times or divide numbers, measurements or money (pounds and pence).	I can solve one-step and two-step problems involving numbers, money or measurements (including time). I decide what sums to do and complete them correctly.	**I can solve one-step and two-step problems involving numbers, money or measurements (including time). I decide what sums to do and complete them correctly. I use a calculator when it is sensible to do so.**	I can solve one-step and two-step problems involving whole numbers and decimals and all four operations (+, -, x, ÷). I make good decisions about the best ways to do the calculations (whether to use mental methods with jottings, written methods or a calculator).	I can solve multi-step problems. I can solve problems involving fractions, decimals and percentages. I make good decisions at each stage of the calculation about the best way to do the sums (whether to use mental methods with jottings, written methods or a calculator).

	2	3	**Year 4: main objectives**	5	6
F	I can correctly find one half, one quarter and three quarters of a shape and set of objects.	I can read and write "proper fractions" (e.g. 3/7, 9/10). I know that the denominator tells me how many parts there are in a whole one and that the numerator tells me the number of parts. I can judge fractions of shapes and use diagrams to compare fractions and find equivalent fractions.	**I can use diagrams to find equivalent fractions (e.g. 6/8 and 3/4, or 70/100 and 7/10).** **I can interpret mixed numbers (e.g. 3½) and put them in the correct place on a number line.**	… I can find equivalent fractions (e.g. 7/10 = 14/20, or 19/10 = 19/10). I can relate fractions to their decimal form.	… I can simplify fractions by cancelling common factors. I can put a set of fractions in order by converting them to fractions with a common denominator.
G	I know my 2x, 5x and 10x times-tables well and I can work out the related division facts quite quickly. I recognise multiples of 2, 5 and 10.	I know my 2x, 3x, 4x, 5x, 6x and 10x times-tables well and I can work out the related division facts quite quickly. I recognise multiples of 2, 5 or 10 up to 1000	**I know my time-tables (including 7x, 8x and 9x tables) well and can work out the related division facts quite quickly.** **I recognise multiples of numbers 1 to 10, up to the tenth multiple.**	I quickly recall multiplication facts up to 10 × 10 and I can use them to multiply pairs of multiples of 10 and 100. I can quickly work out division facts related to these times-tables.	I use my knowledge of place value and multiplication facts to 10 × 10 to work out related multiplication and division facts involving decimals (e.g. 0.8 × 7, 4.8 ÷ 6).
H	I can spot and use whole, half and quarter turns, both clockwise and anticlockwise. I know that a right angle is a quarter turn.	I can use a set-square to draw right angles and to find right angles in 2-D shapes. I can compare angles with a right angle. I know that a straight line is "equal to" two right angles.	**I know that angles are measured in degrees and that one whole turn is 360°.** **I can compare and order angles up to 180°.**	I can estimate, draw and measure acute and obtuse angles using an angle measurer or protractor. I can use my knowledge that a straight line is 180° to calculate angles in a straight line.	When I estimate angles, I am quite accurate. I can use a protractor to measure and draw angles (including angles in shapes). I can calculate angles in a triangle or around a point.
I	I can estimate, compare and measure lengths, weights and capacities. I choose and use standard units (m, cm, kg, litre) and suitable measuring instruments.	I know the relationships between kilometres and metres, metres and centimetres, kilograms and grams, litres and millilitres. I choose and use appropriate units to estimate, measure and record measurements.	**I choose and use standard metric units and their abbreviations when estimating, measuring and recording length, weight and capacity.** **I know the meaning of 'kilo', 'centi' and 'milli' and, where appropriate, I use decimal notation to record measurements (e.g. 1.3 m or 0.6 kg).**	I can read, choose, use and record standard metric units to estimate and measure length, weight and capacity accurately. I can convert larger to smaller units using decimals to one place (e.g. change 2.6 kg to 2600 g)	I choose and use standard metric units of measure and can convert between units using decimals to two places (e.g. change 2.75 litres to 2750 ml, or vice versa).
J	I can answer a question by collecting and recording data in lists and tables. I can represent the data as block graphs or pictograms to show results. I can use the computer to help me do this.	I can answer a question by collecting, organizing and interpreting data. I can use tally charts, frequency tables, pictograms and bar charts to represent results and illustrate observations. I can use the computer to create a simple bar chart.	**I can answer a question by identifying what data to collect.** **I organise, present, analyse and interpret the data in tables, diagrams, tally charts, pictograms and bar charts.** **I use ICT where appropriate.**	I can answer a set of related questions by collecting, selecting and organising relevant data. I can draw sensible conclusions. I can use ICT to present results and identify further questions to ask.	I can solve problems by collecting, selecting, processing, presenting and interpreting data, using ICT where appropriate. I can draw conclusions and identify further questions to ask.