Numeracy Key Objectives Record of Achievement/Self Assessment Sheet

Name _____ Year 5

	3	4	Year 5: main objectives (calculations)	6	7
A	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, U.t - U.t) as well as with whole numbers.	I can do mental addition and subtraction involving decimals, fractions and percentages.
B	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…	I use standard column 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.	**When I do sums in my head, I can multiply a two-digit number by a one-digit number (e.g. 12 x 9) and multiply by 25 (e.g. 16 x 25). Using my knowledge of place value, I can multiply and divide whole numbers and decimals by 10, 100 and 1000.**	I can do mental multiplication and division accurately with decimal numbers (e.g. U.t x U, U.t ÷ U) as well as with whole numbers (e.g. TU x U, TU ÷ U).	I can do mental multiplication and division involving decimals, fractions and percentages.
D	I can use apparatus and jottings to multiply and divide two-digit numbers (e.g. 13 × 3, 50 ÷ 4). I round remainders up or down after thinking about the context of the question and deciding which makes sense.	I 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 sums 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 integers (whole numbers) and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer.	I use standard column methods to multiply two-digit and three-digit integers by a one-digit or two-digit integer. I can divide a three-digit integer by a two-digit integer.
E	I can work out fractions (like $^1/_2$, $^1/_3$ and $^1/_4$) of numbers.	I can find fractions of numbers, quantities and shapes (e.g. $^1/_5$ of 30 plums, $^3/_8$ of a 6 x 4 rectangle).	**I can find fractions of numbers and quantities by using division (e.g. $^1/_{100}$ of 5 kg). I can find percentages of numbers and quantities (e.g. 10%, 5% and 15% of £80).**	I can relate fractions to multiplication and division (e.g. 6 ÷ 2 = $^1/_2$ of 6 and 6 x $^1/_2$). I can express a quotient as a fraction or a decimal. I can find fractions and percentages of whole number quantities (e.g. $^5/_8$ of 96, 65% of £260).	I can calculate percentage increases and decreases (e.g. work out the new price of an item with a ticket price of £9.60 in a sale with 25% off). I can find fractions of quantities and measurements.
F	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).	I solve problems by breaking down complicated calculations into simpler steps. I think about the numbers and the context when deciding what sums to do and the best methods (mental, written, calculator) to use. I try different approaches when I come up against difficulties. I can present, interpret and compare solutions.

	3	4	Year 5: main objectives	6	7
G	I can partition three-digit numbers into multiples of 100, 10 and 1 in different ways. I can round two-digit or three-digit numbers to the nearest 10 or 100 …	I can partition four-digit whole numbers. I can also round them to the nearest 100 or nearest 10 and put them in order correctly.	**I can say what each digit represents in whole numbers and in decimals with up to two places.** **I can partition, round and order these numbers correctly.**	I can use decimal notation for tenths, hundredths and thousandths. I can partition, round and order decimals with up to three places, and position them correctly on a number line.	I can compare and order integers (whole numbers) and decimals in different contexts (e.g. when dealing with money, lengths, weights, etc.).
H	I know all my number bonds (addition and subtraction) for each number to 20. I know the sums and differences of multiples of 10 (10, 20, 30……90) and pairs of numbers that add up to 100.	I use my knowledge of number bonds and place value to work out sums and differences of pairs of multiples of 10, 100 or 1000. I can spot the doubles of two-digit numbers and I use these to work out doubles and halves of numbers like 80, 280, 300, 4500.	**I use my knowledge of place value and addition and subtraction of two-digit numbers to work out sums and differences and doubles and halves of decimals (e.g. 6.5 + 2.7 and 6.5 – 2.7, half of 5.6, double 0.34).**	I use my knowledge of place value and multiplication facts (up to 10 × 10) to work out related multiplication and division facts involving decimals (e.g. 0.8 × 7, 4.8 ÷ 6).	
I	I can read and write a range of words to describe position, direction and movement. I can use the four compass directions to describe movement about a grid.	I can spot horizontal and vertical lines. I can use the eight compass points to describe direction. I can find and describe the position of a particular square on a grid of squares.	**I can read and plot coordinates in the first quadrant.** **I recognise parallel and perpendicular lines in grids and shapes.** **I can use a set-square and ruler to draw shapes with perpendicular or parallel sides.**	I can use coordinates in the first quadrant to draw, find and complete shapes that match the properties I have been given.	I can use coordinates in all four quadrants and find points needed to complete shapes. I can also find the position of points after movement (such as reflection, rotation or translation).
J		I can draw rectangles and measure and calculate their perimeters. I can find the area of "rectilinear shapes" drawn on a square grid by counting the squares	**I can draw and measure lines to the nearest millimetre.** **I can measure and calculate the perimeter of regular and irregular polygons.** **I can use the formula for the area of a rectangle to calculate the rectangle's area.**	I can calculate the perimeter and area of "rectilinear shapes". I can estimate the area of an irregular shape by counting squares.	I can calculate the area of right-angled triangles when I know the lengths of the two perpendicular sides. I can calculate the volume and surface area of cubes and cuboids.
K	I can make tally charts, frequency tables, pictograms and bar charts to show results. I can use the computer to help make a bar chart.	I can make tables, diagrams, tally charts, pictograms and bar charts. I can use the computer to make graphs and charts.	**I can make frequency tables, pictograms and bar and line graphs to show the frequencies of events and changes over time.**	I can draw and interpret frequency tables, bar charts and line graphs. I can interpret pie charts.	I can draw, interpret and compare graphs and diagrams that represent data. (For example, I can compare proportions in two pie charts that represent different totals.)