Mathematics Target Sheet –Year 3

		Year 3 Expectations
Number and Place Value	**Counting**	count from 0 in multiples of 4, 8, 50 and 100;
	Comparing Numbers	find 10 or 100 more or less than a given number
		compare and order numbers up to 1000
	Identifying, Representing and Estimating Numbers	identify, represent and estimate numbers using different representations
	Reading and Writing Numbers	read and write numbers up to 1000 in numerals and in words
	Understanding Place Value	recognise the place value of each digit in a three-digit number (hundreds, tens, ones) solve number problems and practical problems involving these ideas.
	Problem Solving	solve number problems and practical problems involving these ideas
Number: Addition and Subtraction	**Number bonds**	
	Mental Calculations	add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds
	Written Methods	add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
	Inverse Operations, Estimating and Checking Answers	estimate the answer to a calculation and use inverse operations to check answers
	Problem Solving	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Number: Multiplication and Division	**Multiplication and Division Facts**	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
	Mental Calculation	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
	Written Calculation	*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*
	Properties of Numbers	
	Order of Operations	
	Inverse Operations, Estimating and Checking Results	*estimate the answer to a calculation and use inverse operations to check answers* (copied from Addition and Subtraction)
	Problem Solving	solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
Number	**Counting in Fractional Steps**	count up and down in tenths

	Recognising Fractions	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
	Comparing Fractions **Comparing Decimals** **Rounding including Decimals**	compare and order unit fractions, and fractions with the same denominators
	Equivalence (Including Fractions, Decimals and Percentages)	recognise and show, using diagrams, equivalent fractions with small denominators
	Addition and Subtraction of Fractions	add and subtract fractions with the same denominator within one whole (e.g. $^{5}/_{7} + {}^{1}/_{7} = {}^{6}/_{7}$)
	Multiplication and Division of Fractions	
	Problem Solving	solve problems that involve all of the above
Measurement	**Comparing and Estimating**	compare durations of events, for example to calculate the time taken by particular events or tasks
	Measuring and Calculating	measure, compare, add and subtract: **lengths** (m/cm/mm); **mass** (kg/g); **volume/capacity** (l/ml) measure the **perimeter** of simple 2D shapes add and subtract amounts of **money** to give change, using both £ and p in practical contexts
	Telling the Time	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight
	Converting	know the number of seconds in a minute and the number of days in each month, year and leap year
Geometry: Properties of Shapes	**Identifying Shapes and their Properties** **Drawing and Constructing**	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
	Comparing and Classifying	
	Angles	recognise angles as a property of shape or a description of a turn 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
	Position, Direction and Movement	identify horizontal and vertical lines and pairs of perpendicular and parallel lines
	Pattern	
Statistics	**Interpreting, Constructing and Presenting Data**	interpret and present data using bar charts, pictograms and tables
	Solving Problems	solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.
Algebra	**Equations**	solve problems, *including* ***missing number*** *problems, using number facts, place value, and more complex addition and subtraction.*
	Formulae	*solve problems, including* ***missing number*** *problems, involving multiplication and division, including integer scaling*
	Sequences	