Maths Targets

	Year 3	Evidence	Assess
Problem solving through all areas:	Reason following a line of enquiry.		
	Solve routine problems.		
	Solve non-routine problems.		
	Develop an argument, justification or proof using mathematical language.		
	Break down problems into simpler steps..		
	Persevere in seeking solutions.		
Number and Place Value	Count from 0 in multiples of 4 (up and back).		
	Count from 0 in multiples of 8 (up and back).		
	Count from 0 in multiples of 50 (up and back).		
	Count from 0 in multiples of 100 (up and back).		
	Find 10 more or less than a given number mentally.		
	Find 100 more or less than a given number mentally.		
	Recognise the place value of each digit in a 3 digit number (including 0).		
	Compare and order numbers up to 1000 (e.g. using number lines and <>).		
	Read numbers up to 1000 in numerals and in words.		
	Write and spell numbers up to 1000 in numerals and in words.		
	Identify, represent and estimate numbers using different representations (e.g. grouping, tallying etc.)		
Calculations	**Add** numbers mentally, including a 3-digit number and tens and 3- digit numbers and hundreds.		
	Subtract numbers mentally, including a 3-digit number and tens and 3- digit numbers and hundreds.		
	Add numbers with up to 3-digits, using formal written methods of columnar addition and subtraction.		
	Subtract numbers with up to 3-digits, using formal written methods of columnar addition and subtraction.		
	Estimate the answer to a calculation.		
	Use inverse operations to check answers.		
	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.		
	Recall and use multiplication facts for the 3 multiplication table.		
	Recall and use multiplication facts for the 4 multiplication table.		
	Recall and use multiplication facts for the 8 multiplication table.		
	Recall and use division facts for the 3 multiplication table.		
	Recall and use division facts for the 4 multiplication table.		
	Recall and use division facts for the 8 multiplication table.		
	Write and calculate mathematical statements for multiplication and division including for two-digit numbers times one-digit numbers.		
	Solve problems, including missing number problems, involving multiplication and division.		
	Solve positive integer scaling problems and correspondence problems in which n objects are connected to m objects.		

Fractions	Recognise, find and write unit fractions of a discrete set of objects.			
	Recognise, find and write non-unit fractions of a discrete set of objects.			
	Recognise and use unit fractions as numbers with small denominators as numbers.			
	Recognise and use non-unit fractions as numbers with small denominators as numbers.			
	Recognise and show equivalent fractions with small denominators.			
	Know that a tenth arises from dividing an object into 10 equal parts and write this as $^1/_{10}$.			
	Add and subtract fractions with the same denominator within one whole [for example, $^5/_7 + ^1/_7 = ^6/_7$].			
	Compare and order (a range of) unit fractions, also non-unit fractions with the same denominators.			

Measures	Measure, compare, add and subtract lengths (m/cm/mm).			
	Measure, compare, add and subtract mass (kg/g).			
	Measure, compare, add and subtract volume/capacity (l/ml).			
	Measure the perimeter of simple 2-D shapes.			
	Add amounts of money to give change, using both £ and p in practical contexts.			
	Subtract amounts of money to give change, using both £ and p in practical contexts.			
	Tell the time from an analogue clock, including using Roman numerals from I to XII.			
	Write the time for an analogue clock, including using Roman numerals from I to XII.			
	Tell the time from a digital clock (12 hr and 24 hr)			
	Write the time for a digital clock (12 hr and 24 hr)			
	Estimate and read time with increasing accuracy to the nearest minute.			
	Record and compare time in terms of seconds, minutes and hours (single unit only).			
	Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.			
	Compare durations of events , e.g. to calculate the time taken by events.			
	Draw 2-D shapes.			
	Make 3-D shapes using modelling materials.			
	Recognise 3-D shapes in different orientations and describe them.			
	Know the number of seconds in a minute and the number of days in each month, year and leap year.			
	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.			
	Identify horizontal and vertical lines (in shapes).			
	Identify pairs of perpendicular and parallel lines in shapes.			
Statistics	Interpret and present data using bar charts, pictograms and tables.			
	Solve one-step and two-step questions using information presented in **scaled bar charts**.			
	Solve one-step and two-step questions using information presented in **pictograms**.			
	Solve one-step and two-step questions using information presented in **tables**.			

Aut 1		Spr 1		Sum 1	
Aut 2		Spr 2		Sum 2	

Em - Emerging Understanding   Exp - Expected Understanding   D - Deep Understanding

Maths Targets

Year 4	How many times?		
	1	2	3
Problem solving through all areas:			
Reason following a line of enquiry.			
Solve routine problems.			
Solve non-routine problems.			
Develop an argument, justification or proof using mathematical language.			
Break down problems into simpler steps..			
Persevere in seeking solutions.			
Number and Place Value			
Count in 6s from 0.			
Count in 7s from 0.			
Count in 9s from 0.			
Count in 25s from 0.			
Count in 1000s from 0			
Find 1000 more or less than any given number mentally.			
Recognise the value of each digit in a 4 digit number.			
Compare and order a set of numbers beyond a 1000 (e.g. using number lines and <>).			
Identify, represent and estimate numbers using groupings (tallies, groups of 25, 50, 100).			
Read 4-digit numbers in numerals and words (including accurate spelling).			
Write 4-digit numbers in numerals and words (including accurate spelling).			
Round any number to the nearest 10, 100 and 1000 (using number lines).			
Read Roman numerals to 100 (I to C).			
Know that over time, the numeral system changed to include the concept of zero and place value.			
Solve number and practical problems using all of the above and with increasingly larger positive numbers.			
Calculations			
Subtract numbers with up to 4 digits using the formal written methods of addition and subtraction where appropriate.			
Estimate and use inverse operations to check answers to a calculation.			✓
Solve addition two-step problems in contexts.			
Solve subtraction two-step problems in contexts.			
Decide which operations and methods to use and why within problem solving.			
Recall multiplication facts for multiplication tables up to 12 × 12.			
Recall division facts for multiplication tables up to 12 × 12.			
Use place value, known and derived facts to multiply and divide mentally.			
Multiplying by 0 and 1; dividing by 1; multiplying together three numbers.			
Add numbers with up to 4 digits using the formal written methods of addition and subtraction where appropriate.			
Recognise and use factor pairs.			
Understand commutatively 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.			

	Solve problems involving multiplying and adding.				
	Use the distributive law to multiply two digit numbers by one digit.				
	Solve harder correspondence problems such as n objects are connected to m objects.				
Fractions	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 one hundred and dividing tenths by ten.				
	Use 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 and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$.				
	Find the effect of dividing a one- or two-digit number by 10 and 100.				
	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 problems involving fractions and decimals (e.g. time, money, measures).				

Measures	Convert between different units of measure [e.g., kilometre to metre; hour to minute].				
	Estimate, compare and calculate different measures, including length, mass and money in pounds and pence in order to solve problems.				
	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.				
	Find the area of rectilinear shapes by counting squares.				
	Compare and classify geometric shapes, including different quadrilaterals and different 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.				
	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 discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.				
	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.				

Aut 1	Spr 1	Sum 1
Aut 2	Spr 2	Sum 2