National Curriculum for Mathematics - Objectives - Year 4

	Number				Geometry & Measurement			
POS	Number and place	Addition and subtraction	Multiplication and division	Fractions (including decimals)	Measurement	Properties of shapes	Position and direction	Statistics
LO	-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 (thousands, hundreds, tens, and ones). -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 how that, over time, the numeral system changed to include the concept of zero and place value.	-add and subtract numbers with up to 4 digits using the efficient written methods of columnar addition and subtraction where appropriate. - estimate and use inverse operations to check answers to a calculation. - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	-recall multiplication and division facts for multiplication tables up to 12 × 12. -use place value, known and derived facts to multiply and 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 which n objects are connected to m objects.	- 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 and write decimal equivalents to 1/4; 1/2; ¾ - 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 units, 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.	-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.	-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 indifferent 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.	-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 simple line graphs.