

Year Four – end of year maths expectations

Autumn: Counting and Instant Recall Facts			
Count in steps of 3, 4, 8, 50 and 100.	Count up and down in tenths	Recall and use multiplication and division facts for the 2, 3, 4, 5, 8 and 10 times tables	Recall and use multiplication and division facts for the 6 times table
Count in steps of 6 and 1000			
Spring: Counting and Instant Recall Facts			
Count in steps of 3, 4, 6, 8, 50, 100 and 1000.	Count up and down in tenths	Count up and down in hundredths	
Count backwards through zero to include negative numbers	Recall and use multiplication and division facts for the 2, 3, 4, 5, 6, 8 and 10 times tables	Recall and use multiplication and division facts for the 9, 11 and 12 times tables	
Count in steps of 9 and 25			
Summer: Counting and Instant Recall Facts			
Count in steps of 3, 4, 6, 8, 9, 25, 50, 100 and 1000.	Count up and down in tenths and hundredths	Recall and use multiplication and division facts for the 7 times table	Recall and use multiplication and division facts for all times tables up to 12×12
Count backwards through zero to include negative numbers	Count in steps of 7.		
Place Value			
count in multiples of 1000	find 1000 more or less than a given number	order and compare numbers beyond 1000	
round any number to the nearest 10, 100 or 1000			
identify, represent and estimate numbers using different representations	read Roman numerals to 1,000 (M) and recognise years written in Roman numerals	count backwards through zero to include negative numbers	
solve number and practical problems that involve all of the above and with increasingly large positive numbers	read Roman numerals to 1000 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	
Addition and Subtraction			
choose efficient mental methods to add and subtract numbers	add and subtract numbers with up to 4 digits using the formal written methods of column 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
Multiplication and Division			
recall multiplication and division facts for $6 \times$ table	recall multiplication and division facts for $9 \times$ and $11 \times$ table and begin $12 \times$ table.	recall multiplication and division facts for $7 \times$ and $12 \times$ table.	recall multiplication and division facts for multiplication tables up to 12×12
recognise and use factor pairs and commutativity in mental calculations	use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers	solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	multiply two-digit and three-digit numbers by a one-digit number using grid method (N.B. national curriculum says formal written method but grid method seems more appropriate at this stage.)

Fractions			
recognise and show, using diagrams, families of common equivalent fractions	compare numbers with the same number of decimal places up to 2 decimal places	recognise and write decimal equivalents of any number of tenths or hundreds	solve simple measure and money problems involving fractions and decimals to 2 decimal places
add and subtract fractions with the same denominator	round decimals with 1 decimal place to the nearest whole number	solve simple measure problems involving fractions	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
count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10	recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$	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 ones, tenths and hundredths	
Measurement			
estimate, compare and calculate different measures, including money in pounds and pence	Convert between different units of measure [for example, kilometre to metre; hour to minute]	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.
Geometry – Properties of Shape			
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 in different orientations	complete a simple symmetric figure with respect to a specific line of symmetry.
Geometry – Position and Direction			
describe positions on a 2-D grid as coordinates in the first quadrant	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 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 other graphs	