Numeracy Expectations Year 4

Counting	Place Value	Comparing and Ordering	Rounding approximation and estimation	Negative Numbers	Roman Numerals
Count in multiples of 6, 7, 9, 25 and 1000 Count up and down in Hundredths Count backwards through zero to include negative numbers Count up and down in Hundredths	Read and write numbers to at least 10 000 Read and write numbers with up to two decimal places Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Partition numbers in different ways (for example, 2.3 = 2 + 0.3 and 2.3 = 1 + 1.3) Identify, represent and estimate numbers using different representations.	Order and compare numbers beyond 1000 Order and compare numbers with the same number of decimal places up to 2 decimal places. Find 0.1,1,10,100 or 1000 more or less than a given number	Round any number to the nearest 10, 100 or 1000 Round decimals with one decimal place to the nearest whole number	Count backwards through zero to include negative numbers. **Multiplying by powers of 10** Find the effect of dividing a 1 or 2 digit number by 10 and 100, identify the value of the digits in the answer in ones, tenths and hundredths.	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value

Solving Number Problems	Addition and Subtraction(Mental)	Addition and Subtraction (written)	Estimating and checking	Solving + and – problems including those with missing numbers.	Understanding x and ÷
Solve number problems and practical problems involving these ideas.	Add and subtract mentally combinations of two and three digit numbers	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	Estimate and use inverse operations to check answers to a calculation	Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	Recognise and use factor pairs and commutativity in mental calculations

Multiplication and Division facts	Mental methods	Written methods	Solving x and ÷ problems including those with missing numbers.	Fractions of objects shapes and quantities.
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	Multiply two-digit and three digit numbers by a one-digit number using formal written layout. Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	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 n objects are connected to m objects	Recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators Recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten

Counting, comparing and ordering fractions	Equivalence	Calculating with fractions	Solving problems involving fractions,decimals and percentages	Length/height	Perimeter
Count on and back in steps of unit fractions Compare and order unit fractions and fractions with the same denominators (including on a number line) (continued from Year 3)	Recognise and show, using diagrams, families of common equivalent fractions Recognise and write decimal equivalents of any number of tenths or hundredths Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$	Add and subtract fractions with the same denominator (using diagrams)	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 Solve simple measure and money problems involving fractions and decimals to two decimal places.	Estimate and calculate lengths. Compare lengths.	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

Area	Mass	Capacity/Volume	Temperature	Conversion	Time
Understand that area is a measure of surface within a given boundary Find the area of rectilinear shapes by counting squares	Estimate and calculate mass Compare Mass	Estimate and calculate volume/capacity Compare volume/capacity (L ml)	Order temperatures including those below 0°C	Convert between different units of measure (e.g. kilometre to metre; hour to minute)	Convert between different units of time, e.g. hour to minute Read, write and convert time between analogue and digital 12 and 24-hour clocks

Money	Solving problems involving money and measures	Properties of shape	Angles and rotation	Coordinates (including reflection and translation)	Sorting and Classifying
Write amounts of money using decimal notation Recognise that one hundred 1p coins are equivalent to £1 and that each coin is $\frac{1}{100}$ of £1 Estimate, compare and calculate money in pounds and pence	Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days and problems involving money and measures	Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes 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 Continue to identify horizontal and vertical	Identify acute and obtuse angles and compare and order angles up to two right angles by size	Describe positions on a 2-D grid as coordinates in the first quadrant Plot specified points and draw sides to complete a given polygon Describe movements between positions as translations of a given unit to the left/right and up/down	Use a variety of sorting diagrams to compare and classify numbers and geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

| | | lines and pairs of perpendicular and parallel lines

Compare and classify geometric shapes based on their properties and sizes | | | |
|---|---|---|---|---|---|

Present and interpret dats	Solve problems using data				
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				