Year 4
National Curriculum Maths Objectives

Place value

★ 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 that over time, the numeral system changed to include the concept of zero and place value

Addition and Subtraction

★ 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 n objects are connected to m objects

Multiplication and Division

★ 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 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
★ 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 one quarter, a half, three quarters
★ 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
★ 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

Measurement

★ Convert between different units of measure [for example, 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

Geometry: Shapes

★ 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 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