Year 4 Mathematics Yearly overview

Area

NUMBER AND PLACE VALUE –

NPV1 - count in multiples of 6, 7, 9, 25 and 1000
NPV2 – find 1000 more or less than a given number
NPV3 – count backwards through zero to include negative numbers
NPV4 - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
NPV5 - order and compare numbers beyond 1000
identify, represent and estimate numbers using different representations
NPV6 - round any number to the nearest 10, 100 or 1000
NPV7 - solve number and practical problems that involve all of the above and with increasingly large positive numbers
NPV8 - 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 –

N+-1 - add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
N+-2 – estimate and use inverse operations to check answers to a calculation
N+-3 – solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

MULTIPLICATION AND DIVISION –

Nx÷1 - recall multiplication and division facts for multiplication tables up to 12 × 12
Nx÷2 – 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
Nx÷3 – recognise and use factor pairs and commutativity in mental calculations
Nx÷4 - multiply two-digit and three-digit numbers by a one-digit number using formal written layout
Nx÷5 - 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 –

NFD1 - recognise and show, using diagrams, families of common equivalent fractions
NFD2 - count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
NFD3 - 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
NFD4 - add and subtract fractions with the same denominator
NFD5 - recognise and write decimal equivalents of any number of tenths or hundredths
NFD6 - recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
NFD7 - 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
NFD8 - round decimals with one decimal place to the nearest whole number
NFD9 - compare numbers with the same number of decimal places up to two decimal places
NFD10 - solve simple measure and money problems involving fractions and decimals to two decimal places.

Area

STATISTICS –

S1 - interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
S2 – solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

MEASUREMENT –

M1 – Convert between different units of measure [for example, kilometre to metre; hour to minute]
M2 - measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
M3 - find the area of rectilinear shapes by counting squares
M4 - estimate, compare and calculate different measures, including money in pounds and pence
M5 - read, write and convert time between analogue and digital 12- and 24-hour clocks
M6 - solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

GEOMETRY –Position & Direction –

GPD1 - describe positions on a 2-D grid as coordinates in the first quadrant
GPD2 - describe movements between positions as translations of a given unit to the left/right and up/down
GPD3 - plot specified points and draw sides to complete a given polygon.

GEOMETRY –Properties of Shapes

GPoS1 - compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
GPoS2 - identify acute and obtuse angles and compare and order angles up to two right angles by size
GPoS3 – identify lines of symmetry in 2-D shapes presented in different orientations
GPoS4 - complete a simple symmetric figure with respect to a specific line of symmetry.