Newtons Primary School

Mathematics expectations

YEAR 4

Number

- I can count in 6s, 7s, 9s, 25s and 1000
- I recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- I can compare and order numbers beyond 1000
- I can read, write, order and compare numbers to 10,000
- I can identify, estimate and represent numbers using different representations including measures (4 digits)
- I can read Roman numerals to 100 (I to C)
- I can find 1000 more or less than a given number
- I can count backwards through 0 to include negative numbers
- I can count forwards through 0 to include negative numbers
- I can begin to solve problems with negative numbers in context e.g. temperature
- I can order and compare negative numbers
- I can round any number to the nearest 10, 100 or 1000
- I can solve number and practical problems that involve place value, negative numbers and with increasingly large positive numbers up to 10,000 and explain reasoning

Addition and Subtraction

- I can add and subtract numbers up to 4 digits using formal written methods of column addition and subtraction
- I can estimate and use inverse operations to check answers to calculations
- I can solve addition and subtraction 2 step problems, including missing numbers in contexts, deciding which operations and methods to use and why.
- I can solve missing number problems, including balancing equations

Multiplication and Division

- I know multiplication and division facts for 2, 3, 4, 5, 6, 7, 8, 9, 0, 11 and 12 times tables
- I can use place value, known and derived facts to x / ÷ mentally, including multiplying by 0 & 1, dividing by 1, multiplying 3 numbers together. 2x3=6 so 600÷3=200
- I understand the term 'factor'
- I can multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout
- I can recognise and use factor pairs and commutatively in mental calculations. e.g. 39x7=(30x7)+(9x7) e.g. 2x3x4=(2x4)x4 and 2x(3x4)
- I can solve problems involving multiplying and adding including using the distributive law to multiply 2-digit numbers by 1-digit
- I can solve problems of integer scaling and correspondence e.g. n objects are connected to m objects. e.g. number of meal choices on a menu e.g. 3 cakes shared between 10 children.
- I am beginning to use the formal written method of short multiplication

Fractions

- I can count up and down in hundredths
- I can recognise that hundredths arise from dividing an object into one hundred equal parts, dividing by one hundred and dividing tenths by ten
- I can recognise and write decimal equivalents of any tenth or hundredth number
- I can recognise and show ,using diagrams, families of common equivalent fractions
- I can simplify simple fractions e.g. 2/8=1/4
- I can solve problems involving increasingly harder fractions to calculate quantities, fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- I can add / subtract fractions with the same denominator including beyond 1
- I can recognise and write decimal equivalents of any number of tenths or hundredths and 1/4, 1/2 and ¾
- I can round decimals with 1dp to the nearest whole number
- I can compare numbers with the same number of decimal places up to 2dp
- I can find the effect of ÷ a one- or two- digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths

- I can solve simple measure and money problems involving fractions and decimals to 2dp

Measurement

- I can convert between different units of measure [for example, kilometre to metre, hours to minutes]
- I can measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m
- I can use decimal notation to record money
- I can read, write and convert time between analogue and digital 12- and 24-hour clocks (using am and pm)
- I can estimate, compare and calculate different measures including money in £ & p
- I can read, write and convert time between analogue and digital 12/24 hour
- I can find the area of rectilinear shapes by counting squares
- I can start to relate area to arrays
- I can solve problems involving converting from hours to minutes, minutes to seconds, years to months and weeks to days
- I can begin to read labelled divisions, including tenths

Properties of shape

- I know names of common quadrilaterals.
- I know and can name common triangles.
- I can compare and classify geometric shapes including quadrilaterals and triangles based on properties and sizes
- I can identify all lines of symmetry in common 2-D shapes including those presented in different orientations.
- I can complete a simple symmetric figure with respect to a specific line of symmetry
- I can identify acute and obtuse angles
- I can compare and order angles up to 180^{0}

Position and direction

- I can describe positions on a 2D grid as coordinates in the 1st quadrant. e.g. (2,5)
- I can describe movements between positions as translations of a given unit to the left / right and up / down
- I can plot specific points and draw sides to complete a given polygon

Statistics

- I can present discrete and continuous data using appropriate graphical methods including bar charts and time graphs
- I can interpret discrete and continuous data using appropriate graphical methods including bar charts and time graphs
- I can draw and read line graphs
- I can draw axes and label integer scales
- I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs