Newtons Primary School

Mathematics expectations

YEAR 3

Number and Place Value

- I understand the importance of 0 as a place holder in numbers up to 1000
- I can partition numbers in different ways e.g. 146=100+46 146=130+16
- I can recognise place value of each digit in 3-digit numbers
- I can identify, estimate and represent numbers up to 1000 using different representations
- I can read & write numbers in numerals and words up to 1000
- I can partition 3 digit numbers into H, T, O
- I can find 10 or 100 more or less than any number
- I can round numbers to the nearest 10 or 100
- I can compare and order numbers up to 1000 using > < =
- I can recognise and read Roman numerals to 20 (I to XX)
- I can use partitioning up to 999 to solve problems
- Confidently count on in multiples of 2, 3, 4, 5, 8, 10, 50, 100 from any given starting number
- I can read, write, compare and order numbers beyond 1000

Addition and Subtraction

- I can add / subtract numbers with up to 3 digits using formal written methods of columnar addition and subtraction up to 999
- I can add and subtract numbers mentally including: ThHTO+O, ThHTO+T, ThHTO+H
- I can estimate answers to calculations and use inverse operations to check answers
- I can solve missing number problems involving addition and subtraction which include balancing equations up to 100
- I can solve problems, including missing number problems using number facts, place value and more complex addition / subtraction

Multiplication and Division

- I know my TIMES TABLES: 2, 3, 4, 5, 8 and 10
- I can write number sentences for times tables and related division facts
- I can progress to use formal written method calculations of short multiplication / division.
- I can solve problems, including missing number problems, involving x / ÷
- I can begin to solve problems of positive integer scaling and correspondence. i.e. n objects are connected to m objects. e.g. 3 hats, 4 coats, how many different outfits?
- I can use times tables to work out more complex calculations. e.g.4x12x5 = (4x5) x 12 = 20x12 = (2x12)x10= 24x10= 240
- I can solve problems of positive integer scaling and correspondence. i.e. n objects are connected to m objects. e.g. 3 hats, 4 coats, how many different outfits?

Fractions

- I can recognise, find and write fractions of a discrete set of objects: unit fractions with small denominators
- I can count up and down in tenths.
- I can recognise, and show using diagrams, equivalent fractions with small denominators
- I can recognise, find and write fractions of a discrete set of objects: non-unit fractions and non-unit fractions with small denominators
- I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- I can recognise that tenths arise from dividing an object into ten equal parts and dividing 1-digit numbers or quantities by 10
- I can compare and order fractions with the same denominators
- I can compare and order unit fractions including on a number line going beyond 1.
- I can add and subtract fractions with the same denominator within a whole. e.g. 5/7 + 1/7 = 6/7
- I understand the relation between unit fractions and division
- I can solve problems that involve all of the above
- I can compare and order unit fractions, and fractions with the same denominators, using < > =

Measurement

- I can use vocabulary such as o'clock, am / pm, morning, afternoon, noon, midnight

- I know the number of seconds in a minute & the number of days in each month, year & leap year.
- I can compare durations of events for example to calculate the time taken by particular events or tasks.
- I can measure the perimeter of simple 2D shapes
- I can add and subtract amounts of money to give change using both £ & p in practical contexts
- I can tell and write the time from an analogue clock to the nearest minute using am and pm
- I can read 12 hour & 24 hour clocks
- I can record and compare time in terms of seconds, minutes and hours
- I can measure, compare, add and subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) including mixed units. e.g. 200g and 1kg
- I can read labelled and unlabelled divisions (in 1s, 2s, 5s, 10s, 100s)

Properties of shape

- I can draw 2D shapes
- I can make 3D shapes using modelling materials
- I can recognise 3D shapes in different orientations and describe them
- I can recognise and name prisms
- I can identify right angles as a quarter turn
- I can recognise angles as a property of shape or a description of a turn.
- I can recognise that 2 right angles make 1/2 turn, 3 make 3/4 turn and 4 make a whole turn
- I can identify whether angles are greater or less than a right angle
- I can identify horizontal and vertical lines
- I can identify pairs of perpendicular and parallel lines
- I can identify horizontal and vertical lines of symmetry in 2D shapes

Position and direction

- I know the 8 points of a compass

Statistics

- I can present data using bar charts, pictograms and tables
- I can use scales progressing in 2s, 5s and 10s
- I can interpret data using bar charts, pictograms and tables in a variety of contexts
- I can solve 1- and 2- step questions e.g. How many more / fewer using information presented in scaled bar charts, pictograms and tables