Hamble Primary School

‘Learning for Life’

End of Year Statements for Maths

Based on the NAHT Key Performance Indicators

By the end of Year 1 the expectation is that a child…

Counts to and across 100, forwards and backwards, beginning with 0 or one, or from and given number

Count, reads and writes numbers to 100 in numerals; counts in multiples of twos, fives and tens

Given a number, identifies one more and one less

Represents and uses number bonds and related subtraction facts within 20

Recognises, finds and names a half as one of two equal parts of an object, shape or quantity

Compares, describes and solves practical problems for:

- lengths and heights eg long/short, longer/shorter, tall/short, double/half
- mass/weight eg heavy/light, heavier than, lighter than
- capacity and volume eg full/empty, more than, less than, half, half full, quarter
- time eg quicker, slower, earlier, later

Tells the time to the hour and half past the hour and draws the hands on a clock face to show these times

Recognised and names common 2-D and 3-D shapes, including rectangles/squares, circles and triangles, cubes/cuboids, pyramids and spheres

Has a developing knowledge of addition and subtraction using both objects and pictorial representations

Can describe and compare different quantities such as length, mass and capacity/volume

Should read and spell mathematical vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

By the end of Year 2 the expectation is that a child…

Counts in steps of two, three and five from 0, and in tens from any number, forward and backward

Compares and orders numbers from 0 up to 100

Uses < > and = signs correctly

Uses place value and number facts to solve problems

Solves problems with addition and subtraction by:

- using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- applying an increasing knowledge of mental and written methods

Recalls and uses addition and subtraction facts to 20 and 100 – fluently up to 20

Recalls and uses multiplication and division facts for the two, five and ten multiplication tables, including recognising odd and even numbers

Solves problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Recognises, finds, names and writes fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity

Solves simple problems in a practical context involving addition and subtraction of money of the same unit including giving change

Compares and sorts common 2-D and 3-D shapes and everyday objects

Uses mathematical vocabulary to describe position, direction and movement including movement in a straight line, and distinguishes between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)

Asks and answers questions about totalling and comparing categorical data

By the end of Year 3 the expectation is that a child…

Counts from 0 in multiples of 4, 8, 50 and 100

Can work out if a given number is greater or less than 10 or 100

Recognises the place value of each digit in a three-digit number (hundreds, tens and ones)

Solves number problems and practical problems involving these ideas

Adds and subtracts mentally including: a three-digit number and ones, a three-digit number and tens, and a three-digit number and hundreds

Recalls and uses multiplication and division facts for the multiplication tables, 3, 4 and 8

Writes and calculates mathematical statements for multiplication and division using the multiplication tables that are known including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

Counts up and down in tenths; recognising that tenths arise form dividing an object into 10 equal parts and in dividing one-digit numbers or qualities by 10

Recognises, finds and writes fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators

Recognises and shows, using diagrams, equivalent fractions with small denominators

Measures, compares, adds and subtracts lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Adds and subtracts amounts of money to give change, using both £ and p in practical contexts

Tells and writes the time from an analogue clock and 12-hour and 24-hour clocks

Identifies right-angles, recognises that two right angles make a hlf-turn, three make three quarters of a turn and four a complete turn; identifies whether angles are greater than or less than a right angle

Interprets and presents data using bar charts, pictograms and tables.

By the end of Year 4 the expectation is that a child…

Counts in multiples of six, seven, nine, 25 and 1,00

Counts backwards through zero to include negative numbers

Orders and compares numbers beyond 1,000

Rounds any number to the nearest 10, 100 or 1,000

Solves additional and subtraction two-step problems in context, deciding which operations and methods to use and why

Recalls multiplication and division facts fro multiplication tables up to 12x12

Recognises and shows, using diagrams, families of common equivalent fractions

Counts up and down in hundredths; recognises that hundredths arise when dividing an object by 100 and dividing tenths by 10

Rounds decimals with one decimal place to the nearest whole number

Solves simple measure and money problems involving fractions and decimals to two decimal places

Converts between units of measure eg kilometre to metre; hour to minute

Compares and classifies geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

Identifies line of symmetry in two dimensional shapes presented in different orientations

Plots specified points and draws sides to complete a given polygon

Solves comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

By the end of Year 5 the expectation is that a child…

Reads, write, orders and compares numbers to at least 1,000,000 and determines the value of each digit

Interprets negative numbers in context, counts forwards and backwards with positive and negative whole numbers including through zero

Adds and subtracts whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction)

Adds and subtracts numbers mentally with increasingly large numbers (eg 12,462 – 2,300 – 10,162)

Identifies multiples and factors including finding all factor pairs of a number and common factors of two numbers

Solves problems involving multiplication and division including using a knowledge of factors and multiples, square and cubes

Solves problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates

Compares and orders fractions whose denominators are all multiples of the same number

Reads and writes decimal number as fractions eg 0.71 = 71/100

Reads, writes, orders and compares numbers with up to three decimal places

Solves problems which require knowing percentage and decimal equivalents of ½, ¼,. 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25

Converts between different units of metric measure (eg kilometre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)

Measures and calculates the perimeter of composite shapes in centimetres and metres

Calculates and compares the area of rectangles (including squares), using standard units, square centimetres (cm2) and square metres (m2)

Draws given angles and measures them in degrees

Distinguishes between regular and irregular polygons based on reasoning about equal sides and angles

Completes, reads and interprets information in tables, including timetables

By the end of Year 6 the expectation is that a child…

Rounds any whole number to a required degree of accuracy

Uses negative numbers in context and calculates intervals across zero

Multiplies multi-digit numbers up to four digits by a two-digit number using the formal written method of long multiplication

Divides numbers up to four digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

Solves addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Uses estimation to check answers to calculations and determines, in the context of a problem, an appropriate degree of accuracy

Uses written division methods in cases where the answer has up to two decimal places

Solves problems which require answers to be rounded to specific degrees of accuracy

Recalls and uses equivalences between simple fractions, decimals and percentages, including in different contexts

Solves problems involving the calculation of percentages eg of measures and calculations such as 15 per cent of 360, and the use of percentages for comparison

Solves problems involving unequal sharing and grouping using knowledge of fractions and multiples

Uses simple formulae

Uses, reads, write and converts between standard units, covering measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places

Compares and classifies geometric shapes based on their properties and sizes and finds unknown angles in any triangle, quadrilaterals and regular polygons

Draws and translates simple shapes on the coordinate plane and reflects then in the axes

Interprets pie charts and line graphs and uses these to solve problems

Calculates and interprets the mean as an average