

Number – Number and Place Value

Children will learn to:

- * 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.

Number – Addition and Subtraction

Children will learn to:

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

Number – Multiplication and Division

Children will learn to:

- * 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.

Geometry – Properties of Shapes

Children will learn to:

- * 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.



Little Paxton

Primary School

Year 4

Mathematics

Number – Fractions

Children will learn to:

- * 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, one 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

Children will learn to:

- * 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 – Position and Direction

Children will learn to:

- * 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

Statistics

Children will learn to:

- * 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.