

## Number

- Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.
- Read, write, order and compare numbers to at least 1 000 000.
- Determine the place value of each digit in numbers up to 1 000 000.
- Read Roman numerals to 1000(M) and recognise years written in Roman numerals.
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000, and 100 000.
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
- Add and subtract numbers mentally with increasingly large numbers.
- Add and subtract numbers with up more than 4 digits, using formal written methods of columnar addition and subtraction.
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers.
- Establish whether a number up to 100 is prime and recall prime numbers up to 19.
- Recognise and use square numbers and cube numbers and the notation for squared <sup>2</sup> and cubed <sup>3</sup>.
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- Multiply numbers up to 4 digit by a 1 or 2 digit number using formal written methods, including long multiplication for 2 digit numbers.
- Divide numbers up to 4 digits by 1 digit numbers.
- Solve addition and subtraction, multiplication and division word problems.

# St Bartholomew's Primary School



## Year 5 End of Year Expectations Maths

## Geometry

- Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- Identify 3–D shapes including cubes and other cuboids, from 2–D representations.
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
- Draw given angles and measure them in degrees.
- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

## Statistics

- Complete, read and interpret information in tables, including timetables.
- Solve comparison, sum and difference problems using information presented in a line graph

## Fractions, decimals and percentages

- Recognise mixed numbers and improper fractions and convert from one to the other.
- Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- Compare and order fractions whose denominators are multiples of the same number.
- Add and subtract fractions with the same denominator and whose denominators are multiples of the same number.
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Read and write decimal numbers as fractions.
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Read, write, order and compare numbers with up to three decimal places.
- Solve problems involving numbers up to three decimal places
- Understand that per cent relates to number parts per hundred.
- Write percentages as a fraction with denominator 100 as a decimal fraction.
- Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.

## Measurement

- Solve problems involving converting between units of time.
- Convert between metric measures and estimate volume and capacity.
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metre.
- Calculate and compare the area of squares and rectangles.
- Use all four operations to solve problems involving measure [money, mass, length, capacity and time) using decimal notation, including scaling.