

## An overview of our Maths throughout the year



Year 5



- ◆ read, write, order and compare numbers to at least 1 million and numbers with up to three decimal places, determine the value of each digit
- ◆ interpret negative numbers in context, counting forwards and backwards
- ◆ round any number up to a million to a power of 10 and decimals with two decimal places to the nearest whole or tenth
- ◆ add and subtract whole numbers with more than four-digits, including using formal written methods
- ◆ identify prime numbers to 100 and recall those to 19, awareness of prime factors and non-prime numbers
- ◆ short multiplication and division of four-digit by a one-digit and long multiplication of four-digit by two-digit number
- ◆ multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- ◆ compare, order, add and subtract fractions whose denominators are all multiples of the same number
- ◆ understand that per cent relates to “number of parts per 100”, and write percentages as a fraction with denominator 100, and as a decimal
- ◆ multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

- ◆ convert different units of metric measures; understand and use equivalences between metric and imperial units
- ◆ calculate the perimeter of composite rectilinear and the area of rectangles using standard units

- ◆ given angles and measure them in degrees (°) including acute, obtuse and reflex angles
- ◆ distinguish between regular and irregular polygons based on reasoning about equal sides and angles

- ◆ solve number problems and practical problems involving these ideas

## This Autumn term we will be learning:

- To read, write, order and compare numbers at least to 1,000,000 and determine the value of each digit.
- To count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
- To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction).
- To add and subtract numbers mentally with increasingly large numbers.
- To identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- To multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- To know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles.
- To compare and order fractions whose denominators are all multiples of the same number.
- To identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- To read and write decimal numbers as fractions (for example,  $0.71 = 71/100$ ).
- To measure and calculate the perimeter of composite rectilinear shapes in cm and m.
- To calculate and compare the area of squares and rectangles including using standard units, square centimetres ( $\text{cm}^2$ ) and square metres ( $\text{m}^2$ ) and estimate the area of irregular shapes.

## This is how you can help:

**Apps** - Squeebles Times tables + Division - all times tables and division facts

**Area and Perimeter** - collect used envelopes of different sizes, ask your child to estimate the perimeter and write it on the back. Then measure the perimeter, how close were they? Next estimate the area in  $\text{cm}^2$  and write it on the back, then calculate the area.

**Perimeter** = distance around the edge of a shape

**Area of a rectangle** = length  $\times$  breadth (width)

**Addition** - find a selection of telephone numbers and challenge your child to add the digits and find as many possibilities where the numbers add to 42. On another day can they beat their total, give them a new number to aim for or time how long it takes to find the totals for 10 different telephone numbers.