# YEAR 5

### <u>Place value</u>

- Read, write and know the value of digits in 7digit numbers
- Understand negative numbers in context
- Order & compare numbers to at least
  1,000,000
- Count forwards and backwards from negative
- whole numbers, through zero, to positive whole numbers

#### Addition and subtraction

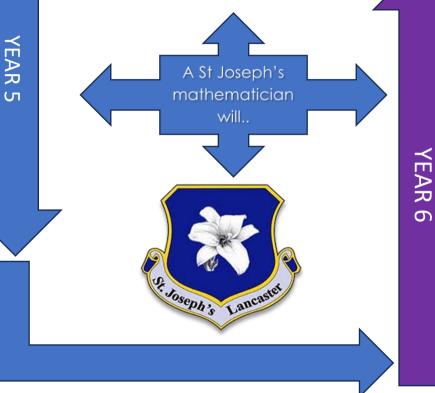
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Simplify mental calculations by manipulating the commutative law
- Use formal written methods to add and subtract whole numbers with more than 4 digits with 2 or more exchanges
- Add/subtract numbers mentally with increasingly large numbers using place value ` to help

### Multiplication and division

- Multiply HTOx TO using long multiplication
- Multiply and divide whole or decimal numbers by 10, 100, 1000
- Divide ThHTO ÷ O using short division and interpret remainders appropriately for the context
- Fractions, decimals percentages and ratio
  - Compare fractions whose denominators are all multiples of the same number
  - Add fractions with denominators that are multiples of the same number
  - Write decimal numbers as fractions e.g. 0.5 = 1/2, 0.2 =%
  - Read, write, order and compare numbers with up to 3 decimal places
  - Write percentages as a fraction with a denominator 100
  - Order fractions whose denominators are all multiples of the same number
  - Subtract fractions with denominators that are multiples of the same number

# YEAR 6 Number and place value

- Round any whole number accurately to 1 000 000
- Create practical problems that involve place value & rounding
- Convert between smaller and larger units of
- measure using decimal notation to 3dp
- Solve problems involving negative numbers in context



- Write percentages as a decimal
- Divide numbers ThHTO ÷ 0 and express remainders as a fraction or decimal
- Solve problems which require knowing decimal and percentage
- equivalents of 1/2 1/4, 1/5, 2/5

## <u>Measurement</u>

- Measure and draw angles in degrees (°) using a
- protractor
- Estimate the area of irregular shapes in square
- centimetres (cm2) or square metres (m2)
- Statistics
- Read and interpret information in timetables

Addition. subtraction, multiplication and division

- Multiply and divide ThHTO by TO using long multiplication or short division
- Estimate the answer to a calculation problem
- Solve multi-step problems in contexts involving al four operations

 Simplify mental calculations by manipulating the distributive law <u>Eractions, decimals percentages and</u> ratio

- Multiply simple pairs of fractions
- Add and subtract fractions when both denominators are different
- Know the fraction, decimal and percentage equivalents for all halves, quarters, fifths, tenths, sixths and eighths
- Find percentages of quantities
- Compare relative proportions by comparing the parts to the whole <u>Algebra</u>
  - Describe and generate linear number sequences algebraically
  - Use simple formulae

### Properties of shapes

- Calculate the volume of a cuboid using V= a X D X C
- Calculate the area of triangles
- Calculate the area of parallelograms
- Find unknown angles in any triangle
- Find unknown angles in any quadrilateral

# Position of movement

• Use co-ordinates to describe positions in all four quadrants of a grid

## <u>Statistics</u>

- Calculate and interpret the mean average of a set of data
- Interpret and construct pie charts and line graphs from my own enquiries