

## MEASURES


- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places.
- Use, read, write and convert between standard units, converting 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.
- Convert between miles and kilometres
- Recognise that shapes with the same areas can have different perimeters and vice versa.
- Recognise when it is possible to use formulae for area and volume of shapes.
- Calculate the area of parallelograms and triangles.
- Calculate, estimate and compare volume of cubes and cuboids using standard units.

## FRACTIONS AND DECIMALS

- Use common factors to simplify fractions and use common multiples to express fractions in the same denomination.
- Compare and order fractions, including fractions  $> 1$ .
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
- Multiply simple pairs of proper fractions, writing the answer in its simplest form.
- **Divide proper fractions by whole numbers.**
- **Associate a fraction with division and calculate decimal fraction equivalents.**
- **Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.**
- **Multiply one-digit numbers with up to two decimal places by whole numbers.**
- **Use written division methods in cases where the answer has up to two decimal places.**
- **Solve problems which require answers to be rounded to specified degrees of accuracy.**
- **Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.**

# Year 6 Maths

## End of Year Expectations



## STATISTICS

- Interpret and construct pie charts and line graphs and use these to solve problems.
- Calculate and interpret the mean as an average.

## NUMBER, PLACE VALUE AND ALGEBRA

- Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.
- Round any whole number.
- Use negative numbers in context, and calculate intervals across zero.
- Solve number and practical problems that involve all of the above.
- Use simple formulae.
- Generate and describe linear number sequences.
- Express missing number problems algebraically.
- Find pairs of numbers that satisfy an equation with two unknowns.
- Enumerate possibilities of combinations of two variables.

## GEOMETRY

- Draw 2-D shapes using given dimensions and angles.
- Recognise, describe and build simple 3-D shapes, including making nets.
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.
- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
- Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

## CALCULATION

- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
- Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding.
- Solve mental calculations, including with mixed operations and large numbers.
- Identify common factors, common multiples and prime numbers.
- Use their knowledge of the order of operations to carry out calculations involving the four operations.
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.
- Solve problems involving the calculation of percentages
- **Solve problems involving similar shapes where the scale factor is known or can be found.**
- **Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.**