Key Learning Objectives

Counting and Understanding and Calculating with Numbers

- Find the difference between a positive and negative number.
- Read, write, order and compare numbers up to 10 000 000
- Round any number to the required degree of accuracy
- Identify common factors, common multiples and prime numbers
- Use formal written methods for multiplication and division
- Compare and order fractions
- Find equivalent decimals, fractions and percentages.
- Multiply and divide a decimal by 10, 100 or 1000
- Solve problems about ratio and proportion
- Find fractions and percentages of amounts
- Use simple formulae, e.g. $3a + 4 = 16$
- Describe number sequences

Measurements

- Use standard metric units of measure and convert between units.
- Convert between miles and kilometres.
- Recognise that shapes with the same areas can have different perimeters and vice versa.
- Calculate the area of parallelograms and triangles.
- Calculate, estimate and compare volume of cubes and cuboids.

Geometry

- I can make and draw shapes with increasing accuracy.
- I can confidently name 2D and 3D shapes and discuss their properties.
- Find unknown angles in any triangle or regular shape.
- Use co-ordinates in all four quadrants.
- Know the parts of a circle: radius, diameter and circumference.

Statistics

- Understand and create pie charts and line graphs and use these to solve problems.
- Calculate the mean (average) of a set of data.

Ideas for home learning activities

Counting and Understanding Numbers/Knowing and Using Number Facts

- Look at the weather reports in newspapers or watch the TV weather forecast. Calculate the difference in temperature between different places.
- Look in a catalogue or note down prices in a shop. Put them in order and work out totals.
- Choose 5 items from the catalogue and use a calculator to work out how much they would cost if they were reduced by 10%, 20% etc. Look out for sale leaflets.
- Three in a row – Draw a line like this.
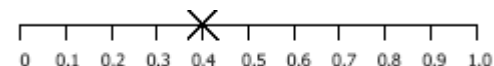
The aim of the game is to get three crosses in a row without any of the other player's marks in between. Take it in turns to choose a fraction say 2/5 . Use a calculator to convert it to a decimal (i.e. $2 \div 5 = 0.4$) and mark the line with a colour or your initials. Next player repeats this. How close can they get to your mark?

- Practise mental calculation of number at every opportunity.
- Allocate a budget for the week/month – encourage them to keep a record of spending and remaining budget.
- Work out differences in time periods e.g. between lunch and dinner.
- Calculate journey times from timetables or plane journeys from travel brochures.

Measuring

- Work out the area of different rooms in the house. Draw plans/diagrams. How much would it cost to carpet a different room? Tile it? Lay laminate flooring?
- Work out the distance for different journeys. Convert the distance to another unit, e.g. miles to kilometres.

Geometry
- Create a battleships game with all four quadrants

Statistics

- There are more red cars on the road than any other. Collect information to prove/disprove this statement.
- Use a set of information, e.g. goals scored, time ran and find the mean (average)