

### Key Learning Objectives

#### Using and Applying Mathematics

- I can solve problems involving addition, subtraction, multiplication and division in the context of number, measures or pounds and pence
- I can choose the right operation (addition, subtraction, multiplication, division) or sequence of operations to solve a word problem
- I can explain how I solved a problem and check that my answer makes sense
- I can describe patterns and relationships involving numbers of shapes, make predictions and test them with examples



#### Counting and Understanding Numbers

- I can read and write two-digit numbers
- I can recognize odd and even numbers
- I can count up to 100 objects by grouping them and counting in tens, fives or twos
- I can order two-digit numbers from lowest to highest and highest to lowest
- I can estimate number of objects
- I can round a number to the nearest 10
- I know my 2, 5 and 10 times-tables
- I can find one-half, one-quarter and three-quarters of shapes and sets of objects



#### Calculating

- I can add or subtract a single-digit number to or from a two-digit number in my head
- I can add and take away two-digit numbers using practical and informal written methods
- I know that addition and subtraction are inverses (opposites)
- I know what these symbols mean and can write and solve number sentences. +, -, x, ÷, =
- I can work out the value of an unknown in a number sentence e.g.  $30 - ? = 24$  or  $? \div 2 = 6$



#### Measuring

- I can estimate and measure a length, mass or capacity using standard units and suggest and use suitable equipment for taking such measurements
- I can read measurements from a scale and use a ruler to draw accurate lines



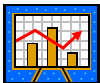
#### Understanding Shape

- I can name common 2-D shapes and 3-D solids from pictures of them in different positions
- I can draw symmetrical patterns
- I can sort shapes according to their properties e.g. sides with equal length
- I can follow and give instructions involving position, direction and movement
- I can recognize and use whole, half and quarter turns, both clockwise and anti-clockwise; know that a right angle represents a quarter turn



#### Handling Data

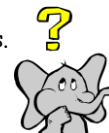
- I can answer questions by recording data in lists and tables and draw a block graph or a pictogram
- I can sort objects against one or two criteria and explain choices e.g. shapes with an even number of sides and straight sides



### Ideas for home learning activities

#### Using and Applying Mathematics

- Create a toy shop or a supermarket. Make up the prices and some shopping lists. Can they work out the total costs? What change would they receive from different amounts? Involve multi-buys. Ask questions such as if a bag of 5 apples costs 25p how much would each apple cost?
- Create shape patterns and number patterns. Challenge child to continue the pattern and explain what they have done and why.



#### Counting and Understanding Numbers

- Write random two-digit numbers on blank playing cards. Turn them face down. Time how quickly they can put them in order. Can they beat their time?
- Add up house numbers. Can they find two house numbers where the units are 3, 4, 5 etc.
- Collect a quantity of objects such as buttons or shells. Ask the child to estimate the number and then count by grouping.
- Learn 2x, 5x and 10x tables. Count aloud. Write question and answer on different cards and pair them up. Focus on speed and accuracy.
- Draw around shapes and colour in a half, a quarter and three-quarters. How many different ways are there of colouring in a half?



#### Calculating

- Use playing cards. Deal out 5. How quickly can they add them? What strategies help? (Pairing those that make 10) Deal out 10 etc. Can they beat the adults?



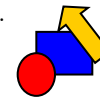
#### Measuring

- Estimate measurements. Draw a picture accurately with a ruler e.g. draw a square where the sides are 6cm and then one inside that is half the size.
- Estimate and weigh a selection of toys
- Estimate and measure the capacity of different containers



#### Understanding Shape

- Take pictures of or draw shapes in the environment. Take pictures or draw shapes from different angles. Can they name the shapes? Are arrows all the same shape?
- Draw up a table and then go on a shape hunt around the house. How many triangles, circles, squares can they find? How many cubes, cuboids, spheres can they find?
- Draw symmetrical patterns using shapes. Draw one side and ask someone else to complete the picture.
- Give instructions for a child to follow to find a particular object. Blindfold them to make it more difficult. Ask the child to give instructions to someone else to retrieve a particular object or reach a particular destination.



#### Handling Data

- Conduct a survey, e.g. favourite sandwich fillings. Draw a graph.
- Sort a collection of buttons according to colour and shape.

