



Parent Information Guide

Arithmetic Strategies

Supporting Your Child with Arithmetic in Key Stage 2

This guide explains the key arithmetic strategies taught in Key Stage 2 (Years 3–6). Children develop understanding and fluency across the four operations: addition, subtraction, multiplication and division.

Our Teaching Approach: Concrete – Pictorial – Abstract

1. Concrete: Using physical resources such as counters, cubes, place value charts and bead strings.
2. Pictorial: Representing calculations with drawings, number lines, bar models and part-whole models.
3. Abstract: Moving to formal written methods once understanding is secure.

Addition Strategies

Partitioning numbers (e.g., $346 = 300 + 40 + 6$).

Number lines for counting on.

Column addition with correct place value alignment.

Compensation (adjusting numbers to make calculations easier).

Subtraction Strategies

Counting back using number lines.

Finding the difference (counting up).

Partitioning numbers.

Column subtraction with exchanging.

Multiplication Strategies

Repeated addition and equal groups.

Arrays and area models.

Using known facts and breaking apart numbers.

Short and long multiplication methods.

Division Strategies

Sharing and grouping with objects.

Number line jumps (repeated subtraction).

Fact families linking multiplication and division.
Short and long division methods.

Building Fluency

Daily short arithmetic practice (5–10 minutes).
Rapid recall of number bonds and times tables.
Mixed practice of all four operations.
Encouraging children to explain their reasoning and check answers.

How Parents Can Support at Home

Encourage children to explain their thinking.
Use real-life maths (shopping totals, measuring, sharing food).
Practise little and often rather than long sessions.
Praise effort, strategy use and resilience.

Expected Progress in KS2

Year 3: Secure place value, column addition and subtraction, introduction to formal multiplication.
Year 4: Fluency in all tables up to 12×12 and efficient written methods.
Years 5–6: Confidence with long multiplication, long division and multi-step problem solving.
If you would like further guidance or additional resources, please contact your child's teacher.