# \* Year 2 Maths – Parent Guide

In Year 2, children build on their Year 1 learning and start to work more confidently with **two-digit numbers**, **times tables**, and **fractions**. They also deepen their understanding of shape, measures, money, time and data (charts and graphs).

Our aims are that children:

- Become **fluent** with key number facts and methods
- Can **reason** and explain their thinking
- Can **solve problems** in real-life contexts and persevere when it's tricky

We encourage them to "See it, think it, link it" and often ask:

"What's the same?" "What's different?" "What do you notice?"

## Rapid Recall & Mental Strategies in Year 2

These are the **quick-fire facts and strategies** children are working towards by the end of Year 2

### **Napid Recall Facts**

By the end of Year 2, children are working towards being able to quickly recall:

- Addition and subtraction facts to at least 10
- Number pairs that make 20 (e.g. 13 + 7, 9 + 11)
- Pairs of multiples of 10 that make 100 (e.g. 30 + 70, 40 + 60)
- Fact families (e.g. if 17 3 = 14, then 14 + 3 = 17, 3 + 14 = 17)
- Times tables:
  - o  $2\times$ ,  $5\times$ ,  $10\times$  tables
  - o Begin working with  $3\times$  and  $4\times$  (mainly through patterns and links)
- Linked division facts for 2, 5 and 10 (e.g.  $20 \div 5 = 4$ )
- Doubles and halves:
  - o Doubles up to at least 15
  - o Double any multiple of 5 up to 50
  - o Halve multiples of 10 up to 100

### 🧩 Mental Strategies

Children learn to use efficient methods, such as:

- Counting on or back in **ones**, **tens** and small jumps
- Finding a small difference by counting up (e.g. 52-48)
- Adding three small numbers by spotting bonds to 10
- Splitting numbers into tens and ones (e.g. 47 = 40 + 7)

- Bridging through 10 or 20 (e.g.  $18 + 7 \rightarrow 18 + 2 + 5$ )
- Adding/subtracting 9, 19, 11, 21 by adjusting (add 10 then subtract 1)
- Using **near doubles** (e.g. double 7 to help with 7 + 8)
- Using what they know about 2, 5, 10× to multiply and divide
- Seeing subtraction as the **inverse** of addition, and halving as the inverse of doubling

### **Example of what this looks like:**

"I know 6 + 4 = 10, so 16 + 4 = 20 and 60 + 40 = 100."

# 🍂 AUTUMN TERM – Year 2

### 1. Place Value (Understanding Numbers)

### Children learn to:

- Understand tens and ones in two-digit numbers
- Partition numbers in different ways (e.g. 23 = 20 + 3, 10 + 13, 5 + 5 + 10 + 3)
- Recognise, read and write numbers to 100
- Use number lines and 100 squares
- Use symbols <, >, = to compare numbers
- Find 10 more/less than a given number
- Round numbers to the nearest 10

### At home:

- Use a 100 square (printed or online) and ask: "What's 10 more than 34?" "What's 10 less than 67?"
- Make two-digit numbers with playing cards or number cards and ask:
  - "Which is bigger?" "Can you put these in order?"

### 2. Addition & Subtraction

### Children work on:

- Adding and subtracting using **practical equipment**, pictures and mental strategies
- Adding and subtracting:
  - o a two-digit number and ones (e.g. 37 + 5)
  - o a two-digit number and tens (e.g. 46 + 30)
  - o two two-digit numbers (e.g. 24 + 35)
  - o three one-digit numbers
- Using and extending facts to 20 and then to 100
- Understanding that addition can be done in any order, but subtraction cannot
- Using inverse operations to check answers

#### At home:

- Use coins, Lego or pasta to act out problems.
- Play "make 20" games: "You say a number, I say the number that makes 20."
- Ask your child to explain *how* they worked it out, not just the answer.

### 3. Times Tables & Early Multiplication/Division

### Children explore:

- $2 \times$  and  $10 \times$  tables (and later  $5 \times$ )
- Doubling and halving
- Multiplication as **repeated addition** (e.g.  $3 \times 4 = 4 + 4 + 4$ )
- Division as **sharing** and **grouping**
- Using arrays (rows and columns of objects) to represent multiplication and division

### At home:

- Count socks in 2s, fingers in 5s, toes in 10s.
- Lay out snacks in equal groups: "We've got 12 grapes, can we put them into groups of 3?"
- Draw simple arrays (e.g. 3 rows of 4 circles) and ask "How many altogether?"

### 4. Fractions

### Children learn to:

- Recognise, find and write: 1/2, 1/3, 1/4, 2/4, 3/4 of shapes, quantities and sets of objects
- Understand that 2/4 is the same as ½
- Use the words **numerator** (top number) and **denominator** (bottom number)
- Understand that the bigger the denominator, the smaller the parts

### At home:

- Cut pizza, toast or fruit into halves, quarters and thirds.
- Ask: "Is this fair? Are the parts equal?"
- Show 4 identical pieces; label 2/4 and 1/2 and talk about them being equal.

### 5. Geometry (Shape & Space)

### Children learn to:

- Name and describe **2D shapes** (sides, corners, symmetry)
- Name and describe **3D shapes** (faces, edges, vertices/corners)
- Spot 2D shapes on 3D shapes (e.g. circle on a cylinder)
- Sort and compare shapes
- Make models and patterns
- Understand line symmetry
- Describe position and direction; understand a turn as a movement

#### At home:

- Shape hunt around the house or on a walk.
- Make symmetrical patterns using Lego, beads or drawing.
- Fold paper to find lines of symmetry.



### 1. Number Sequences & Place Value (Extending Understanding)

### Children:

- Count forwards and backwards in 1s, 2s, 5s, 10s and 3s
- Explore simple number patterns and sequences
- Say what is 1, 10 or 100 more or less than a number
- Estimate amounts and check by counting
- Read and write numbers to at least 100 in numerals and words

### At home:

- Clap or step-count in different jumps: "Let's count in 2s up to 30."
- Estimate how many toys in a box before counting them.
- Read door numbers, page numbers, prices and say them out loud.

### 2. Fractions (Continuing)

### Children:

- Count in halves and quarters
- Compare simple fractions in context (e.g. "Which is bigger, ½ or ½?")
- Recognise equivalence (e.g.  $2/4 = \frac{1}{2}$ ) using shapes and objects

### 3. Statistics (Data Handling)

#### Children learn to:

- Make and interpret pictograms, tally charts, block diagrams and simple tables
- Ask and answer questions about "how many more", "how many altogether"
- Sort information into categories

### At home:

- Make simple charts:
  - o favourite fruit in the family
  - o colours of cars going past
- Keep tally marks and then turn them into a simple bar chart.

### 4. Times Tables & Multiplication/Division

- Continue with 2, 5, 10× tables
- Introduce 4× (often linked to doubling 2× facts)
- Understand multiplication and division as **inverse** operations
- Solve simple word problems using times tables

#### At home:

- Short, regular chants of times tables (singing or rapping them works well).
- Quick-fire questions in the car or on a walk: "What's 4 × 5?" "How many 2s in 10?"

### 5. Addition & Subtraction (Refining Strategies)

#### Children work on:

- Choosing sensible mental strategies based on the numbers
- Using **number lines** to add and subtract
- Understanding subtraction as "how many more/less?" as well as "take away"
- Using bar models and pictures to show problems

### At home:

- When shopping, talk about change: "If it costs 37p and you pay 50p, how much change?"
- Play "nearest 10" games: round numbers and adjust.



### 1. Measurement (Length, Mass, Capacity)

### Children:

- Use standard units (cm, m, g, kg, ml, l)
- Measure with increasing accuracy using rulers, scales and jugs
- Compare using phrases like "twice as long", "half as heavy"

### At home:

- Measure heights of family members and compare.
- Weigh ingredients when baking.
- Compare containers when filling with water: "Which holds more?"

### 2. Money

### Children learn to:

- Recognise coins and notes and add small amounts of money
- Read amounts using £ and p
- Make the same amount in different ways (e.g. 20p as 10p+10p, 5p+5p+10p)
- Begin to calculate simple totals and change

#### At home:

- Let children pay at the shop with coins.
- Empty out a purse and ask: "Can you make 50p in different ways?"

### 3. Time, Position & Direction

#### Children:

- Tell the time to o'clock, half past, and increasingly quarter past/to
- Sequence events in a day
- Describe movement using right/left, clockwise/anticlockwise
- Understand quarter turns, half turns and three-quarter turns

### At home:

- Ask: "What time is it now?" "What will it be in half an hour?"
- Give instructions in the garden or living room: "Take two steps forward, quarter turn right, one step forward."

## 4. Consolidation: Place Value, Addition, Subtraction, Multiplication, Division & Fractions

Towards the end of the year, children:

- Revisit and deepen all core number skills
- Solve word problems involving all four operations  $(\times, \div, +, -)$

#### At home:

- Use real-life problems: sharing food, comparing prices, measuring DIY jobs.
- Encourage children to explain their choice of method: "Why did you do it that way?"



Even 5-10 minutes, a few times a week, makes a big difference.

- Play number and dice games
- Count in 2s, 5s, 10s (and 3s/4s if they're ready)
- Talk about money, shopping, time and measuring in everyday life
- Ask your child to **explain** their thinking, not just give answers
- Praise effort, especially when they keep going with tricky problems