🌟 Year 3 Maths – Parent Guide

In Year 3, children move from "early number" into **more formal maths**, especially with **larger numbers, times tables, written methods and fractions**. They are expected to explain their thinking more clearly and to apply maths in real-life situations.

We still focus on three big ideas:

- **Fluency** – knowing key facts and methods and using them confidently
- **Reasoning** – explaining why something works, spotting patterns and making connections
- **Problem solving** – using maths in real-life situations, including multi-step problems

We support children to *"See it, think it, link it"* and often ask:

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

🧠 Rapid Recall & Mental Maths in Year 3

Children are encouraged to practise **quick maths** every day.

✅ Key Facts to Know

By the end of Year 3, children are working towards being able to quickly recall:

- **Addition and subtraction facts** for numbers to 20
- Sums and differences of **multiples of 10**
  - e.g. 70 + 20, 80 – 30
- **Number pairs that make 100**
  - e.g. 46 + 54
- **Times table facts** and related division facts for:
  - 2×, 3×, 4×, 5×, 6×, 10×

They also get used to:

- Doubling and halving numbers (including tens and larger numbers)
- Multiplying and dividing by **10 and 100** (e.g. 6 × 10, 600 ÷ 100)

🧩 Mental Strategies

Children learn to choose efficient methods, such as:

- Counting on/back in **tens** and **ones**
- Finding **small differences** by counting up
- Adding several small numbers by spotting facts to 9, 10 or 11
- Splitting numbers into **hundreds, tens and ones** and recombining

- Bridging through multiples of 10 (e.g. 38 + 7 → 38 + 2 + 5)
- Using **near doubles** (e.g. double 7 to help with 7 + 8)
- Adjusting when adding/subtracting **near multiples of 10** (e.g. +9, +11)
- Using known facts to multiply and divide by 2, 5, 10 (and building to 3, 4, 6)
- Seeing addition ↔ subtraction and multiplication ↔ division as **inverse** operations

What this looks like in class:
"I know 7 × 5 = 35, so 35 ÷ 5 = 7."
"300 + ? = 1000, so I need 700 more."

🍂 AUTUMN TERM – Year 3

1. Times Tables (Recap & Build Up)

Children recap:

- 2×, 5×, 10× tables, then 3×
- Use arrays, repeated addition and patterns to deepen understanding
- Link multiplication with **division** and sharing/grouping

At home:

- Quick-fire times-table questions in the car or at the table
- Skip-counting aloud: "Let's count in 4s up to 48"
- Use real objects (Lego, pasta, coins) to show **equal groups**

---

2. Place Value (Up to 1000)

Children learn to:

- Count in **4s, 8s, 50s, 100s**
- Find **10 or 100 more/less** than a number
- Understand the place value of each digit in a **three-digit number**
    - e.g. 346 = 3 hundreds, 4 tens, 6 ones
- Read, write, compare and order numbers up to **1000**
- Represent numbers in different ways (e.g. 146 = 100 + 40 + 6 or 130 + 16)

At home:

- Read numbers on receipts, letters, house numbers, car mileage
- Ask: "What's 100 more than 325?" "What's 10 less than 470?"
- Make three-digit numbers with cards and ask your child to say the value of each digit

---

3. Addition & Subtraction

Children work on:

- Adding and subtracting **three-digit numbers** mentally with:
  - ones
  - tens
  - hundreds
- Using concrete objects, pictures and **expanded column methods**
- Using number lines and bar models to show thinking
- Estimating answers and using the inverse to check
- Solving **money problems**, including working out change

At home:

- Use supermarket prices to make quick total/cost problems
- Ask: "We've spent 67p, we paid with £1 – how much change?"
- Encourage your child to **estimate** first: "About how much do you think it will be?"

---

4. Multiplication & Division

Children learn to:

- Multiply 2-digit numbers by 1-digit numbers using times tables (e.g. 14 × 3)
- Represent multiplication and division using **arrays**, **number lines** and written jottings
- Understand division as:
  - **sharing** (split equally)
  - **grouping** (how many groups of…?)
- Solve word problems, including where remainders relate to fractions (e.g. 31 ÷ 5)

At home:

- Share snacks fairly and ask: "Is this equal?"
- Discuss problems like: "We have 24 sweets and 4 children. How many each?"
- Show an array (e.g. 3 rows of 5) and ask for the matching multiplication and division facts.

---

5. Fractions (First Steps)

Children learn to:

- Recognise **unit fractions** (e.g. ½, ⅓, ¼, 1/5) and **non-unit fractions** (e.g. 2/3, 3/4)
- See fractions as **numbers** on a number line
- Find fractions of a set of objects (e.g. ¼ of 8 cars)

- Add and subtract fractions with the **same denominator**
    - e.g. 5/7 + 1/7 = 6/7
- Compare and order fractions with the same denominator

At home:

- Cut food (pizza, cake, toast) into equal parts and name the fractions
- Ask: "Which is bigger, ¾ or ½?"
- Share items between people and talk about the fraction each person gets.

🌱 SPRING TERM – Year 3

1. Times Tables (Including 6×)

Children:

- Strengthen 2, 3, 4, 5, 6, 10× tables
- Use patterns and number lines to see connections
    - e.g. 6× is double the 3× facts

At home:

- Chant, sing or quiz tables for a few minutes daily
- Use apps or flashcards if helpful
- Ask: "If 4 × 3 = 12, what is 8 × 3?" (doubling link)

---

2. Place Value & Number Sequences

Children:

- Find 1, 10 or 100 more/less than a number
- Explore number sequences, counting forwards and backwards in different steps
- Round numbers to the nearest **10** or **100**
- Begin working with numbers with **one decimal place** in money contexts (e.g. £1.3 = £1.30)

At home:

- Ask your child to round prices to the nearest 10p or £1
- Create number patterns (e.g. start at 7, add 4 each time) and get them to continue.

---

3. Multiplication & Division (Deepening)

Children continue to:

- Multiply 2-digit by 1-digit numbers using known tables
- Use written jottings and mental methods
- Solve more complex word problems, including **two-step problems**
- Understand multiplication as scaling:
    - "There are 3 times as many…"

---

4. Fractions (Equivalence)

Children:

- Recognise and show **equivalent fractions** using diagrams
    - e.g. ½ = 2/4
- Use fraction walls, number lines and shapes to compare and reason

At home:

- Fold paper to show different but equal fractions
- Use pictures or fraction walls (printed/online) to compare fractions.

---

5. Measures (Length, Mass, Volume, Perimeter)

Children learn to:

- Measure and compare lengths (m, cm, mm), mass (kg, g), volume (l, ml)
- Add and subtract measures (e.g. total length, combined mass)
- Measure the **perimeter** of simple shapes

At home:

- Measure household objects with rulers or tape measures
- Weigh ingredients when cooking and compare weights
- Walk around a table and describe that as the "perimeter".

---

6. Geometry (Shape & Angles)

Children:

- Draw 2D shapes and make 3D models

- Recognise shapes in different orientations
- Describe shapes using the correct vocabulary (sides, edges, vertices, faces)
- Learn that angles are **a measure of turn**
- Identify **right angles** and compare other angles as bigger/smaller
- Spot **horizontal/vertical**, **parallel** and **perpendicular** lines
- Describe positions on a grid using coordinates (letters and numbers)

At home:

- Spot angles in door frames, books, TV screens
- Look for parallel/perpendicular lines in buildings or road markings
- Play simple "battleships" style games on squared paper.

---

7. Statistics (Data Handling)

Children:

- Interpret and present data using **bar charts**, **pictograms** and **tables**
- Solve one- and two-step questions about the data
- Use **Venn** and **Carroll diagrams** to sort shapes, numbers and objects

At home:

- Create simple bar charts (favourite foods, sports, colours in the wardrobe, etc.)
- Sort objects (e.g. toys) using different criteria (size, colour, type).

☀️ SUMMER TERM – Year 3

1. Place Value & Problem Solving (Consolidation)

Children:

- Revisit and secure understanding of three-digit numbers
- Use place value and known facts to solve more complex problems
- Choose sensible methods: mental, jotting, or written method
- Understand **difference** as a way to subtract (how much bigger/smaller)

---

2. Fractions (Using in Problems)

Children:

- Use fractions in real-life contexts
- Find fractions of quantities and link this to division
- Use number lines to place and compare fractions

At home:

- Use sharing contexts: “What is ⅓ of 15 grapes?”
- Put fractions in order using visuals (drawn bars or circles).

---

3. Addition & Subtraction (Fluency & Reasoning)

Children:

- Tackle larger addition and subtraction problems (including missing number problems)
- Justify their choice of method and check answers using inverse operations

At home:

- Talk through *how* they solved a problem, not just whether it’s right.
- Ask: “Could you have done that another way?”

---

4. Multiplication & Division (Scaling & Place Value)

Children:

- Multiply 1- or 2-digit numbers by **10 and 100** and understand how digits move
- Connect division with fractions (e.g. 31 ÷ 5 as 31/5)
- Estimate and check answers in context

At home:

- Play “times 10/100” games:
    - “What’s 7 × 10?” “What’s 4 × 100?”
- Spot patterns in 10s and 100s on a 100-square or 1000 chart.

---

5. Time

Children learn to:

- Tell and write the time on analogue clocks, including **Roman numerals** and 12/24-hour clocks
- Read the time to the nearest **minute**

- Use and understand words like **a.m., p.m., noon, midnight**
- Know the number of **seconds in a minute** and **days in months/years/leap years**
- Compare durations, e.g. “How long did that take?”

At home:

- Regularly ask: “What time is it now?”
- Talk about TV schedules, clubs, journeys and how long they take
- Use both analogue and digital clocks at home.

🏡 General Ways Parents Can Help in Year 3

- **Little and often** is best – 5–10 minutes a few times a week.
- Ask children to **explain their thinking**:
  - “How do you know?”
  - “Can you show me another way?”
- Use **real life**: cooking, shopping, journeys, pocket money, games.
- Play card and dice games that involve adding, subtracting or making target numbers.
- Encourage a **positive attitude**: praise effort, persistence and “having a go” more than speed.
