🌟 Year 4 Maths – Parent Guide

In Year 4, children really **stretch their number work**: they use bigger numbers (into the thousands), become more confident with **all times tables up to 12×12**, work with **fractions and decimals**, and start to use more formal written methods.

We keep three big priorities:

- **Fluency** – quick recall of key facts and efficient methods
- **Reasoning** – explaining *why* something works, not just how
- **Problem solving** – using maths in real-life, multi-step problems and sticking with it

We still encourage children to:

"See it, think it, link it"
and ask:
"What's the same? What's different? What do you notice?"

🧠 Rapid Recall & Mental Maths in Year 4

Daily short practice helps children become confident and accurate.

✅ Key Facts to Know

By the end of Year 4, children are working towards knowing by heart:

- **All multiplication facts** for the:
  2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 times tables
- **All related division facts**
  e.g.
  - 7 × 8 = 56, so 56 ÷ 7 = 8 and 56 ÷ 8 = 7

They also use mental strategies to:

- Add and subtract **two- and three-digit numbers** in their head
- Quickly find complements to **100** and **1000**
  - e.g. 37 + ? = 100, 374 + ? = 400
- Double and halve numbers, including multiples of 5 and 10
- Multiply and divide by **10 and 100**
- Multiply **two-digit multiples of 10** by a single digit
  - e.g. 30 × 4, 70 × 6

🧩 Mental Strategies Children Use

They practise things like:

- Counting on and back in **1s, 10s, 100s**
- "Bridging" through 10, 100 or 1000 (e.g. 397 + 8 → 397 + 3 + 5)
- Reordering numbers to make calculations easier
- Adding several numbers by spotting **pairs that make 10 or 100**
- Splitting numbers into **tens and ones** (or hundreds, tens and ones)
- Adjusting when adding or subtracting **9, 19, 29, 11, 21, 31**
- Using **near doubles**
- Using known facts to work out new ones (e.g. if 6 × 4 = 24, then 60 × 4 = 240)
- Seeing and using the links between:
    - **addition and subtraction**
    - **multiplication and division**

At home:

- Regular game-style practice of times tables (chanting, apps, flash cards, quizzes).
- Little "mental maths challenges" in everyday situations:
    - "What do I add to 64 to make 100?"
    - "Double 35."
    - "What's 7 × 8?"

🍂 AUTUMN TERM – Year 4

1. Times Tables Focus (7× and 8× in particular)

Children:

- Strengthen all tables up to 12×, with special focus on 7× and 8×
- Use times tables to help with division
- Spot patterns and connections between tables

At home:

- Quick-fire questions: "7 × 8?", "56 ÷ 7?", etc.
- Use "tricky table of the week" and revisit several times a day.

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2. Place Value (Numbers to 10,000 & Beyond)

Children learn to:

- Read, write and understand numbers up to **at least 10,000**
- Recognise the value of each digit in a **4-digit number** (thousands, hundreds, tens, ones)
- Count forwards and backwards, including **through zero** into **negative numbers**
    - e.g. from 3 down to –2

- Compare and order numbers beyond 1000
- Use number lines and other representations (e.g. base 10 equipment, place value charts)
- Round numbers to the nearest **10, 100 and 1000**
- Solve problems that use these skills, including temperature below zero

At home:

- Read big numbers on speedometers, electricity meters, timetables, etc.
- Talk about temperatures (weather apps are great for this), especially below zero.
- Ask: "Round 3,487 to the nearest 10/100/1000."

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3. Addition & Subtraction (Including Money & Decimals)

Children work on:

- Using number facts to **100** and **1000**
- Adding and subtracting:
    - 2- and 3-digit numbers **mentally**
    - 4-digit numbers using **written column methods**
- Working with **decimals to one decimal place**, especially money
    - e.g. £3.60 + £2.40
- Choosing sensible methods: mental, jotting or formal written
- Using inverse operations (e.g. undoing addition with subtraction) to check answers
- Solving "missing number" problems and word problems

At home:

- Involve children in shopping:
    - "We've got £5. We spend £3.75 – how much is left?"
- Ask them to estimate first, then calculate.
- Let them explain which method they chose and why.

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4. Fractions (Equivalence & Ordering)

Children learn to:

- Compare and order **unit fractions** (e.g. ¼, ⅓, 1/5) and fractions with the same denominator
- Recognise and show **equivalent fractions** using diagrams, fraction walls and number lines
    - e.g. ½ = 2/4 = 3/6

At home:

- Use pizzas, cakes, chocolate bars or folded paper to show different but equal fractions.
- Ask: “Which is bigger: 3/4 or 2/3? How do you know?”

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5. Multiplication & Division (Grid Method & Mental Strategies)

Children develop:

- Mental methods using place value and known facts
- Understanding of **factor pairs** (e.g. 12 = 3 × 4, 2 × 6)
- Use of **commutativity** (4 × 6 is the same as 6 × 4)
- Written methods for:
  - 2- and 3-digit numbers × 1-digit (e.g. 23 × 7)
- Understanding and solving scaling and correspondence problems:
  - e.g. “There are 3 times as many red counters as blue ones.”

At home:

- Talk about “times as many” situations:
  - “If I have 3 apples and you have 4 times as many, how many do you have?”
- Show grid layouts for multiplication on squared paper or with arrays of objects.

🌱 SPRING TERM – Year 4

1. Addition & Subtraction (4-digit & Decimals)

Children:

- Add and subtract numbers with up to **4 digits**, and money amounts with 1 decimal place
- Use formal written **column methods** alongside mental strategies
- Add and subtract fractions with the **same denominator**
- Check answers using inverse operations
- Solve **two-step word problems** (e.g. “first add, then subtract”)

At home:

- Give realistic problems:
  “You have £12.50. You spend £3.75 and then £2.25. How much is left?”
- Ask your child to **draw bar models** or diagrams to show what’s happening.

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2. Statistics (Data Handling)

Children:

- Interpret and present **discrete and continuous data** using bar charts, time graphs, pictograms and tables
- Answer questions like "How many more…?", "How many fewer…?"
- Use sorting diagrams (Venn and Carroll) to compare numbers and shapes

At home:

- Collect simple data at home – e.g. favourite snacks, daily temperatures, steps per day – and draw bar charts or line graphs.
- Use Venn diagrams (two intersecting circles) to sort things by two properties (e.g. "things that are red", "things that are round").

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3. Geometry – Shape, Angles & Symmetry

Children learn to:

- Identify and draw **lines of symmetry** in 2D shapes
- Complete symmetrical pictures
- Continue using **horizontal and vertical**, **parallel** and **perpendicular** lines
- Identify and compare **acute**, **right** and **obtuse** angles
- Classify shapes, especially **quadrilaterals** and **triangles**, by their properties

At home:

- Spot symmetry in logos, signs, flags and patterns.
- Fold paper shapes to find lines of symmetry.
- Look for right angles around the home (corners of books, screens, doors).

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4. Place Value & Decimals (Money Links)

Children:

- Compare and order numbers with the same number of decimal places (up to 2 decimal places)
- Recognise and write decimal equivalents of **¼, ½, ¾**
- Work with tenths and hundredths (0.1, 0.01, etc.), often in money contexts
- Understand that 100 pennies = £1 and each penny is 1/100 of £1

At home:

- Use money to explain decimals:
    - "£1.23 means 1 pound and 23 hundredths of a pound."
- Ask: "Which is bigger: £1.40 or £1.04? Why?"

☀️ SUMMER TERM – Year 4

1. Times Tables & Mental Multiplication/Division (11× & 12× Focus)

Children:

- Secure all tables up to **12×12**, with focus on 11× and 12×
- Use tables to multiply and divide larger numbers
- Understand how digits move when dividing by 10 and 100 (ones → tenths → hundredths)

At home:

- Keep up quick, regular times-table practice – especially the "harder" ones (6, 7, 8, 9, 11, 12).
- Ask questions like "What's 132 ÷ 11?" using known facts.

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2. Division & Fractions Link

Children:

- Divide up to **3-digit numbers by a 1-digit number** using written short division, arrays and place value models
- Interpret **remainders** sensibly (sometimes as fractions)
- Understand division as linked to fractions (e.g. 3 ÷ 4 = 3/4)

At home:

- Share real quantities:
  "31 sweets shared between 5 children – how many whole ones each? What's left?"
- Talk about the remainder as "a bit more" or part of a whole.

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3. Fractions – Quantities & Problem Solving

Children:

- Find fractions of sets and quantities, including **non-unit fractions** (e.g. 3/4 of 20)
- Understand that a fraction is **one whole number divided by another**
- Solve problems involving fractions and decimals, especially in **measures and money**

At home:

- Ask things like:
  - "What is 3/5 of 20 biscuits?"
  - "If we share £12 between 4 people, what fraction does each person get?"

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4. Measures – Length, Area, Volume & Time

Children learn to:

- Convert between units:
  - km ↔ m, m ↔ cm, hours ↔ minutes, minutes ↔ seconds
- Measure and calculate **perimeter** of rectilinear shapes (straight-sided)
- Understand **area** by counting squares and linking it to arrays and multiplication
- Estimate and compare **volume** and **capacity**
- Read and write time in both **12-hour and 24-hour** formats
- Convert between time units and solve time problems

At home:

- Let your child read both analogue and digital clocks.
- Ask: "If we start at 3:15 and finish at 4:05, how long did it take?"
- Measure rooms or objects and estimate area by counting squares on squared paper.
- Compare liquid amounts when cooking or filling bottles.

🏡 How Parents Can Help in Year 4 (Quick Summary)

- **Times tables:** Short, daily practice (say, 5 minutes) is golden.
- **Money:** Let children handle coins and notes, work out totals and change.
- **Time:** Use both analogue and digital clocks; talk about durations.
- **Fractions & Decimals:** Use food, sharing games and money to make it real.
- **Reasoning:** Ask "How do you know?" and "Can you show me another way?"
- **Growth mindset:** Praise effort, thinking and perseverance – not just speed.
