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Supporting Maths at Home: A Guide for Year 5 Parents

Wincham Community Primary School

In Year 5, the "complexity" of the maths increases as we introduce numbers up to one million. The children move away from using physical equipment for every calculation and begin to master "Long Multiplication" and "Short Division." We also spend a lot of time looking at the deep links between fractions, decimals, and percentages.

Here is how you can help your child keep up with the Year 5 curriculum at home.

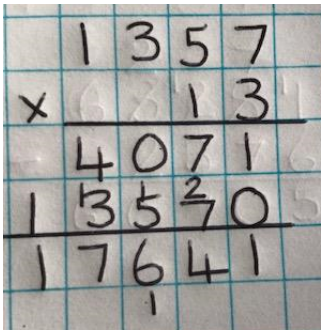
1. Place Value: Numbers to One Million

What we do in school: We look at numbers up to 1,000,000. We practice multiplying and dividing numbers by 10, 100, and 1,000, which involves "sliding" digits across place value columns.
How to help at home:

- **Real Estate Maths:** Look at house prices online or in local papers. "Can you say that number out loud? Which digit is in the ten-thousands place?"
- **Sliding Digits:** Use a place value grid on a whiteboard. "If we multiply £4.50 by 10, does the decimal point move? No! The digits slide to the left."
- **Rounding in the Real World:** "The stadium holds 54,382 people. To the nearest ten-thousand, how many is that?"

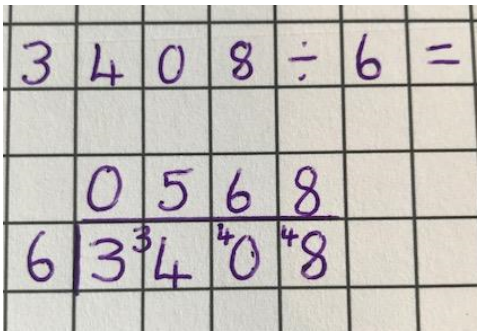
2. Multiplication: Long Multiplication

What we do in school: This is a big step! We move from multiplying by a 1-digit number to a 2-digit number (e.g., 243 x 25). We use the area model (grid) first to understand it, then move to the formal column method.
How to help at home:



- **The "Zero Placeholder" Talk:** When multiplying by the 'tens' digit in the column method, we always put a **0** in the ones column first. Remind them: "Don't forget the placeholder!"
- **Area Estimates:** "If this floor is 12 metres by 15 metres, roughly how many square metres is it?" (10 x 15 = 150, so it must be more than that).

3. Division: Factors, Primes, and Squares



What we do in school: We use Short Division for 4-digit numbers. We also learn about Prime Numbers (numbers with only two factors) and Square Numbers (like 5 x 5 = 25).

How to help at home:

- **Prime or Not?:** Pick a number under 50. "Can you find any way to make 13 other than 1 x 13?" (No, so it's prime!).
- **Square Number Bingo:** Call out square numbers (1, 4, 9, 16, 25, 36...) and see if they can tell you the "root" number.

4. Fractions, Decimals, and Percentages (FDP)

What we do in school: We learn that $\frac{1}{2}$, 0.5 and 50% are all the same thing. We learn the equivalent fraction, decimal and percentage for $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$. We also learn to add and subtract fractions with different denominators (e.g.,$\frac{1}{4}$+ $\frac{1}{8}$ by finding a common denominator.

How to help at home:

- **Sales Shopping:** "This coat is £40 but has 25% off. What is the fraction for 25%? ($\frac{1}{4}$). How do we find a quarter of 40?"
- **Cooking Conversions:** If a recipe serves 4 but you are cooking for 2, ask them to halve all the fractions. "The recipe needs $\frac{3}{4}$ of a cup. What is half of that?"

Key Vocabulary for Year 5:

- **Factor:** Numbers we multiply together to get another number.
- **Multiple:** The "answers" in a times table (e.g., multiples of 5 are 5, 10, 15...).
- **Prime Number:** A number that only has two factors (1 and itself).
- **Improper Fraction:** A fraction where the numerator (top) is bigger than the denominator (bottom) e.g., $\frac{5}{4}$.
- **Mixed Number:** A whole number and a fraction together (e.g., $1\frac{1}{4}$).

Quick "Year 5" Everyday Maths:

- **Negative Numbers:** Look at the weather forecast in winter. "It's -2°C now but it's going to drop by 3 degrees. What will the new temperature be?"
- **Timetables:** Look at bus or train timetables. "If the train leaves at 14:15 and takes 45 minutes, what time does it arrive?"
- **Volume:** Use measuring jugs. "If this jug holds 1 litre, how many 250ml glasses can I fill?"