

Lining Up to Add: Why We Write Numbers Column by Column

This guide explains a key building block in Year 2 maths: why numbers are written in neat columns (tens under tens, ones under ones) when adding two-digit numbers, and why getting this lined up correctly matters for working out the right answer.

What this is all about

In Year 2 (the school year for children aged 6 to 7), children start adding two two-digit numbers, like $34 + 12$. Before they learn any written 'tricks', they need to understand place value – the idea that where a digit sits tells you what it's worth. In the number 34, the 3 is worth three tens (30) and the 4 is worth four ones. When children write numbers in columns, with tens in one column and ones in another, it helps them see this clearly and add the right amounts to each other. If the columns aren't lined up properly, a child might accidentally add a tens digit to a ones digit, which gives a wrong, often much too big or too small, answer. Getting comfortable with columns now, using simple grids rather than formal written methods, lays the groundwork for the more formal column addition (including carrying, which is a later step) that comes in future years.

What happens in the classroom

Teachers usually introduce this with concrete, hands-on materials before any written work: bundles of ten straws or lolly sticks alongside loose single ones, or place value counters, so children can physically see and build numbers as 'tens' and 'ones'. They might draw or use a simple two-column grid, labelled 'tens' and 'ones', and practise placing digits in the correct column for different numbers. A common next step is comparing numbers with different amounts of digits, such as 7 and 23, where children learn that the ones column is written under other ones, and tens under other tens, even when one number doesn't have a tens digit. Through games, sorting activities and plenty of talk about what each digit means, children build up the habit of lining digits up correctly before they ever attempt to add two two-digit numbers in a written column format. Approaches vary between schools and classes, so it's worth asking your child's teacher exactly how they're currently practising this if you'd like more detail.

What it means for your child

This is a small but important step that often gets overlooked because it seems simple. A child who hasn't fully grasped that digits must line up by place value can get muddled later when adding bigger numbers, because a misplaced digit throws off the whole sum. It's a very common and completely normal stage to need extra practice with – it doesn't mean a child is 'behind' or struggling with maths generally. Many children briefly mix up columns, especially when numbers have different numbers of digits (like adding 6 and 23), simply because it's a new way of thinking about numbers. With a bit of playful practice at this visual, concrete stage, most children move on to confident column addition, including carrying, without difficulty. There's no need to rush ahead to carrying or harder sums before this foundation feels secure – it's worth letting it bed in at its own pace.

How you can help at home

Little and often, and always playful, works best. Everyday objects are great for this: group small items like pasta, buttons or toy bricks into tens and ones, and ask your child how many tens and ones make up a

number. You could draw a simple two-column grid on paper or a whiteboard, label it 'tens' and 'ones', and take turns writing numbers in the right places. Real-life maths helps too – counting out coins, or lining up socks in pairs of ten – without it feeling like a test. If you're doing any written sums together, gently check that digits are stacked neatly, one on top of the other, rather than squashed to one side. Keep sessions short and low-pressure; if your child seems unsure or frustrated, it's fine to stop and try again another day, or check in with their teacher about how it's being taught at school.

Questions parents often ask

Does my child need to know 'carrying' for this? No – at this stage, the focus is simply on understanding tens and ones and lining digits up correctly. Carrying (adjusting digits when a column adds up to more than nine) usually comes once this foundation is solid. What if my child still muddles up columns sometimes? This is very common and usually settles with practice; it's not a sign of a bigger problem. Is this the same in every school? The national curriculum (the framework set by the Department for Education that all state schools in England follow) sets out what's expected by the end of Year 2, but how it's taught, and the exact resources and pace used, can vary between schools and even classes – your child's teacher is the best person to ask about their particular approach. Should we use a calculator to check answers? There's no need; simple mental checks or recounting with objects are more useful at this stage.

Sources

- Department for Education (GOV.UK) – National curriculum in England: mathematics programme of study, key stages 1 and 2
- Department for Education (GOV.UK) – Mathematics guidance: key stages 1 and 2 (non-statutory guidance)