

Counting On and Counting Back: Using a Number Line to Add and Subtract in Year 1

A number line is a visual tool that helps Year 1 children see addition and subtraction as journeys forwards and backwards. Instead of counting from one every time, children learn to jump forward (for adding) or backward (for taking away) from a starting number. This page explains what a number line is, how children use it in class, and simple ways you can support this at home.

What is a number line?

A number line is a simple line with numbers marked on it in order, usually from 0 to 10 or 20 in Year 1. It's a visual picture that helps children see numbers as a sequence and understand what happens when we add or take away. Number lines are part of the official National Curriculum for Key Stage 1 because they bridge the gap between using physical objects (like counters or blocks) and doing sums in their head or on paper. They're not a strict method children must use forever—they're a helpful thinking tool that makes addition and subtraction make sense.

How do children use the number line in class?

When adding (or 'counting on'), a child finds the larger number on the line and then jumps forward by smaller steps. For example, with $7 + 3$, they start at 7 and take three jumps forward to reach 10. For subtraction (or 'counting back'), they find the number they're starting with and jump backward. With $10 - 3$, they start at 10 and take three jumps back to reach 7. Teachers draw these jumps as arcs or hops above or below the line so children can see the path. The number line turns what might seem abstract into a real journey they can visualise and talk about.

What does this mean for your child?

Your child is learning that numbers have a fixed position and that adding means moving forward whilst subtracting means moving backward. This understanding is powerful—it connects addition and subtraction to the same idea and helps them move away from simply counting everything from one, which gets slower the bigger the numbers are. Some children grasp this straight away; others need more time and practice. That's completely normal. The number line stays with children through primary school and adapts as the numbers get bigger, so it's a skill worth settling into gently. There's no pressure—it's just another way to think about sums.

How you can help at home

You don't need formal worksheets—everyday life is full of number line moments. Draw a simple line on paper with numbers 0 to 10 and chat about journeys: 'We're at 5, let's jump on 2 more—where do we land?' You can use a ruler, a tape measure or even mark spots on a kitchen surface. Play with steps: physically walk and count jumps forward and back. Sing counting songs, play board games (which naturally involve moving along numbers), and notice numbers everywhere—doors with house numbers, shop tills, stairs. Keep it light and playful. If your child seems confused, stop and come back another day. You're not teaching the method; you're building familiarity with the idea that numbers sit in a line.

Questions parents often ask



Q: Is my child learning *the* method for adding and subtracting? A: No. The number line is one way to picture sums while your child is building understanding. Later, they'll learn other strategies and mental methods. Q: Will counting on on a number line confuse them with other ways of working? A: No. Children learn that there are different tools for different sums—number lines help with some, fingers with others, knowing facts by heart with others. That's healthy maths thinking. Q: When do they stop using number lines? A: Usually by late Year 1 or Year 2 for small numbers, but children may return to them for larger sums or when they need to think something through. It's a tool, not a stage.

Sources

- Department for Education (2014). National Curriculum in England: Mathematics Programmes of Study – Key Stage 1
- GOV.UK. Supporting your child's primary education: a guide for parents and carers