

Bonds to 20: Why Learning Number Pairs Beyond 10 Speeds Up Year 2 Maths

A gentle guide to helping your Year 2 child move from knowing number pairs that make 10 to those that make 20, helping them feel more confident with mental maths.

What are number bonds to 20?

Number bonds are pairs of numbers that add up to a specific total. In Reception and Year 1, children usually learn bonds to 10 (like 7 and 3). In Year 2, they move on to bonds to 20, such as 12 and 8. This is a key part of the National Curriculum (the official guide for what children should learn in school). While it seems like a small step, it is a big leap in confidence. It helps children move away from counting on their fingers and towards 'recall', which means knowing the answer quickly from memory.

How children learn these pairs

Many children find bonds to 20 tricky because they cannot simply rely on what they know about 10. To help, teachers often use 'bridging'. This means breaking a number apart (partitioning) to reach 10 first, then adding the rest. For example, to solve $8 + 6$, a child might think: '8 needs 2 to make 10, and there are 4 left over from the 6, so the answer is 14'. They often use visual tools like ten frames (grids of ten squares) or number lines to see this happening. Every school may use slightly different methods, so it is a good idea to ask your child's teacher which ones they use in class.

Why this helps your child

When children can quickly recall these pairs, it frees up their brain to tackle harder problems. If a child has to count every single number one by one, they can lose track of the bigger goal of the maths problem. Mastering bonds to 20 acts as a bridge to more complex addition and subtraction. It is common for children to plateau here, but with a little playful practice, they can move past counting and start feeling the 'click' of mental fluency, which makes maths feel less like a chore and more like a puzzle.

Simple ways to help at home

You do not need to sit down for formal lessons or use drills. Instead, try short, playful moments. While walking to school or tidying up, you could ask, 'I have 13 socks, how many more do I need to make 20?' Use things you have at home, like pasta pieces or buttons, to show how 10 and 7 make 17. For children with SEND (Special Educational Needs and Disabilities) or those learning English, using physical objects they can touch and move is often the most reassuring way to learn. Keep it light, short, and positive.

Common questions

Parents often ask if their child should just memorise a list of sums. Generally, it is more helpful for children to understand the 'how' through bridging and visuals first. You might also wonder if it matters if they still use their fingers; this is a natural part of learning, but the goal in Year 2 is to gradually move towards mental recall. If you are worried about your child's progress or if they seem stuck, your child's teacher is the best person to talk to for a plan tailored to your child's needs.

Sources

- Department for Education, National Curriculum in England: Framework for Key Stage 1
- GOV.UK, National Curriculum