

Arrays Explained: Seeing Multiplication as Equal Rows and Columns in Year 2

A simple guide to using 'arrays'—neat rows and columns of objects—to help your child in Year 2 understand how multiplication works through pictures and play.

What are arrays?

In Year 2 (children aged 6 or 7), children learn about arrays. An array is simply a set of objects, like buttons or pasta shapes, arranged in neat rows (going across) and columns (going up and down). Instead of just memorising numbers, arrays let children see multiplication as a picture. For example, if you have 3 rows of 4 buttons, you have a total of 12. This helps children move from counting one by one to understanding that multiplication is a faster way of adding the same number over and over again.

How arrays work

When children build an array, they learn that they can look at the same group of objects in two different ways. They might see '3 rows of 4' or '4 columns of 3'. Both ways give the same answer: 12. In school, this introduces a big idea called the commutative law, which is just a fancy way of saying that the order of the numbers doesn't change the total. Whether it is 2 times 5 or 5 times 2, the result is always 10. This makes learning times tables feel less like a memory test and more like a puzzle.

What this means for your child

Following the National Curriculum (the official plan for what children should learn in England), Year 2 pupils are expected to know their 2, 5 and 10 times tables. Using arrays helps your child build a 'mental map' of these numbers. It is especially helpful for children who find abstract numbers confusing or for those who are still learning English, as the visual layout explains the maths without needing many words. If your child has SEND (Special Educational Needs and Disabilities), these physical objects can provide a comforting, hands-on way to learn.

Fun ways to help at home

You don't need special equipment to practice arrays; you can use things you already have. Try arranging pieces of cereal on a table, or counting the studs on a Lego brick. You could ask, 'Can we make 2 rows of 5 grapes?' and let them arrange them. Keep it short and playful—just a few minutes while snacking or tidying up. There is no need for drilling or pressure. If you are unsure which numbers your child is working on right now, a quick message to their class teacher is the best way to find out.

Common questions

Parents often ask if their child must memorise the tables immediately. The goal in Year 2 is to understand the concept first. Using arrays is the bridge that leads to memorisation. Another common question is about the difference between rows and columns; it is very normal for children to mix these up at first. Simply reminding them that rows go across (like a rowboat on water) and columns go up (like a pillar on a building) usually helps. Remember, every child learns at their own pace.



Sources

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