Concrete, Pictorial, Abstract: Planning a Y1 Maths Lesson That Moves Through All Three

A gentle guide to how your child learns maths in Reception using the 'Concrete, Pictorial, Abstract' approach, which helps them understand numbers through play and pictures before using symbols.

What is the CPA approach?

In Reception (the first year of primary school for children aged 4 to 5), teachers often use a method called CPA. This stands for Concrete, Pictorial, and Abstract. It is a way of teaching maths that ensures children truly understand a concept rather than just memorising a rule. Instead of starting with numbers on a page, children start by touching and moving real objects. This approach is part of a wider way of teaching called 'Mastery', which aims to make sure every child feels confident with a topic before moving on to something new. It allows children to explore maths at their own pace in a way that feels natural and safe.

How does it work in the classroom?

A lesson usually moves through three stages. First is the 'Concrete' stage, where children use 'manipulatives'—real objects they can hold, like beads, buttons, or counting bears. Next is the 'Pictorial' stage, where they look at a drawing or a picture that represents those objects. Finally, they reach the 'Abstract' stage, where they use symbols, such as the number '5' or a plus sign (+). For example, if they are learning how 2 and 3 make 5, they might first hold two red blocks and three blue blocks, then draw five circles, and only then write the numbers. This sequence helps build a strong foundation for later years.

What this means for your child

Your child may spend a lot of time playing with objects or drawing pictures during maths. This is not 'just playing'; it is a vital part of their learning. By using their hands and eyes, children with different learning styles, including those with SEND (Special Educational Needs and Disabilities) or those learning English as an additional language, can grasp tricky ideas more easily. It reduces the pressure to get a 'right answer' quickly and instead encourages them to explore how numbers work. Every child moves through these stages at their own speed, and your child's teacher will guide them when they are ready.

Simple ways to help at home

You do not need any special equipment to support this at home. You can turn everyday moments into playful maths. While snacking, you could ask, 'You have two apple slices; if I give you one more, how many do you have now?' This is the 'Concrete' stage. You could also draw little dots on a piece of paper to represent the fruit, which is the 'Pictorial' stage. Keep it light and fun; there is no need for drilling or formal lessons. If you are unsure what your child is currently learning, a quick chat with their teacher can help you find similar playful ideas.

Common questions

Parents sometimes wonder why their child isn't writing more numbers or using sums yet. It is important to remember that in the Early Years Foundation Stage (EYFS), which covers the Reception year, learning is primarily play-based. Rushing to the 'Abstract' stage—like writing numbers—before a child understands the 'Concrete' part can lead to confusion later on. If you feel your child is struggling or, conversely, is ready for a new challenge, please speak with your child's teacher. They can explain how your child is progressing through these stages in the classroom.

Sources

- Department for Education: Early Years Foundation Stage (EYFS) statutory framework
- GOV.UK: National curriculum in England: Early Years Foundation Stage