

THINKING WITH NUMBERS

Lesson Descriptions

Equals With Addition

Children often have misconceptions about the concept of equals. To help address these issues, an introduction to the equals sign has been separated from the introduction of the plus sign. For example, some children believe that the equals sign means to do something. Now it is time to add or time to subtract. Some children believe that $2 + 3 = 5$ is correct, but $5 = 2 + 3$ is not. Children commonly see a number sentence like $2 + \underline{\quad} = 5$ and complete the blank by filling in 7. They see the + sign and the two numbers then just add. The equals sign means that the numbers on both sides are the same. $2 + \underline{\quad}$ is the same number as 5. Introduction to the equals sign is closely related to children's recognition that numbers can be represented in different ways. For example, $5 + 2$, $1 + 6$, $8 - 1$, and $2 + 2 + 2 + 1$ are just different ways to represent the number we usually write as 7.

Expected content outcomes include helping children learn:

- to understand that the numbers on each side of the equals sign are the same,
- to know that numbers can be represented in many ways,
- to know what part to add to another to make it the same number as the number on the other side of the equals sign, and
- to use numbers with the plus and equals signs to represent addition.

