



More About Math

Rainbow Math

Background for Leaders

This unit focuses on number and operation skills for 4-5-year-olds. These colorful activities touch on counting, addition, and subtraction in a way that makes math fun and relatable to young children.



Counting

The goal at age four is to count up to ten and the goal at age five is to count up to twenty. Some children will be more advanced and count higher than these benchmark numbers easily on their own, while others will need more support. It is essential that you model proper counting procedures: saying numbers in the correct order, connecting each number to just one object as you count (showing a one-to-one correspondence), and connecting the number being said to the numeral that represents it.

Addition

Children will begin to add initially by counting and combining groups of objects. This means that they will need to represent each number with a set of objects, combine the two quantities, and then count the total. Young children should not be expected to add to sums above ten (4 year olds) or twenty (five year olds).

Many children at this age will need to draw pictures of problems, use objects to count, or need to act out situations. Help children see the association between the problem situation and the equation, and model how to write a blank equation to be built and fill in the addends and sum ($_ + _ = _$).

Throughout this unit, children are asked to find the missing addend. To do this, children will need to count on to see how many more are needed. With experience, children will become more proficient with this practice. Children should practice appropriate vocabulary with addition problems: add, add five more, addition, altogether, and counting on.

Subtraction

Subtraction can be viewed as counting backwards, just as addition is counting forward. Children may need a numberline or other visual representation of the numbers that they are counting back through and be encouraged to touch each number on the numberline as they count backwards.

Children this age should begin by subtracting within five. Addition and subtraction facts are related, yet children tend to have more difficulty with subtraction equations. Children will require seeing subtraction problems in drawings or represented with objects, so they can count the initial amount, cross off or remove what is being subtracted or taken away, and find what is left. Model how to put this into a subtraction sentence ($_ - _ = _$) with reminders that the first number should be the total amount, while the second number is what is taken away, and the third number is what is left.

Children should practice appropriate vocabulary with subtraction problems: one fewer, reducing, subtracting, minus, take one away, and the amount leftover.

