

## Strategic Number Counting

Fuchs, L. S., Powell, S. R., Seethaler, P. M., Cirino, P. T., Fletcher, J. M., Fuchs, D., & Hamlett, C. L. (2009). The effects of strategic counting instruction, with and without deliberate practice, on number combination skill among students with mathematics difficulties. *Learning and Individual Differences* 20(2), 89-100.

**This targeted intervention helps students build fluency with basic facts and computation using number counting strategies.**

### Materials:

- Flash cards with basic addition and subtraction facts
- Number lines (1-10 and 1-20)

### Steps:

1. The student is given either a 1-10 or 1-20 number line depending on the sum of the facts.
2. The teacher teaches the student how to solve an addition problem using the number line. The student starts with the largest number and counts up.
3. The teacher teaches the student how to solve a subtraction problem using the number line. The student is taught to refer to the first number in a subtraction problem (minuend) as “the number to start with” and the number after the minus sign (subtrahend) as “the minus number.” The student starts with the minus number on the number line (subtrahend) and counts up to the starting number (minuend).
4. The teacher explains to the student that there are two ways to solve the problems. The student can say, “know it,” and give the answer; or “count up,” and use the number line.
5. The teacher then goes through the flashcards with the student. If the student doesn’t know the answer or the answer is incorrect, the teacher directs the student to use the number line.
6. The teacher records the number of cards (1) identified from memory, (2) solved using the count-up strategy, and (3) those not answered correctly.