*The student is taught explicit number counting strategies for basic addition and subtraction. Those skills are then practiced with a tutor*

**Materials**

1. Number line
2. Number combination (math fact) flashcards for basic addition and subtraction
3. Strategic Number Counting Instruction Score Sheet

**Preparation**

*The tutor trains the student to use these 2 counting strategies for addition and subtraction*

1. ADDITION: the student is given a copy of the appropriate number line (1-10 or 1-20). When presented with a 2-addend addition problem, the student is taught to start with the larger of the 2 addends and to ‘count up’ by the amount of the smaller addend to arrive at the answer to the problem
2. SUBTRACTION: The student is given a copy of the appropriate number line (1-10 or 1-20). The student is taught to refer to the first number appearing in the subtraction problem (the minuend) as the ‘number you start with’ and to refer to the number appearing after the minus (subtrahend) as ‘the minus number.’ The student is directed to start at the minus number on the number line and to count up to the starting number while keeping a running tally of numbers counted up on his or her fingers. The final tally of digits separating the minus number is the answer to the subtraction problem

**Intervention Steps**

1. **Create Flashcards.** The tutor creates addition and/or subtraction flashcards of problems that the student is to practice. Each flashcard displays the numerals and operation sign that make up the problem but leaves the answer blank
2. **Review Count-Up Strategies.** As the opening of the session, the tutor asks the student to name the two methods for answering a math fact. The correct student response is ‘Know it or count up.’ The tutor next has the student describe how to count up an addition problem and how to count up a subtraction problem. Then the tutor gives the student 2 sample addition problems and two subtraction problems
3. **Complete Flashcard Warm-Up.** The tutor reviews addition/subtraction flashcards with the student for 3 minutes. Before beginning, the tutor reminds the student that when shown a flashcard, the student should try to recall the answer from memory- but that if the student does not know the answer, he or she should use the appropriate count-up strategy. The tutor then reviews the flashcards with the student. Whenever the student makes an error, the tutor directs the student to use the correct count-up strategy to solve. NOTE: If the student cycles through all cards in the stack before the 3-minute period has elapsed, the tutor shuffles the cards and begins again
4. At the end of the 3 minutes, the tutor counts up the number of cards reviewed and records the number of cards that the student (a) identified from memory, (b) solved using the count-up strategy, and (c) was not able to correctly answer. These totals are recorded on the Strategic Number Counting Instruction Score Sheet
5. **Repeat Flashcard Review.** The tutor shuffles the math-fact flashcards, encourages the student to try to beat his or her previous score, and again reviews the flashcards with the student for 3 minutes. As before, whenever the student makes an error, the tutor directs the student to use the appropriate count-up strategy. Also, if the student completes all cards in the stack with time remaining, the tutor shuffles the stack and continues presenting cards until the time is elapsed
6. At the end of the 3 minutes, the tutor again counts up the number of cards reviewed and records the number of cards that the student (a) identified from memory, (b) solved using the count-up strategy, and (c) was not able to correctly answer. These totals are again recorded on the Strategic Number Counting Instruction Score Sheet
7. **Provide Performance Feedback.** The tutor gives the student feedback about whether (and by how much) the student’s performance on the second flashcard trial exceeded the first. The tutor also provides praise if the student beat the previous score or encouragement if the student failed to beat the previous score