Counting Back on a Number Line – 1st Grade

SUNSHINE STATE STANDARD: MA.A.3.1 – The student understands the effects of operations on numbers and the relationships among these operations, selects appropriate operations, and computes for problem solving.

PURPOSE: Students will solve basic subtraction facts using the count back strategy.

OBJECTIVE: Given a subtraction sentence, the student will correctly solve it using the count back strategy on the giant number line.

MATERIALS: number lines out of fax paper, worksheets, pencils

PROCEDURES:
1. Review what a "number line" is and what "counting back" is.
2. Set induction
   a. point out giant number lines on the floor
   b. each student will get a turn to stand on the number line
3. Define new concepts – explain that the giant number line is the same as the number lines on their worksheets; you can use a number line to solve subtraction word problems; we move to the left on a number line
   HOT questions: 1) When you use a number line to subtract, why do you move to the left? (subtraction is counting down/ counting backwards)
   2) How does a number line help you count back? (helps you visualize subtracting)

4. Provide examples and non-examples – have one student demonstrate moving left on a number line, have another student demonstrate moving right on a number line, explain that one is subtraction and one is addition
5. Identify attributes – I will give students subtraction sentences like: start on the number 4, count back 2, what number are you standing on?
   HOT questions: 3) How do you know your answer is correct? (add same number to get back to starting position, check with a friend, etc.)
   4) (after counting back) How would you get back to your starting position? (add same number to get back to starting position)

6. Practice distinguishing concepts – give each student a chance to practice on big number line, then have them practice what they learned on their worksheets