



## Curriculum Guide for Integers Card Set

Materials: TimeLine Scroll  
Integers Card Set

Prerequisite: This lesson is an introduction to pre-algebraic concepts. Student should have a basic understanding of the concepts of addition (putting things together) and subtraction (taking things away).

### Presentation I

1. Unroll Scroll
2. Take out positive integer cards (red) and the zero card (black).
3. Tell students, "Today we will be making a number line that includes numbers greater than zero. We call these positive numbers and we use a + sign. This will show us a different way to think about addition and subtraction."
4. Beginning at the first tick mark, lay out the zero card. Continue laying out positive integers cards up to the number 50. As you place each new card, point out to students that you have added 1 to the previous number.
5. When layout of all positive numbers is complete, ask a student to choose a number. Show students that when they move to the right of their number, the number is getting bigger (addition). Then show students that when they move to the left of their number, the number is getting smaller (subtraction).

Teacher may decide to stop lesson here and let student work with materials. Or teacher may continue with lesson and Level 1 Equation Cards (yellow).

6. Choose an equation card. Please note that there are equations on both the front and back of card.
7. Have students locate the first number from the equation card on the number line.
8. Have students identify the operation sign (addition or subtraction).
9. If the sign is +, have student move the correct number of spaces to the right. Place equation card arrow at the correct answer. Students may check answers on the back side in the yellow circle.
10. If the sign is -, have student move the correct number of spaces to the right. Place equation card arrow at the correct answer. Students may check answers on the back side in the yellow circle.
11. Student(s) may continue using the Level 1 Equation Cards with or without teacher's help.
12. After completing work, gather cards, roll up the scroll, and return to shelf.

### Presentation II

1. Repeat Steps 1-5 from Presentation I.
2. Pull out Level 2 Equation Cards (orange).



3. Point out to students that they will be working with equations that have more than two numbers and combine the two operations (addition and subtraction).
4. Have a student choose an equation card from Level 2 and locate the first number on the number line.
5. Identify the first operation and move in the appropriate direction on the number line.
6. Identify subsequent operations and move in the appropriate direction on the number line until equation is complete.
7. Have students check the answer on the back of the card.
8. Student(s) may continue using the Level 2 Equation Cards with or without teacher's help.
9. After completing work, gather cards, roll up the scroll, and return to shelf.

### Presentation III

1. Unroll the scroll and locate the center tick mark (13<sup>th</sup> small tick mark). Place the zero card (black) here.
2. Tell the students, "Today we are making a number line that includes numbers less than zero. We call these negative numbers and we use a - sign."
3. Take out the positive integer cards (red) up to +25 and the negative integer cards (green) up to -25. Have students layout +1 to the right of zero and -1 to the left of zero. Continue in this manner for each set of opposite numbers. (This would be a good time to discuss opposites).

Teacher may decide to stop lesson here and let student work with materials. Or teacher may continue with lesson and Level 3 Equation Cards (red).

4. Have student choose an equation card from Level 3 (red).
5. Have student locate the first number in the equation card, paying close attention to the sign in front (+/-).
6. Identify the operation and move in the appropriate direction on the number line to find the answer.
7. Have students check the answer on the back of the card.
8. Student(s) may continue using the Level 3 Equation Cards with or without teacher's help.
9. After completing work, gather cards, roll up the scroll, and return to shelf.

### Teacher Information:

Positive integers are all the whole numbers greater than zero: 1, 2, 3, 4, 5, ... . Negative integers are all the opposites of these whole numbers: -1, -2, -3, -4, -5, ... . We do not consider zero to be a positive or negative number. For each positive integer, there is a negative integer, and these integers are called opposites. For example, -3 is the opposite of 3, -21 is the opposite of 21, and 8 is the opposite of -8. If an integer is greater than



zero, we say that its *sign* is positive. If an integer is less than zero, we say that its *sign* is negative.

Supplemental:

Download Clocca Concepts Integer I booklets for additional follow-up work.

Teacher and/or students can make own equations to use with or without number line material.