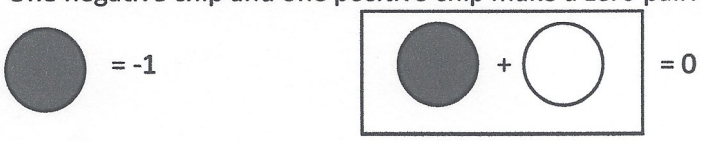
Grade Seven

Modeling Integers

Materials: Two-Colored Chips

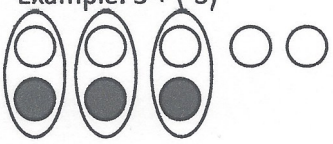
One negative chip and one positive chip make a zero pair. They cancel each other out.




= +1

(-1) + (1) =0
(zero pair)

Example: 5 + (-3)



There are +2 remaining, so 5 + (-3) = 2

Activity 1: Addition With Two-Colored Chips (Chips = Tiles)

1. Use the two-colored chips to represent each integer and manipulate them to show each problem given below. Make a sketch in each box to represent what you did in each problem. (You can draw them)

a.) (4) + (3)

b.) (8) + (-3)

c.) (-9) + (-2)

d.) (-4) + (7)

e.) (5) + (-5)

f.) (2) + (-6)

Lesson Contributed by: Jordan Godfrey
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Use the two-colored chips to investigate the following questions and then write the answers to the given situations. You may draw an example showing the use of the two-colored chips to explain your answers.

2. Is the sum of two positive integers positive or negative? How do you know? Give an example.

3. Is the sum of two negative integers positive or negative? How do you know? Give an example.

4. When is the sum of a positive integer and a negative integer:
   a.) positive?

   b.) negative?

   c.) zero?

What patterns do you see?

When we add **two positive numbers**, what do we do?

When we add **two negative numbers**, what do we do?

When we add **two numbers with different signs**, what do we do?

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