

Balancing Equations Post-Assessment **ANSWER KEY**

1. Do you feel more comfortable with solving algebraic equations after this activity? Briefly explain yes or no.

2. Did using the LEGO MINDSTORMS kit help you understand solving algebraic equations better? Briefly explain yes or no.

3. Given: $2x = 5 - 1$

- a. What is the positive integer in this equation? +5.
- b. What is the negative integer in this equation? -1.
- c. What is the unknown variable in this equation? x.
- d. What is the coefficient in this equation? 2.

4. Solve for the unknown in $2x = 5 - 1$ below. (You can do it!!)

$$2x = 5 - 1$$

$$2x = 4$$

$$\frac{2x}{2} = \frac{4}{2}$$

$x = 2$

5. Show your work to check your solution to #4 below. Is your equation balanced? Will your results balance on the balancing seesaw? How do you know?

To check results, substitute the unknown value solved for back into the original equation in place of the unknown variable. After simplification, values on either side of the equation should be equaled. If they're equaled, the equation is balanced.

Work to check the solution:

$$2x = 5 - 1$$

$$2(2) = 4$$

$$4 = 4$$

6. What did you NOT like about this activity?

7. What did you LIKE about this activity?