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| **Lesson Name:** | **Learning 101** |
| **Grade Level(s):** | Math 7 |
| **Goal/Objective(s):** | The Student will:   * learn which type of learning style (auditory, visual, or kinesthetic) is best for them. * Students will learn how to construct simple equations and solve problems by reasoning about the quantities. * Students will examine their learning style via the CFWV website. |
| **Standard(s):** | **Math Standards:**  M.7.EE.4 Use variables to represent quantities in a real world or mathematical problem and construct simple equations to solve problems by reasoning quantities.  **School Counseling – Student Success Standards:**  **MLP.SS.1.1.6** identify personal learning style(s) and establish habits that enhance personalized learning.  **MLP.SS.1.1.7** work collaboratively in groups or independently as appropriate.  **MLP.SS.1.2.8** analyze assets and barriers to academic goal attainment and utilize school and community resources to overcome barriers and strengthen assets. |
| **Instructions:** | Students will learn how to solve simple equations auditorily, visually, and kinesthetically.   1. Ask students to clear their desk and give you their full attention. 2. Begin the lesson by writing on the board “ A number plus twenty-six equals negative fifteen”. 3. Rewrite this to an math problem:  * The words “a number” will be replaced with the variable “x”. * The word “plus” will be replaced with “+”. * The word “twenty-six” will be replaced with “26”; the number “negative fifteen” will be replaced with “-15”. * The word “equals” will be replaced with “=”.  1. Split the equation at the equals sign making sure the students understand that now there is a right and left side. What you do to one side of the line, you must do to the other side of the line. 2. Remind students that the “goal” is to isolate the variable. 3. In order to isolate the variable, you must do the inverse of what is with the variable. In this case, you will want to subtract twenty-six from both sides. 4. On the left hand side, show that only “x” is left; on the right hand side, remind the students you need to add the two numbers together since they have the same sign. 5. Finally x = -41.   Explain to the students that you will show a similar problem using algebra tiles (kinesthetic) on the smartboard. X + 12 = 15:   1. Show on the smartboard: 1 “x” algebra tile; 12 “+” tiles; then on the other side of the equals sign 15 “+” tiles. 2. Remind the students the goal is to get the variable “x” by itself. 3. “X” has 12 positive tiles with it. Therefore, you need to take those away. 4. Remind the students if you take away tiles from one side, you must take them away from the other side. Therefore, take 12 tiles away from the 15 tiles. 5. Finally, show that only the “X” is on the left and 3 positive tiles are on the right. Therefore, x = 3.   Lastly, students are going to hear how to solve a problem. Ask the students to shut their eyes and think about what you are saying. Ask them to imagine writing it on the board.   1. Say: “A number plus seven is equal to negative six”. 2. Say: “ I write this as x + 7 = -6”. 3. Say: “ I need to get the variable x by itself so I subtract 7 to both sides” 4. Say: “Since the numbers on the right have the same signs, I add the numbers together. -6 + -7 = -13”. 5. Say: “ x = -13”.   Now it’s your turn:   1. Please get a set of algebra tiles and a sheet of paper from the table. 2. Create your own simple equation. 3. Show the equation using the tiles and visually. 4. Then explain how you solved it to your partner sitting across from you.   Once you have shared with your partner, turn your paper over and answer the following two questions:   1. Which learning style do you think is best for you? 2. Which learning style do you have the most difficulty with? 3. When you have answered those two questions. Log into the [www.cfwv.com](http://www.cfwv.com). 4. Click on “Career Planning”. 5. Click on Learning Inventory Style. 6. Answer all questions in learning inventory style. |
| **Materials:** | Algebra tiles  Paper  Pencil  Smartboard |
| **CFWV Tools Used:** | Computers with internet access. CFWV.com |
| **Assessment:** | Learning 101 Assessment |