

## Lesson Plan Template

<b>Grade: 6</b>	<b>Subject: Math 6</b>
<b>Materials:</b> pen, paper	<b>Technology Needed:</b> Calculator
<b>Instructional Strategies:</b> <input checked="" type="checkbox"/> Direct instruction <input type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Technology integration <input type="checkbox"/> Other (list)	<b>Guided Practices and Concrete Application:</b> <input checked="" type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity <input checked="" type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list)
<b>Standard(s) (Common Core Standards)</b>  <b>6.EE.2b</b> – Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity.  <b>6.EE.5</b> – Understand solving an equation ... as a process of answering a question: which values from a specified set, if any, make the equation... true? Use substitution to determine whether a given number in a specified set makes an equation... true.  <b>6.EE.7</b> – Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ , and $x$ are all nonnegative rational numbers.	<b>Differentiation</b> <b>Below Proficiency:</b> For students below proficiency, I will pair them with a student that understands the content more and have them discuss the “how” and “why” of solving two – step equations.  <b>Above Proficiency:</b> In order to keep on the higher end of the ZPD for the above proficient students, I will have them work on two-step problems that involve like terms.  <b>Approaching/Emerging Proficiency:</b> Students that are approaching/emerging proficiency will work on problems that may seem slightly difficult, but they will also be asked to deepen their knowledge by explaining their processes.  <b>Modalities/Learning Preferences:</b>  <b>Logical</b> – Students with a logical modality will benefit from this lesson by using previous knowledge to deduce procedures and answers to two-step problems.  <b>Interpersonal</b> – The interpersonal modality will find strength in this lesson because there are many opportunities for discussion amongst peers to solidify and strengthen their understandings of the concepts.
<b>Objective(s)</b> <ul style="list-style-type: none"> <li>- I can solve a two-step equation by using addition, subtraction, multiplication and subtraction.</li> <li>- I can explain how I solve a two-step equation.</li> <li>- I know what two-step equations are.</li> </ul> <b>Bloom’s Taxonomy Cognitive Level:</b> Remember, Understand, Apply	<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b>  During the beginning bell ringer and stretching activity, the students will need to keep their hands to themselves and be actively listening to directions. The explanation of the content will require of them critical thinking skills. I will be using the strategy of choice when working with two-step equation examples (do you want to subtract or divide first?). I expect the students to actively attempt to solve the equations as well as readily be able to express the answer they got or navigate their way through explaining why they are confused.
<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b>  I will meet the students at the door and have them sit in their assigned seat. Once they have answered the bell ringer, I will have them stand up and do the stretch exercise with me. Once this is over, I will have them all sit down. They will stay in their seat until the end of class.  After we go through examples, I will ask them for answers to the questions on the board. I will first take volunteers and then, if the same people are raising their hands, I will draw names.	(This cell is merged with the previous one in the original image)

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Minutes	Procedures
3 min.	<p><b>Set-up/Prep:</b> I need to set up the document camera, place my book and white sheet under the camera, and write the bell ringer questions on the board.</p>
7 min	<p><b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b></p> <p>For the first 3-4 minutes of class, I will have the students work on the following problems quietly, asking a neighbor if they need.</p> <p>Bell Ringer:</p> <ol style="list-style-type: none"> <li>1. <math>x - 20 = 15</math></li> <li>2. <math>6y = 72</math></li> </ol> <p>Stretch Exercise: I will then ask everyone to silently stand-up and stand an arm's length away from other students around them. I will then go through a small strength exercise with them:</p> <ul style="list-style-type: none"> <li>- Stand with your hands straight in the air</li> <li>- Touch your right hand to your left foot</li> <li>- Stand straight again</li> <li>- Touch your left hand to your right foot</li> <li>- Stand straight</li> <li>- Reach your left hand over your body</li> <li>- Reach your right hand over your body</li> <li>- Deep breath in/out</li> <li>- Sit down</li> </ul> <p>We are now ready to focus and work hard!</p> <p>For the last 2-3 minutes of the warm- up, I will have a class discussion about their answers to the bell ringers. I will ask for verification in numbers, how they got their answers, if anyone got the answer a different way, etc.</p>
25 min	<p><b>Explain: (concepts, procedures, vocabulary, etc.)</b></p> <p>KEY VOCABULARY: <b>Two-Step Equation</b> – an equation that contains two different operations. TO solve a two-step equation, use inverse operations to isolate the variable.</p> <p>What is the order of operations? PEDMAS. Now, to solve two-step equations, we follow the operations, PSAMDE.</p> <p>CLASS EXAMPLE: <math>3x - 4 = 17</math></p> <p>When doing these types of problems, go straight down! Procedure is ALWAYS vertical.</p> <p>(Another class example if needed more step-by-step instruction) Example: <math>5c + 32 = 2</math> What do you think we should do first?</p> <p>Example: <math>15p - 4 = 119</math></p> <p>DOCUMENT CAMERA: Two-Step Notes</p>
10 min	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <p>The following two examples will be in-class, independent activities. I will have them work on the problems for a few minutes before coming back together as a class and discussing the answer the procedure used to get the answer.</p> <p>Example:</p> <ol style="list-style-type: none"> <li>1. <math>\frac{1}{5}p - 4 = 119p - 4</math></li> <li>2. <math>13x - 84 = 7</math></li> <li>3. <math>\frac{x}{10} + 5 = 7.5</math></li> </ol>
	<p><b>Review (wrap up and transition to next activity):</b></p>

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<b>5 min</b>	In your pods, develop questions you still have about two-step equations. Do you feel like you could solve more complex questions?	
<b>Formative Assessment: (linked to objectives)</b> <b>Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.</b> During the middle of the lesson, I will have the pods do a quick discussion about how to solve two-step equations. We will then have a group discussion on the questions they still have.  <b>Consideration for Back-up Plan:</b> If the students still do not understand how to solve two-step equations, we will review solving by addition/subtraction and multiplication/division. Then we will put them together slowly.		<b>Summative Assessment (linked back to objectives)</b> <b>End of lesson:</b> In-class, individual assessment will happen with examples. At the end of the two-day lesson, there will be a homework assigned to have a summative assessment on two-step equations and like terms.  <b>If applicable- overall unit, chapter, concept, etc.:</b> N/A
<b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b>		