# Lesson Plan Template

**Grade: 6**

**Subject:** Math 6 (Algebra Section

**Materials:** Paper, pencil, Math 6 Book

**Technology Needed:** Calculator, Overhead projector

**Instructional Strategies:**

- ☐ Direct instruction
- ☐ Guided practice
- ☐ Socratic Seminar
- ☐ Learning Centers
- ☐ Lecture
- ☐ Technology integration
- ☐ Other (list)
- ☐ Peer teaching/collaboration/ cooperative learning
- ☐ Visuals/Graphic organizers
- ☐ PBL
- ☐ Discussion/Debate
- ☐ Modeling

**Guided Practices and Concrete Application:**

- ☐ Large group activity
- ☐ Independent activity
- ☐ Pairing/collaboration
- ☐ Simulations/Scenarios
- ☐ Other (list)

Explain:

- ☐ Hands-on
- ☐ Technology integration
- ☐ Imitation/Repeat/Mimic

**Standard(s)**

(Common Core Standards from textbook)

**6.EE.5 –** 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.

**6.EE.7 –** 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.

**Objective(s)**

- Students can solve an equation using addition or subtraction
- Students can explain their reasoning when solving an equation
- Students understand and can use terminology regarding solving equations.

**Bloom's Taxonomy Cognitive Level:** Remember, Understand, Apply

**Differentiation**

**Below Proficiency:** For those that are below proficient in the standards, I will switch the "teams" so that they can have stronger students who could be capable of explaining how they got the answer.

**Above Proficiency:** To aid the students who need something more to grasp for, they will be asked to explain their reasoning and come up with new examples. This will help the information go deeper in memory.

**Approaching/Emerging Proficiency:** Students that are approaching/emerging proficiency will have the opportunity to explain their reasoning as well as having the benefit of above proficiency students to help them clarify their thinking.

**Modalities/Learning Preferences:**

**Kinesthetic** – Students with a Kinesthetic learning modality will be other benefit due to our full body classroom activity. This way they will not only see, but also experience the expressions.

**Classroom Management- (grouping(s), movement/transitions, etc.):**

When the students come into the classroom, I will have them sit down in their pods of 4 students and quietly write down everything they know about equations. When they are done with this, I will come around and pick them up. After this, I will go around and list students off from 1-3. Students will get into 3 groups – each sides of the classroom and one in the middle. We will go through our "balancing activity." They will then sit down we will go over the intro things. They will then do a problem independently, and then do their homework.

**Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)**

Due to the nature of the "move around" activity, it could go very chaotic. In this lesson, I expect each student to use lower voices and to follow directions when moving around the classroom. They will be expected to stand up and sit down without diverging from the activity.

| Minutes | Procedures |
|---|---|
| 5 min | **Set-up/Prep:** Set up the tech camera and make sure the desk clusters in between them. |
| 7 min | **Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)**<br><br>For the first 2 minutes of class, I will have the students write down a piece of paper all of the things they already know about equations. This could be definitions, the set-up of equations, how-to plug-in solutions, examples of these things, why they know this, etc.<br><br>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:<br>- Stand with your hands straight in the air<br>- Touch your right hand to your left foot<br>- Stand straight again<br>- Touch your left hand to your right foot<br>- Stand straight<br>- Reach your left hand over your body<br>- Reach your right hand over your body |

# Lesson Plan Template

| | |
|---|---|
| | - Deep breath in/out<br>- Sit down<br><br>We are now ready to focus and work hard!<br><br>The last 3 minutes of the "engage" activity will consist of a class discussion. I will ask them for some examples of what they wrote down that they already know. I will take about 3-5 students.<br><br>After this, as a class, we are going to write a GOAL for ourselves – what do we want to know next? (Answer: We want to know how to solve equations). |
| **20 min** | **Explain: (concepts, procedures, vocabulary, etc.)**<br><br>I will go over key vocab such as equation, solution, inverse operations, etc. I will use pg 284-286 under the tech camera to help me explain. The topics we will cover are as listed:<br>- What is a solution?<br>- How to find a solution: Dressing/Undressing rule, get the variable alone, what you do to one side you have to do to the other (balance visual).<br>- Check Answers<br>- Examples: x + 5 = 13, 12 – x = 3<br>- Word Problems: pg. 286 #11<br>When I pull names to explain how they got their answers, they cannot say "because I know 8 + 5 = 13," they have to explain the Algebra behind it.<br><br>Students will do a 2 min Turn and Talk and talk about:<br>1. What new things they learned.<br>2. Questions they still have.<br>After this, I will ask them to share parts of their discussion and ask the class if they have answers to the questions before I share my answer. |
| **10 min** | **Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)**<br><br>Students will do #5, 6, 10 (I think 10 is a word problem! If it isn't, it's the next word problem after 8!) on pg. 285. If they want to try something more difficult after this, they can #1, 2 on pg. 292 |
| **10 min** | **Review (wrap up and transition to next activity):**<br><br>After they are done, students will be allowed to use DreamBox for the rest of the hour. |

| | |
|---|---|
| **Formative Assessment: (linked to objectives)**<br>**Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.**<br><br>Midway between explaining, I will have the students do a turn and talk and create one good question they still have. They will then ask another group the question, and me if the other group couldn't answer.<br><br>**Consideration for Back-up Plan:** If the lesson isn't going well, I will ask them to have a conversation within their pods about how they would go about solving a problem like this. If they can't get an answer from group members, we will do more examples on the board (ex. x – 4 = 6, 4 – x = 5, x + 3 = 19) | **Summative Assessment (linked back to objectives)**<br>**End of lesson:** At the end of the lesson, the students will do 2 problems of solving an equation using addition and subtraction. If they feel ready for it, they can also try solving using multiplication and division.<br><br>**If applicable- overall unit, chapter, concept, etc.:** |

**Reflection (What went well? What did the students learn? How do you know? What changes would you make?):**

**Lesson Plan Template**