Lesson Plan Template

Grade: High School

Subject: Math

Materials: Pencil, textbook, notebook, calculator

Technology Needed: Computer

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

Explain:

Standard(s)

8.EE.7 – Solve linear equations in one variable

1. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions
2. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms

Objective(s)

1) Define what it means to have infinite, one or no solution
2) Determine if an equation has infinite, one or no solution

Bloom's Taxonomy Cognitive Level:

Define, apply, solve

Differentiation

Below Proficiency: If students are struggling with the material, they will be encouraged to watch the video again or at least the parts that they are struggling with.

Above Proficiency: Students who excel with this section can choose to start and/or finish the assignments that are assigned to them.

Approaching/Emerging Proficiency: Students will be expected to come to class with the video watched with all notes that they find necessary for them already taken.

Modalities/Learning Preferences: Auditory: The students will be able to listen to the video in a quiet space and have the ability to listen to the video as many times as need be.

Visual: The students are able to watch the video and see the examples on their screens. They can pause the video at any time to take more time to write down examples.

Kinesthetic: The students can watch stop watching the video at any time to get up and move around. They can then resume when they feel up to it. The video is also fairly short so they will not be sitting there too long.

Interpersonal: The students will have more of the interpersonal connection in the classroom when working on their assignment.

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

NA

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

NA

Minutes	Procedures
25	**Set-up/Prep:** Have all examples prepped and video set up
10	**Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)** I will start by reminding everyone that they need to complete a google form before watching the video. I will explain that the google form is just used to see where they are at and they will need to complete another google form to see how they have improved. I will then move forward with the lesson by explaining that an equation may not always have just one solution.
15	**Explain: (concepts, procedures, vocabulary, etc.)** I will start by explaining that we have been doing one solution problems the last few weeks. However, this is not the only case. I will then start by going through an example with infinite solutions. Then, I will go through an example with no solution. We will then go through multiple examples of both of these types of equations. Lastly, we will go through some examples where all solutions are possible. I will also incorporate some of the items from the last few weeks such as combining like terms and the distributive property. When going through the examples, I will make sure to use different colors for pens so it can make the separate steps easier to identify. I will also model how examples could be checked to see if answers are correct or incorrect.

Lesson Plan Template

15	**Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)** Throughout some of the examples that I go through in the explanation process, I will encourage the students to try the problems on their own by stopping the video before I go through that problem. This then allows them to have immediate feedback when they get to do the problem first and then have me go through it as well. There will be more practice and applications for them to do when we are together in class.
5	**Review (wrap up and transition to next activity):** To wrap up this lesson, II will remind them of what they will be doing in class and remind them of anything else they may want to start on. For example, I will remind them that they will have time to work on their assignments in class, but might want to get started or be done with their Dreambox activities by the time they come to class.

Formative Assessment: (linked to objectives) **Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.** They will be formatively assessed when they have their next class period since that is when they will be completing their homework. I will make sure to walk around the room and check their understanding through their assignments. They will also be required to show their assignment to me or Mrs. Thompson once they have completed it. They will also be assessed in using their google forms that they will complete before and after the lesson. **Consideration for Back-up Plan:** Just in case there are some students didn't watch the video or maybe didn't understand it, I will walk through a few examples that were similar to the ones in the video so they can get a little extra practice before going into their activities.	**Summative Assessment (linked back to objectives)** **End of lesson:** The end of the lesson, the students will complete their homework assignment. **If applicable- overall unit, chapter, concept, etc.:** At the end of the chapter, they will have questions on their test where they must determine if the equation has infinite, one or no solution.

Reflection (What went well? What did the students learn? How do you know? What changes would you make?):
This video definitely went smoother than the last one. I think my talking flowed better and I did a much better job of not referring to my students as 'guys'. I also made sure to continuously incorporate the strategy of changing colors of pen I was using between different steps of the equations. I would also incorporate different words in the video that the students would need to write down in order for me to check their notes quickly at the beginning of class.