Graphing Linear Equations Day 2

Grade: 8 | **Subject: Math**

Materials: Graphing Worksheet | **Technology Needed: Flipchart**

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.F.3: Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line.

Objective(s)

TLW Graph linear functions using tables

Bloom's Taxonomy Cognitive Level: Understand, Apply

Differentiation

Below Proficiency: Go around and walk them through any questions that they are struggling with.

Above Proficiency: Rely on these students to help students that are emerging proficiency with any questions.

Approaching/Emerging Proficiency: Students will be led through any struggles by the above proficiency students.

Modalities/Learning Preferences: Visual, cooperative

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

I will collect the slips at the corner of each table. I will let the students know ahead of time if they are going to go up and do the problem on the board.

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

There will be no shoving when putting away markers, and homework time will be just that.

Minutes	Procedures
	Set-up/Prep: Have graphing paper and worksheets for students. Have flipchart prepared for students. This lesson is part-two of a block schedule lesson plan.
10	**Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)** I will show a video on graphing lines and using these functions in the real world. https://www.youtube.com/watch?v=morYIV4tTeI. Then I will ask them to take out a piece of paper to write down their response to how this can be used in the real world, then I will collect them. I will ask for different ideas in front of the class and move on with the flipchart.
10	**Explain: (concepts, procedures, vocabulary, etc.)** I will finish up notes with examples on graphing using a table. Do at least three examples with the students graphing the function on their own and then graphing it as a class. As I give them 3-4 minutes to graph the function, I will observe the students who understand the process and ask them to come up to the board and graph the function for the class with showing their work. Once the notes are complete, I will have a student collect the graphing paper, and the students will put markers away.
25	**Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)** I will hand out the graphing worksheet and have the students work on it for the rest of the class period.
	Review (wrap up and transition to next activity): The end of class will be a reminder to finish the assignment for the next class day and be prepared to correct it.

Formative Assessment: (linked to objectives)

I will use the responses to evaluate their understanding of their content, and to see who needs the extra help during homework time.

Consideration for Back-up Plan: Skip video all together and go through more examples on how to graph. Do activity in which students come forward and graph functions with their partner and explain their process.

Summative Assessment (linked back to objectives)

End of lesson: The homework assignment will help sum up their knowledge and mastery of the content as well as the chapter test.

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

The lesson went well, and I had a great opportunity to go around during homework time to check on a lot of the student's progress. Before that though, I do not plan on showing that video for the next time I do the lesson. I was hoping it would be a good way for them to see math in the

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real world, but it turned out to be a little to advance for them and they weren't interested on content in the video. I would try to connect it better to the class next time if I did choose another video.

Since the video wasn't connecting with the students, they didn't write very well reflections and I had a hard time using these as ways to analyze their greater understanding of some of the concepts we had just covered.

Something I would do other than the video would be to play a game in which I am able to evaluate understanding of student knowledge. I think a kahoot.it before and after with identifying parts and concepts of a table and graph would be useful in this particular lesson.

In the end, I would say that the major highlight was that I was able to work with the students one on one during homework time, which I know they appreciate. Next time I would try to incorporate a different activity rather than the video for analyzing their understanding of the content.