

Lesson Plan

Learning Segment Focus: Plotting points on coordinate plane

Lesson: 3 of 3

Course & topic addressed: Coordinate plane

Date: 3/9/2020 Grade: 5

Student Outcomes

Specific learning objectives for this lesson.	After this lesson students should be able to plot 3 different points on a coordinate panel (graph) given the coordinates from a table with 90 percent accuracy.
Justify how learning tasks are appropriate using examples of students' prior academic learning .	Students will use their previous knowledge of the first quadrant and the two axis to learn how to plot coordinates on a graph.
Justify how learning tasks are appropriate using examples of students' personal, cultural, linguistic, or community assets .	In my class there are two students who are English learners, three students who are IEP/504. With the diversity of students in mind, I will allow for accommodations, modifications, and differential instructions. I will use the Google Classroom to post assignments for students' convenience and to facilitate learning. I will use QR reader software to assign students different assignments according to their level. This will make the assignment challenging, but at the same time not frustrating for each student..

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	<p>5-PS1-2 Measure and graph quantities such as weight to address scientific and engineering questions and problems.</p> <p>AR. Math.Content.5. G.A.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system.</p> <p>AR. Math.Content.5. G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant</p>
---	---

Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the content?	First quadrant	Perpendicular	Graph
	X-axis	Vertical	Coordinate
	Y-axis	Horizontal	Coordinate plane
	Plot		

Academic Language Support

<p>What are the Academic Language Function(s) (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan?</p> <p>What planned Academic Language Supports will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three Academic Language Demands (vocabulary, syntax, and discourse)?</p>	<p>Students will plot the given coordinate on the graph, by transferring information from a table to a graph. I will do scaffolding by presenting on the projector how to plot a point on the graph as an example. The whole class will work together and think aloud with my guidance to plot the second point. Students need to know the x and y axis. I have a study guide on google classroom where the students could look to help them find where the axis are located. I will pass around the class as the students do the assignment posted on Google Classroom and see if anyone needs help or is struggling to offer differentiated instructions. The second assignment will use a QR reader to give each student challenging, not frustrating, practice questions depending on the students progress in the first assignment. At the end of class each student will discuss what he or she learned today with the student sitting next to them, and write it in their journals. Students need to do a small quiz on Google Classroom before they leave.</p>
---	--

Materials

<p>Materials needed by teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)</p>	<p>Computer , Google Classroom, QR Reader Software, Projector,</p>
<p>Materials needed by students for this lesson. (computers, journals, textbook, etc.)</p>	<p>Computer, Google Classroom, QR Reader Software, Journails, Pencil/ eraser.</p>

Lesson Timeline with Instructional Strategies & Learning Tasks

Amount of Time	Teaching & Learning Activities (This should be a BULLETED LIST)	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)
5 minutes	<p><u>Introduction:</u></p>	<p>Good morning class, in the past two lessons we have learned about the coordinate plane and the first quadrante. We have also learned about the x-axis, the x-coordinate, the y-axis, the y-coordinate, and where each one is located. Please don't forget that the two axes have to be perpendicular to each other.</p> <p>Today I am going to teach you how we can plot a given point on the coordinate plane using your knowledge of the x and y axis.</p> <p>Today's lesson will help us to plot more data on the coordinate plane and be able to analyze the data more easily later on.</p>
10 Minutes	<p><u>Instruction:</u></p>	<p>As on the projector this table shows points that we need to plot. We simply need to find which number represents the x-axis and which number represents the y-axis. The first number here is the x. it says 5 so i will go on the x-axis, remember that is the horizontal one, and go to number 5. Now, the second number is 2. That represents the y-axis. The y-axis is the vertical one. so now I need to go up 2 so that the y-coordinate is 2. Any questions?</p> <p>Show me thumbs up if you understood why I marked that point. Let us try doing another point together.</p> <p>What is the first thing we need to do? Yes, that is right. We need to decide which number goes on which axis. The first</p>

		<p>column is our x-coordinate and the second column is our y-coordinate. Now read the second row 4 and 8. Where do we start on the coordinate panel? Yes, that is right from the zero. 0,1,2,3,4 and then we go ___? Up. We go up 8. 1,2,3,4,5,6,7,8. This is our second point. Great job. Any questions?</p> <p>Now, please get on Google Classroom and click on the coordinate practice assignment. You may use the study guide to help you and to study at home. If you have any questions, raise your hand. When you finish this assignment, please let me know, because I will give you a QR code to scan with your QR Reader that opens your second assignment for today.</p> <p>Now, since we are done with both assignments, please discuss with your neighbour what you have learned today. After that, open your journals and write a summary of what you have learned during this lesson.</p> <p>Now, get back on Google Classroom and take the quiz please.</p>
10 minutes	<u>Closure:</u>	<p>Today, we have learned how to plot a point from information given by a table using our knowledge of the coordinate panel. This will be very helpful to learn how we can compare data together later on.</p> <p>please clean your desk, get your lunch bag, coat, and line up to get ready to go to lunch within two minutes</p>

Accommodations/Modifications

<p>How might I modify instruction for: <i>Remediation?</i> <i>Intervention?</i> <i>IEP/504?</i> <i>LEP/ESL?</i> (All students who have plans mandated by federal and state law.)</p>	<p>Allow the ESL students to use a dictionary while doing any assignment.</p> <p>Send home a study guide, and allow extended time for the IEP/504 students.</p> <p>Give one student preferential seating to allow him to focus more on his work.</p> <p>Post all assignments and quizzes on Google Classroom to facilitate learning.</p> <p>Use QR reader to assign each student the right assignment that would be challenging at their level , not too easy nor frustrating.</p>
--	--

Differentiation

<p>How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) to ensure all student needs are met? (All students who are not on specific plans mandated by federal and state law.)</p>	<p>I will use QR Reader to assign each student the Challenging assignment for their level, not too easy nor frustrating, so that each student could make the most out of the assignments.</p> <p>I will post all assignments and quizzes on Google Classroom to facilitate learning, and allow students to access class’s materials as needed.</p> <p>I will use color coding when needed.</p> <p>I will use smaller groups for differentiated instructions for those that need more help.</p>
---	--

Assessments: Formative and/or Summative

Describe the tools/procedures that will be used in this lesson to monitor students’ learning of the lesson objective(s) (include type of assessment & what is assessed).	<input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative	Show thumbs up
	<input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative	Raise hands if there are any questions
	<input type="checkbox"/> Formative / <input checked="" type="checkbox"/> Summative	Quiz at end of class

Research/Theory

Explain connections to theories and/or research (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using principles of the connected theories and/or research.	<p>This lesson uses logic and cognitive operation which aligns with the concrete stage of Piaget developmental theory.</p> <p>The use of QR Reader to assign different practice questions according to the student’s level aligns with vygotsky’s Zone of</p>
---	---

	<p>Proximal Development.</p> <p>Using Google Classroom to receive content in various ways according to Marzano's strategies for teaching.</p> <p>Using the summarize and note taking in Marzano's strategies by summarizing what the student has learned and highlighting the important parts of it.</p>
--	--

Lesson Reflection/Evaluation

<p>What went well? What changes should be made? How will I use assessment data for next steps?</p>	<p><i>TO BE FILLED IN AFTER TEACHING</i></p>
---	--

