

Name: Frederick Brooks	Grade/Subject: 9th / Algebra	Date:
<p>1. Texas Essential Knowledge and Skills (TEKS): (C2)</p> <p>The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations.</p>		
<p>2. Deconstructing/Unpacking the TEKS: (C2) <i>What students will know and be able to do</i></p> <p>write linear equations in two variables in various forms, including $y = mx + b$, $Ax + By = C$, and $y - y_1 = m(x - x_1)$, given one point and the slope and given two points;</p>		
<p>3. SMART Objective(s): (C3)</p> <p>Essential Question:</p>	<p>By the end of this lesson, in small groups, students will write linear equations using the form $y=mx+b$ and giving y-intercept and the slope.</p> <p>What part of the equation gives you the y-intercept?</p>	
<p>4. Central Focus (C4)</p> <p><i>How will this lesson link with other lessons in the unit?</i></p> <p>Learning Targets</p> <p><i>I CAN statements that clearly show alignment with TEKS</i></p>	<p>The purpose of this lesson is to build up students' previous knowledge of knowing points, slope, and y-intercept. The students will learn how to write equations in slope intercept form when giving points. This lesson adds knowledge to use to write other equations that will lead to graphing later.</p> <p>I can Identify and write equations when giving points and slopes.</p>	
<p>5. Academic Language (C5)</p> <p>Academic language represents the language of the discipline that students need to learn and use to engage in the content area in meaningful ways.</p> <p>There are 4 <u>language demands</u> to consider as you require students to read, write, speak, listen, demonstrate and perform.</p>	<p>Language Function <i>(an active verb that students will use to demonstrate their learning in the assessments; some examples are- explain, describe, predict, summarize, compare, evaluate, interpret, justify):</i></p> <p><i>Students will explain how and where to put the slope and y-intercept into equations.</i></p> <p>Vocabulary <i>(words, phrases, and/or symbols that are used within disciplines):</i></p> <p>Slope, y-intercept, add, dived.</p> <p>Discourse <i>(Structures of written and oral language, how will they talk, write, and participate in knowledge construction: discussions, reports, essays, multi-media presentations, performance):</i></p> <p>Students will talk and discuss with a partner how to write point-slope equations using points and slope.</p> <p>Syntax <i>(The set of conventions for organizing symbols, words, and phrases together into structures, e.g., graphic organizers, formulas, charts, language rules, outlines, graphs, tables):</i></p> <p>Students will look at the formula chart and find the point-slope formulas. Then students will graph the point-slope formula.</p>	

6. Targeted Language Supports (C5)

The resources, representations, and strategies you will provide to help students understand, use, and practice the concepts and language they need to learn within the discipline

Site the researcher's name as you refer to the strategy.

Language Function (*How will you help them demonstrate the DO verb?*)

Vocabulary Strategies - (GO TO Page)

1. **Define slope, y-intercept**
2. Define coordinates and label

Discourse strategies - (GO TO Page)

- Write: Students will write point-slope equations using points and slope.
- Talk: Students will talk and discuss with a partner where the slope is located.

Syntax - (GO TO Page)

1. formula chart
2. they will use the math wall

Making Content Comprehensible (R9)

7. Assessment/Evaluation (C6)

Assessment(s) must be aligned to the TEKS, and objectives.

Assessment of your TEK

Formative:

The student will receive a quiz that will be given the at end of the week and they will be given slope and points to write equation

Summative:

The students will be given a group project for the end of the chapter. The students will form an equation and graph and put them in PowerPoint. They will label the slope y-intercept in the equation and the graph

Assessment of your language demands:

Formative:

Summative: The students will be given a group project for the end of the chapter. The students will form an equation and graph and put them in PowerPoint. They will label the slope y-intercepts in the equation and the graph

8. Hook (C7)

Hook activity (*make connections to prior learning*)

Matching game: matching the slope, and y-intercept to the equation.

<p>Closure (C7)</p> <p>Student Assets (C7)</p>	<p>Closure Activity: <i>(make connections to prior learning)</i></p> <p>By showing how you can look at equations to find the slope and showing the students.</p> <p>Personal assets: a chance to one on one Cultural assets: students working together Community assets:</p>
<p>9. Body of Lesson/ Teaching Strategies and Learning Task(s) (C9)</p> <p>Be sure to include: How will students learn and use <i>academic language</i>?</p> <p>Three higher order thinking questions.</p> <p>Marzano Strategy</p>	<p>I DO – I will model each lesson</p> <p>WE DO – we answer and model together as a class on the equation</p> <p>YOU DO – I will have the students on the problem independently.</p> <p>Differentiation-(GO TO page) <i>(Tailoring instruction to meet individual needs; differentiating the content, process, product, and/or learning environment):</i></p> <ul style="list-style-type: none"> ○ Second Language learners / Cultural Diversity: I will have more examples and cards with the steps ○ Gifted / advanced learners: I will have more challenging work <p>Technology: -(GO TO page) Will use a calculator, math programs,</p> <p>Marzano Strategy - (GO TO page) using problems from past standardized tests.</p> <p>Higher Order Thinking Questions (GO TO page)</p> <ol style="list-style-type: none"> 1. How do you find a slope equation when the slope is not giving In the equation? 2. How do you find the slope and y-intercept in the equation? 3. if you have three coordinates can you still make a point slope equations? <p>Grouping / Partnering Technique: (Hattie)</p>

	<p>Potential misconceptions and your plan to address it:</p>
<p>10. Resources and materials needed (C9)</p> <p>(E7)</p>	<p><i>(How might you differentiate materials and resources for learners with various needs?)</i></p> <p>They use graph paper, makers, calculators, PowerPoint, pencils, sticky notes, and cards</p>
	<p>SUBMIT LPG and SELF EVALUATION RUBRIC – C9</p>
<p>11. Classroom Management Strategies (CBM5)</p> <p><i>What procedures will you employ to manage transitions, behavior, passing out materials, engagement, etc.?</i></p> <p><i>Add 3 procedures</i></p>	<p>Establish rules for a group.</p> <p>Establish group leaders.</p> <p>Establish the routine for the work that’s needed.</p> <p>Raise your hand with number 3 to get quite.</p> <p>A signal for the restroom.</p> <p>A signal for the nurse.</p>
<p>12. Academic Supports for Students (E6)</p> <p><i>What instructional strategies and planned supports, will you employ to meet the needs of each student that has identified special learning needs?</i></p> <p>(E11)</p>	<p>Accommodation(s)- <i>(A change that helps a student overcome or work around obstacles):</i></p> <ol style="list-style-type: none"> 1. formula charts 2. extra time 3. give examples on worksheets <p>Modification(s)- <i>(A change in what is being taught or what is expected from the student):</i></p> <ol style="list-style-type: none"> 1. Do fill in the blanks. 2. multiple choice just a and b only 3. when doing flashcards just finding the slope only <p>Strategies for ELLs <i>(strategies that support language acquisition)</i></p> <ol style="list-style-type: none"> 1. show visual 2. shorten steps 3. allow extra time 4. show videos with caption 5. Model for the students