

21st Century Lesson Cycle Template

Grade: 10

Subject: Math 10 PreIB

Textbook: Mathematics for the International Student Pre-Diploma SL and HL (second edition) by Haese & Harris

Topic 3: Gradient

Driving Question:

Can you apply what you know about gradient to possible real-life scenarios?

Specific Curriculum Outcome:

RF03 Students will be expected to demonstrate an understanding of slope with respect to rise and run, line segments and lines, rate of change, parallel lines, and perpendicular lines

RF01 Students will be expected to interpret and explain the relationships among data, graphs and situations

Prior Knowledge:

- Gradient
- Applications of Gradient

Screencast Link(s):

1. Prior Knowledge
Gradient Formula - <https://youtu.be/g1yzEKJQjeI>
Applications of Gradient - <https://youtu.be/v9BQ0w-naY8>

Link to Story Graph Group Activity:

http://msltam.weebly.com/uploads/5/5/7/3/55739509/story_graph_activity.pdf

Link to Rubrics for Story Graph Group Activity:

http://msltam.weebly.com/uploads/5/5/7/3/55739509/rubric_for_story_graph_activity.pdf

Expected Time: One Class (75 minutes)

Resources:

Lesson Procedure

	<input type="checkbox"/> find, validate <input type="checkbox"/> remember, understand <input type="checkbox"/> collaborate, communicate	<input type="checkbox"/> critical thinking <input type="checkbox"/> evaluate, leverage <input type="checkbox"/> analyze, synthesize
<p><i>We share:</i></p> <p>Once groups have completed all parts of the Story Graph Assignment, their graphs and stories will be displayed in the classroom. Students will share their story and graphs with the class.</p>		
	<input type="checkbox"/> find, validate <input type="checkbox"/> remember, understand <input type="checkbox"/> collaborate, communicate	<input type="checkbox"/> critical thinking <input type="checkbox"/> evaluate, leverage <input type="checkbox"/> analyze, synthesize
<p>WRAP UP/REMINDERS:</p> <p>Students will be asked to review the material covered in today's class. Any students who did not have enough time to finish the activity will need to do it at home.</p>		
<p>Differentiation:</p>		
<p>Modification:</p> <p>Allowing students to watch the video on their own devices allows them to work at their own pace. If students need to re-watch a step they have the ability to do so. If needed, students can create and do worksheet questions together.</p>	<p>Enrichment:</p> <p>Students who have a strong grasp of how to work with gradient can assist their classmates who may be having difficulty. Students can also be encouraged to include non-linear segments in their graph.</p>	
<p>Evaluation:</p> <p>Students will be evaluated throughout the entire activity. Students will be evaluating each other (rubrics provided) on the graph and story. The teacher will be making general observations in order to evaluate students on their contributions/collaboration on the activity.</p>		
<p>Teacher Reflection:</p>		
<p>On-Line Resources:</p>		

