

## 21<sup>st</sup> 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 4:** Linear Equations

### Driving Question:

How do we determine the equation of a line from its graph?

### Specific Curriculum Outcome:

**RF04** Students will be expected to describe and represent linear relations using words, ordered pairs, table of values, graphs and equations.

**RF05** Students will be expected to determine the characteristics of the graphs of linear relations, including the intercepts, slope, domain, and range.

**RF6** Students will be expected to relate linear relations to their graphs expressed in slope-intercept form

### Prior Knowledge:

- Determining the slope of a line
- Slope-intercept form of a linear equation

### Screencast Link(s):

1. Prior knowledge:  
Determining the slope of a line - <https://www.youtube.com/watch?v=g1yzEKJQjeI>  
Slope-Intercept form of a linear equation - <https://www.youtube.com/watch?v=UguPdZH5jDo>
2. Determining the equation of a line from its graph - <https://www.youtube.com/watch?v=oFXj2UThmC8>

### Link to Target Practice Game:

[http://msltam.weebly.com/uploads/5/5/7/3/55739509/target\\_practice\\_activity.pdf](http://msltam.weebly.com/uploads/5/5/7/3/55739509/target_practice_activity.pdf)

### Link to Exit Card:

[http://msltam.weebly.com/uploads/5/5/7/3/55739509/exit\\_card.pdf](http://msltam.weebly.com/uploads/5/5/7/3/55739509/exit_card.pdf)

**Expected Time:** One Class (75 minutes)



<p><a href="#">Target Practice Game</a></p>	<p><i>We do:</i></p> <p>In groups of 4 (2 groups of 2), students will play “Target Practice”. This will give them the opportunity to test their understanding of the material covered over the last few classes.</p>								
	<table border="0"> <tr> <td><input type="checkbox"/> find, validate</td> <td><input type="checkbox"/> <b>critical thinking</b></td> </tr> <tr> <td><input type="checkbox"/> remember, understand</td> <td><input type="checkbox"/> evaluate, leverage</td> </tr> <tr> <td><input type="checkbox"/> <b>collaborate, communicate</b></td> <td><input type="checkbox"/> analyze, synthesize</td> </tr> </table>	<input type="checkbox"/> find, validate	<input type="checkbox"/> <b>critical thinking</b>	<input type="checkbox"/> remember, understand	<input type="checkbox"/> evaluate, leverage	<input type="checkbox"/> <b>collaborate, communicate</b>	<input type="checkbox"/> analyze, synthesize		
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	<p><i>We share:</i></p> <p>At the end of class, there will be a final debrief. Groups will share what they have learned from today’s class. They will also be asked to offer strategies that they might have discovered while playing the game that helped them maximize points.</p>								
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<p><b>WRAP UP/REMINDERS:</b></p> <p>Students will be asked to review all of today’s material for homework in preparation for tomorrow’s class.</p>									
<p style="text-align: center;"><b>Differentiation:</b></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.</p>	<p>Enrichment:</p> <p>Students who have a strong grasp of linear functions can be partnered up with students who may be struggling so that they can provide them with some assistance. As well, stronger groups may wish to apply one of the suggested variations to the Target Practice game.</p>								
<p><b>Evaluation:</b></p> <p>Students will be informally evaluated during the class. The teacher will make general observations while circulating throughout the class to make sure all students are on track. As well, students will be asked to complete the <a href="#">exit card</a> prior to leaving the class.</p>									
<p><b>Teacher Reflection:</b></p>									
<p><b>On-Line Resources:</b></p>									