

## Daily Lesson Plans

<b>Lesson 1</b>	<p><b>Learning Objectives:</b></p> <p><b>6.1.1 How can I change it to <math>y = mx + b</math> form?</b> Students will be able to understand how to solve multi-variable equations for one of the variables using previous “undoing” methods (inverse operations) in relation to putting a linear equation into slope-intercept form or standard form.</p> <p><b>6.1.2 What kind of equations can I solve now?</b> Students will be able to solve single and multi-variable equations and understand their significance to the algebraic reasoning involved in solving systems of equations.</p>
<p><b>Agenda: Warm-up (Problem 6-1) → Classwork problems (6-2 to 6-4, 6-6, and 6-13 to 6-14) → “Hot Seat” Activity (Problem 6-13) → Fill Out Unit 6 Toolkit → Write Down Homework in Planner</b></p>	
<p><b>Common Core Standards:</b></p> <ul style="list-style-type: none"><li>● <b>Practice Standards:</b><ul style="list-style-type: none"><li>○ Make sense of problems and persevere in solving them. (<a href="#">CCSS.MATH.PRACTICE.MP1</a>)</li><li>○ Reason abstractly and quantitatively. (<a href="#">CCSS.MATH.PRACTICE.MP2</a>)</li><li>○ Construct viable arguments and critique the reasoning of others. (<a href="#">CCSS.MATH.PRACTICE.MP3</a>)</li><li>○ Model with mathematics. (<a href="#">CCSS.MATH.PRACTICE.MP4</a>)</li><li>○ Use appropriate tools strategically. (<a href="#">CCSS.MATH.PRACTICE.MP5</a>)</li><li>○ Attend to precision. (<a href="#">CCSS.MATH.PRACTICE.MP6</a>)</li><li>○ Look for and make use of structure. (<a href="#">CCSS.MATH.PRACTICE.MP7</a>)</li></ul></li><li>● <b>Content Standards:</b><ul style="list-style-type: none"><li>○ Interpret parts of an expression, such as terms, factors, and coefficients. (<a href="#">CCSS.MATH.CONTENT.HSA.SSE.A.1.A</a>)</li><li>○ Interpret complicated expressions by viewing one or more of their parts as a single entity. (<a href="#">CCSS.MATH.CONTENT.HSA.SSE.A.1.B</a>)</li><li>○ Create equations and inequalities in one variable and use them to solve problems. (<a href="#">CCSS.MATH.CONTENT.HSA.CED.A.1</a>)</li><li>○ Rearrange formulas to highlight quantities of interest, using the same reasoning as in solving equations. (<a href="#">CCSS.MATH.CONTENT.HSA.CED.A.4</a>)</li><li>○ Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. (<a href="#">CCSS.MATH.CONTENT.HSA.REI.A.1</a>)</li><li>○ Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. (<a href="#">CCSS.MATH.CONTENT.HSA.REI.B.3</a>)</li><li>○ Define appropriate quantities for the purpose of descriptive modeling. (<a href="#">CCSS.MATH.CONTENT.HSN.Q.A.2</a>)</li><li>○ Write a function that describes a relationship between two quantities. (<a href="#">CCSS.MATH.CONTENT.HSF.BF.A.1</a>)</li></ul></li></ul>	

**ELD standards:**

- P1.A1 Exchanging information and ideas with others through oral collaborative discussions on a range of social and academic topics
- P1.A2 Interacting with others in written English in various communicative forms (print, communicative technology and multimedia)
- P1.B5 Listening actively to spoken English in a range of social and academic contexts
- P1.B6 Reading closely literary and informational texts and viewing multimedia to determine how meaning is conveyed explicitly and implicitly through language
- P1.C11 Justifying own arguments and evaluating others' arguments in writing
- P2.A2 Understanding cohesion
- P2.B5. Modifying to add details
- P2.C6. Connecting ideas

**Starter/Warm-up**

**Timings:** 10-15 minutes

**Student Activity:** Students will do problem 6-1 as a warm-up first independently, then discuss their answer with their team. This question will reinforce their understanding of placing linear equations into a particular context. Once they are done with the warm-up problem, they are going to write down some key vocabulary words in their class notes from our “Word Wall”.

**Teacher Activity:** As students start working on their warm-up problem, I will be circling around the classroom going from team to team making sure they are on the right track and are working together. I will be asking the following questions: What parts of the equation do you want to look at? What is the form that this equation is in called? What does each piece of the equation represent in the context of this problem? Once teams have completed the warm-up, I am going to start a “Word Wall” with key vocabulary words that we will add in throughout the lesson. For this particular question, we will discuss the slope and y-intercept of a linear equation with emphasis on using them in the context of a problem. As well as the slope-intercept form ( $y = mx + b$ ).

**Formative Assessments and Feedback:** This is an entry level task that uses their previous knowledge. It also will show me who understood what the slope and y-intercept of a linear equation mean in context and who does not. I will specifically be looking for student’s ability to pick apart the equation and properly label the y-intercept as the starting point of the race and the slope of the equation as Georgia’s rate of speed.

**Evidence of how discourse and literacy and being scaffolded:** The “Word Wall” provides additional visual support for my ELL students, especially my bridging students. This “Word Wall” will help them fill in their toolkits later on in the lesson. Additionally, all my students have access to both an English and Spanish version of the textbook in both hard copy and eBook form.

**Transition:** We will fill in the “Word Wall” and have a mini-discussion emphasizing the meaning of slope and y-intercept of a linear equation in the context of a particular situation. I will set them up to begin problem 6-2 by first explaining what “standard form” of a linear equation is and then having them start on it in their teams.

**Main learning activities**

**Timings:** 25-30 minutes

**Student Activity:** Students will do problems 6-2 to 6-4 and problem 6-6 in their groups. They will use their team roles (facilitator, resource manager, task manager, and recorder reporter) to make sure that everyone is understanding the problem and they are getting help where needed. In these problems, students will explore different methods (looking inside, undoing, and rewriting) to take a multivariable equation and solve it for an indicated variable. In problem 6-4, teams will each be given a problem on an index card. They will simplify it and then graph the un-simplified version as well as the simplified version of the equation on Desmos to make sure they match.

	<p><b>Teacher Activity:</b> Before students start working, I will assign each team a particular equation in problem 6-3, so they know which one to do when they get there. As students work on these problems in their teams, I will be circling around the classroom making sure each of the teams is working together. I will also be having mini-discussions with each team and ask the following questions: Have you seen anything like this before? Which variable do we need to focus on? What are some past algebra tools you can use for these problems? Once the students are finished, I will add the following vocabulary words to our “Word Wall”: looking inside, undoing, rewriting, and standard form (<math>ax + by = c</math>, where <math>b \neq 0</math>).</p> <p><b>Formative Assessments and Feedback:</b> This is a set of problems that challenges their application of previous algebraic concepts and skills. I will walk around and make sure each team is on the right track and judge what skills or concepts need to be reviewed. I will look to make sure students are able to compare the difference between standard form and slope intercept form. I will also be looking to see if they are using appropriate algebra tools to solve each standard form linear equation for <math>y</math> in order to get it into slope-intercept form.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Each student has access to an iPad that has every problem in Spanish. Within the team, each team member has their own role. This makes sure the team goes at a pace that everyone in the team can manage and understand the content. Most of this lesson is symbolic algebra based skills, from previous lessons. My EL students in this particular class did a really good job with this, so not much scaffolding will be required. I will be walking around the room making sure each team is working together and is on the right track.</p>
<p><i>Transition: We will go over our newly added vocabulary words on the “Word Wall” and have a mini-discussion to make sure everyone is clear on our new algebra tools as well as our new form for linear equations.</i></p>	
<p><b>Review/Debrief/Consolidation</b></p>	<p><b>Timings:</b> 5-10 minutes</p> <p><b>Student Activity:</b> Students will talk about the skills they needed to use and summarize what they learned within their teams. Then, we will open up the discussion to the class.</p> <p><b>Teacher Activity:</b> During the class discussion, I will ask the following questions: What new or old skills did we need to use or acquire? How does it benefit us to be able to solve an equation for any variable of our choice? How can we use this new skill in the future (link to solving systems of equations)?</p> <p><b>Formative Assessments and Feedback:</b> This is a summarizing activity that will help me assess which skills or concepts each team gained from the lesson. I am looking for an explanation of how we can use the three new algebraic tools we have gained (looking inside, undoing, and rewriting) in order to rewrite a linear equation that is in standard form into slope intercept form.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Students are encouraged to share their thoughts and ideas in pairs or small groups so that they can organize their ideas before bringing it to a whole class discussion.</p>
<p><i>Transition: I will link what we have discussed about putting a linear equation in standard form to solving any multivariable equation for one variable. This will introduce our next activity, “Hot Seat”.</i></p>	
<p><b>Main learning activities</b></p>	<p><b>Timings:</b> 25-30 minutes</p> <p><b>Student Activity:</b> Students will play a game called “Hot Seat” in their teams. I will call upon the facilitators of each group to come to the front of the room. They will get a piece of paper with a random equation on it. The team will get the same equation to solve. If the facilitator gets the answer correct, the team gets 2 points. If the facilitator gets the answer wrong and the team gets the answer correct, the team gets 1 point. We will rotate the individuals in the teams until all team members have done a problem on their own once.</p>

	<p><b><u>Teacher Activity:</u></b> I will be calling upon the different team roles to make sure each individual in the team gets a chance to do the problem on their own. I will also make sure to keep track of who is getting them correct and who seems to be struggling. If there is a particular problem that the majority of individuals get incorrect, I will make sure to go over it with the class by the end of the activity.</p> <p><b><u>Formative Assessments and Feedback:</u></b> This activity tests the students' knowledge of how to apply their new methods for solving for a single variable in a multivariable equation. I will be looking out for which students are getting the correct answers as well as if they are able to tell me which methods they used if they did get the correct answer.</p> <p><b><u>Evidence of how discourse and literacy and being scaffolded:</u></b> Although individuals have to go up and solve problems on their own, their team will still be able to help them out if they do not understand how to do a problem. This causes less anxiety for the students that are English Language Learners.</p>
<p><i>Transition: After each team member has done a problem individually, I will get everyone back to their seats and point their attention back to our "Word Wall". We will use this "Word Wall" to help us fill in their Unit 6 toolkit.</i></p>	
<p><b>Review/Debrief/ Consolidation</b></p>	<p><b><u>Timings:</u></b> 10-15 minutes</p> <p><b><u>Student Activity:</u></b> Students will fill out what they have learned from the day's lesson in their Unit 6 Toolkit. They can work in pairs or with their entire team.</p> <p><b><u>Teacher Activity:</u></b> I will be walking around making sure students are filling the information correctly while asking each team the following questions: How can you summarize what you were doing to the equations you were working with? What on your toolkit does this new skill seem like it might be able to apply to?</p> <p><b><u>Formative Assessments and Feedback:</u></b> This is a summative task that will help them organize all the ideas that they learned from both their classwork and the "Hot Seat" activity. I will be looking to make sure vocabulary words and algebra tools are defined correctly.</p> <p><b><u>Evidence of how discourse and literacy and being scaffolded:</u></b> There is a Spanish version of the toolkit available for ELL students. The "Word Wall" will be helpful for my bridging and expanding EL students while they are filling out their Unit 6 toolkits.</p>
<p><b>Homework</b></p>	<p><b>Chapter 6 #7, 8, 10-12, 18</b></p>

**Lesson 2****Learning Objective:****6.1.3 How can I use multiple representations to solve?**

Students will be able to see the connections between a graph, table and equation of a system of equations and write their own equations to solve word problems in preparation for solving systems of equations. Then, students will be able to use multiple representations (graph, table, and equation) to solve a simple system of equations.

**Agenda: Go Over/Collect Homework → Warm-up (Block Activity) → Classwork (Problems 6-21, 6-22 and 6-23) → Detention Buy-Out Math Task (Desmos Activity) → Fill in Chapter 6 Toolkit → Write Down Homework in Planner**

**Common Core Standards:****● Practice Standards:**

- Make sense of problems and persevere in solving them. ([CCSS.MATH.PRACTICE.MP1](#))
- Reason abstractly and quantitatively. ([CCSS.MATH.PRACTICE.MP2](#))
- Model with mathematics. ([CCSS.MATH.PRACTICE.MP4](#))
- Attend to precision. ([CCSS.MATH.PRACTICE.MP6](#))

**● Content Standards:**

- Define appropriate quantities for the purpose of descriptive modeling. ([CCSS.MATH.CONTENT.HSN.Q.A.2](#))
- Interpret complicated expressions by viewing one or more of their parts as a single entity. ([CCSS.MATH.CONTENT.HSA.SSE.A.1.B](#))
- Create equations and inequalities in one variable and use them to solve problems. ([CCSS.MATH.CONTENT.HSA.CED.A.1](#))
- Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. ([CCSS.MATH.CONTENT.HSA.CED.A.2](#))
- Write a function that describes a relationship between two quantities. ([CCSS.MATH.CONTENT.HSF.BF.A.1](#))
- Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. ([CCSS.MATH.CONTENT.HSF.LE.A.1.B](#))

**ELD standards:**

- P1.A1 Exchanging information and ideas with others through oral collaborative discussions on a range of social and academic topics
- P1.A2 Interacting with others in written English in various communicative forms (print, communicative technology and multimedia)
- P1.B5 Listening actively to spoken English in a range of social and academic contexts
- P1.B6 Reading closely literary and informational texts and viewing multimedia to determine how meaning is conveyed explicitly and implicitly through language
- P1.C11 Justifying own arguments and evaluating others' arguments in writing
- P2.A2 Understanding cohesion
- P2.B5. Modifying to add details
- P2.C6. Connecting ideas

<p><b>Starter/Warm-up</b></p>	<p><b>Timings:</b> 5-10 minutes</p> <p><b>Student Activity:</b> Students will do a problem about comparing the growth of two situations using blocks in their teams. They will be given a starting point for each situation and a particular growth or decay that must occur at each round. They record the rounds in tables provided. Students will make note when the height of their block towers are the same for both situations. Then, students will graph their tables and see that the point that the heights were the same (at the same point in time/round) correspond to the intersection point. Finally, students will find equations for their lines and solve the equations algebraically.</p> <p><b>Teacher Activity:</b> I will be walking around making sure teams are clear on only removing or adding blocks within the same round. I will also be asking the following questions: What are the significant pieces of information you are given? What do you notice about the point where your towers are the same? How does your answer relate to your graph? After the students are done, I will summarize what they have done and connect it to the next problem they will be working on.</p> <p><b>Formative Assessments and Feedback:</b> This problem is an entry task that guides students toward understanding how a system of equations works and what it means to solve a system of equations. I will be looking for students to make the connection between the starting point and the y-intercept of a linear equation as well as the slope and the growth rate that was given. I will also be looking for students to notice that the point in which the block towers were the same height (during the same round) corresponds to where their two lines on their graph intersect.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Since this activity is modelled by using manipulatives, my bridging and expanding EL students should do well with this activity with minimal scaffolding. The multiple representations (situation, block tower, table, graph, and finally a system of equations) will be helpful for their understanding.</p>
<p><i>Transition: I will have a mini-discussion with the class linking their point of intersection to the “solution” to the system of equations that they found. Then, I will get the teams started on problem 6-21.</i></p>	
<p><b>Main learning activities</b></p>	<p><b>Timings:</b> 30-35 minutes</p> <p><b>Student Activity:</b> Students will work on problems 6-21, 6-22, and 6-23 in their teams, each team member will have their team roles to make sure the team is working at the same pace and is understanding the problems. Students will explore the solution to their warm-up problem and extend their knowledge of what it means to find a solution to a system of equations.</p> <p><b>Teacher Activity:</b> While students are working, I will be circling around to each team making sure they are working together. I will be having mini-discussions with each team asking the following questions: How can you use the information given to determine if the trees will ever be the same height? What information about each person’s tree do you have? Why is this useful? How can we use our previous knowledge of writing rules, graphing, and making tables here? What does your solution to the warm-up problem really mean? What does it look like on a graph at the point where a system of equations has a solution? Why does it look like this? What are the different ways you can go about finding a solution to a system of equations?</p> <p><b>Formative Assessments and Feedback:</b> This is a set of problems that challenges their application of previous algebraic concepts and skills. It extends their knowledge of multivariable equations and how they can be useful. I will be looking for an accurate interpretation of the point of intersection in each of the three tree planting problems. I will also be looking for correct descriptions of the slope as the growth rate of the trees and the y-intercept as the starting height of each tree.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Each student has access to an iPad that has every problem in Spanish. Within the team, each team member has their own role. This makes sure the team goes at a pace that everyone in the team can manage and understand the content. Most of this lesson is symbolic algebra based skills, from previous lessons. My EL students in this particular class did a really good job with this, so not much scaffolding will be required. I will be walking around the room making sure each team is working</p>

	together and is on the right track.
<p><i>Transition: Once the teams have finished up the last problem, I will get the students' attention towards the front of the room. I will then have each team come up with a summary of what they learned in their own words from the last three classwork problems and then relate it to what we learned in the warm-up problem.</i></p>	
<p><b>Review/Debrief/ Consolidation</b></p>	<p><b>Timings:</b> 5-10 minutes</p> <p><b>Student Activity:</b> Students will discuss their solutions to the classwork problems and what they learned within their teams or with a partner. Then the discussion will open up to the class and the students will volunteer what they learned as well as some things that may have surprised them.</p> <p><b>Teacher Activity:</b> I will facilitate the discussion by asking the following questions: What are the different ways we can represent a situation? Why would we want to find a solution to a system of equations? What kind of situations require a system of equations?</p> <p><b>Formative Assessments and Feedback:</b> This is a summarizing activity that will help me assess which skills or concepts each team gained from the lesson. I am looking to make sure students are understanding what it means to find a solution to a system of equations within a particular context. Within this context student's explanations should be something like, "the solution to the systems of equations in these problems is when the trees were the same height at the same time".</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Students will discuss their ideas in pairs and with their team before we open the discussion to the full class, this will give my EL students more time to process what they would like to say.</p>
<p><i>Transition: Once the discussion ends naturally and we have clarified any confusion about what it means to find a solution to a system of equations in a given situation, I will get the class started on the "Detention Buy-Out" activity.</i></p>	
<p><b>Main learning activities</b></p>	<p><b>Timings:</b> 25-30 minutes</p> <p><b>Student Activity:</b> Students will go to the website <a href="http://www.student.desmos.com">www.student.desmos.com</a> and enter in the class code for the Detention Buyout Activity on their iPad. Students will assess the different offers made by three different teachers and come up with which teacher has the best offer. They will think about how the answer may be different depending on the number of detentions one has and will need to come up with a rule for each teacher's offer.</p> <p><b>Teacher Activity:</b> While students are working through the Desmos activity, I will be monitoring their responses and progress on my own screen. I will simultaneously be walking around and asking them the following types of questions: What in the context of this problem is important? Are there more than one answers? How can we use what we learned from the previous problems here? Are there any amount of detentions that someone can get where it doesn't make a difference which teacher the student buys from?</p> <p><b>Formative Assessments and Feedback:</b> This task will help me assess the level of understanding that was formulated during the classwork. It will also reinforce the idea of what we can use a system of linear equations for. I will be looking for students being able to predict that some offers may be better than others. I will also look for students coming up with the correct rule for each offer as well as defining their variables for their rule correctly.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> The Desmos graph is very user friendly and helps ELLs have more visual idea of what the solution to this type of problem would mean. This activity slowly guides the students toward an end result which will help my ELL students stay on track. I will be walking around making sure that my ELLs are on track and understand how to use the Desmos activity.</p>

*Transition: After having a mini-discussion to check for understanding, I will have the class fill in their Unit 6 Toolkit with what they have learned.*

**Review/Debrief/  
Consolidation**

**Timings:** 10-15 minutes

**Student Activity:** Students will fill in their Unit 6 Toolkit with what they learned from the day's lesson. They will think about where we may be going with what we have learned. We will have a brief class discussion after they work with their groups.

**Teacher Activity:** While students are filling out their toolkits, I will be walking around asking each team the following questions: What can we use a system of equations for? What does it mean when we find a solution to a system? What does it look like on a graph when we have a solution to a system of equations?

**Formative Assessments and Feedback:** This is a summative task that will summarize everything they learned throughout the day. I will be looking to make sure they know what pieces of information they need to pull from a situation in order to come up with a system of equations. I will also be looking for the correct interpretation of a solution to a system of equations as well as what the graph looks like at the point of intersection.

**Evidence of how discourse and literacy and being scaffolded:** Students will discuss their ideas in pairs and with their team before we open the discussion to the full class. I will also make sure to go through and help fill in the toolkit as a class for some that may be more confusing, especially for ELLs.

**Homework**

**Chapter 6 #19-20, 25-27**

**Lesson 3****Learning Objective:****6.1.4 How can I use variables to solve problems?**

Students will be able to define variables and write equations to solve word problems to better understand the context in which a system of equations can be used. Students will also be able to understand the relationship between distance, rate, and time in an algebraic context.

**Agenda: Go Over/Collect Homework → Warm-up (Problem 6-31 and 6-32) → Classwork (Problems 6-33 c-e, 6-34, 6-35, 6-36 a-c, and 6-37)**

- 1. Fill in Chapter 6 Toolkit**
- 2. Write Down Homework in Planner**

**Common Core Standards:****● Practice Standards:**

- Make sense of problems and persevere in solving them. ([CCSS.MATH.PRACTICE.MP1](#))
- Reason abstractly and quantitatively. ([CCSS.MATH.PRACTICE.MP2](#))
- Model with mathematics. ([CCSS.MATH.PRACTICE.MP4](#))
- Attend to precision. ([CCSS.MATH.PRACTICE.MP6](#))

**● Content Standards:**

- Define appropriate quantities for the purpose of descriptive modeling. ([CCSS.MATH.CONTENT.HSN.Q.A.2](#))
- Interpret complicated expressions by viewing one or more of their parts as a single entity. ([CCSS.MATH.CONTENT.HSA.SSE.A.1.B](#))
- Create equations and inequalities in one variable and use them to solve problems. ([CCSS.MATH.CONTENT.HSA.CED.A.1](#))
- Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. ([CCSS.MATH.CONTENT.HSF.LE.A.1.B](#))

**ELD standards:**

- P1.A1 Exchanging information and ideas with others through oral collaborative discussions on a range of social and academic topics
- P1.A2 Interacting with others in written English in various communicative forms (print, communicative technology and multimedia)
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- P1.B6 Reading closely literary and informational texts and viewing multimedia to determine how meaning is conveyed explicitly and implicitly through language
- P1.C11 Justifying own arguments and evaluating others' arguments in writing
- P2.A2 Understanding cohesion
- P2.B5. Modifying to add details
- P2.C6. Connecting ideas

<p><b>Starter/Warm-up</b></p>	<p><b>Timings:</b> 10-15 minutes</p> <p><b>Student Activity:</b> Students will begin working on problems 6-31 and 6-32 as a warm-up. First they will try it on their own, then they will discuss it with a partner or their team. These problems make them think about how to describe a particular situation algebraically by having them match an equation to a given situation. Students will then have to define the variables in each of the equations they matched.</p> <p><b>Teacher Activity:</b> While students are working, I will be circling around the room checking for understanding. I will be asking the following questions to each of the teams: Which “clues” tell you that a particular equation matches a given situation? How are each of the variables defined? Is there a way we can give the reader about what an equation may represent without giving them the whole story? After students are finished with the warm-up I will be creating a “Word-Wall” adding the first new concept of the day which is a mathematical sentence as well as a “let statement”.</p> <p><b>Formative Assessments and Feedback:</b> This task will test their knowledge about representing a given situation in algebraic terms. It also reminds them that it is important to define what a variable is before using it. I will be looking for students understanding that even though every input in the listed equations is “z”, we can define “z” to be different things. I am also looking for students finding the correct growth and starting point in each of the listed situations and not mixing the two up.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Each student has access to an iPad that has every problem in Spanish. Within the team, each team member has their own role. This makes sure the team goes at a pace that everyone in the team can manage and understand the content. Also, we will create a “Word Wall” that will list key vocabulary words and their meaning as we learn them throughout the lesson.</p>
<p><i>Transition: Once students have finished their warm-up problem, we will go over our new vocabulary that is added to the “Word Wall” emphasizing that we will use mathematical sentences to describe situations for the rest of this unit and it is very important to define our variables with “let statements”. I will then start them on problem 6-33 of their classwork.</i></p>	
<p><b>Main learning activities</b></p>	<p><b>Timings:</b> 60-70 minutes</p> <p><b>Student Activity:</b> Students will work on problems 6-33 c to e, 6-34 to 6-35, 6-36 a-c and 6-37 in their teams, each team member will have their team roles to make sure the team is working at the same pace and is understanding the problems. Students will think about how to write a system of equations for different situations. Students will also need to make sure to define their variables before coming up with their rules. Finally, students will discover the connection between distance, rate, and time.</p> <p><b>Teacher Activity:</b> While students are working on the classwork problems, I will be circulating the room and monitoring the teams. I will be having mini-discussions with the teams based on the following questions: Why is it necessary to define our variables? How can we use variables in the context of the problem? What are some different methods to solve these systems algebraically? Is there a relationship between distance, rate and time? Once most of the teams have got to problem 6-34 I am going to pause them to talk about defining their units as either cents or parts of a dollar (ex. 5 cents or .05). This is something I am assuming a lot of students in this class will struggle with. I also intend on pausing students when most teams get to problem 6-36b to connect the rate with the slope and the starting point with the y-intercept. I also want to emphasize the importance of writing down units and defining variables before coming up with a rule.</p> <p><b>Formative Assessments and Feedback:</b> This task eases them into creating their own systems of equations and then figuring out how to solve them. This introduces them to the equal values method of solving. They are also introduced to relationship between distance, rate, and time which tests their prior knowledge of dimensional analysis from Unit 2. I will be looking for students defining their variables before coming up with their system of equations. I will also be looking to make sure their units are appropriate for the given situation as well as their growth (or slope) and starting point is accurate for the given situation.</p>

	<p><b>Evidence of how discourse and literacy and being scaffolded:</b> Each student has access to an iPad that has every problem in Spanish. Within the team, each team member has their own role. This makes sure the team goes at a pace that everyone in the team can manage and understand the content. Most of this lesson is symbolic algebra based skills, from previous lessons. My EL students in this particular class did a really good job with this, so not much scaffolding will be required. I will be walking around the room making sure each team is working together and is on the right track. The “Word Wall” created during the warm-up will provide additional assistance for my EL students as they go through the classwork.</p>
<p><i>Transition: Once students have shown understanding of the classwork concepts, I will bring the classes’ attention to the front of the room and do a final summary of what we did for them. Then, I will get the teams talking about how they can fill in their Unit 6 Toolkits with what they learned.</i></p>	
<p><b>Review/Debrief/ Consolidation</b></p>	<p><b>Timings:</b> 10-15 minutes</p> <p><b>Student Activity:</b> Students will fill in their Unit 6 Toolkit with what they learned from the day’s lesson. They will think about where we may be going with what we have learned. Then, I will open a discussion to the whole class. Each team will contribute an idea.</p> <p><b>Teacher Activity:</b> I will walk around to make sure that teams are on the right track in their discussions. Then, I will ask the following questions during the class discussion: What is your favorite method for solving? What is the most important part of creating an equation to describe a situation? What should we keep in mind when solving systems of equations?</p> <p><b>Formative Assessments and Feedback:</b> This is a summative task that will summarize everything they learned throughout the day. I will be looking to make sure that students understand that a mathematical sentence is the same as a rule or equation with defined variables. I also want to make sure that students understand the importance of making sure their units are correct for all the rules or “mathematical statements” they create.</p> <p><b>Evidence of how discourse and literacy and being scaffolded:</b> Students will discuss their ideas in pairs and with their team before we open the discussion to the full class. I will also make sure to go through and help fill in the toolkit as a class for some that may be more confusing, especially for ELLs.</p>
<p><b>Homework</b></p>	<p><b>Chapter 6 #38-43</b></p>