

Lesson Plan Template	
Teacher: Charles Horak	Date:
Class: 10 th /11 th grade Algebra II	School:
Learning Goal/Unit Title: Creating Equations	
Lesson Title and Number: Identifying parts of an equation	
LESSON OVERVIEW	Summary of the task, challenge, investigation, career-related scenario, problem, or community link. This should include the current levels of the students (or pre-requisite skills they have) and the rationale for teaching this unit the way you have planned.
<p>In order to practice identifying different parts of an equation students will be given white boards and an equation will be displayed on the front board. Students then will be asked to identify different parts of the equation (e.g. y-intercept, slope). After every student holds up their answer the answer will be displayed or written on the front board. This allows for students to correct and see what they have misidentified.</p>	
STANDARDS	Identify the relevant academic, alternate (i.e. Common Core Connectors), Early Childhood Standards and/or IEP Goals/Objectives. When possible, pair IEP objectives with appropriate standards.
A2.A.CED.A.1 Create equations and inequalities in one variable and use them to solve problems.	
OBJECTIVE	Clear, Specific, and MEASURABLE – not activities
After participating in this exercise, students will be able to build equations given different parts of the equation to 85% accuracy.	
STUDENT FRIENDLY OBJECTIVE ("I" statement)	What you want your students to tell you they can do at the end of the lesson.
I will be able to identify different parts of an equation given the equation by the end of this lesson.	
ASSESSMENT/ EVALUATION List/describe tools and collection procedures to monitor progress toward the lesson objective.	Students show evidence of proficiency through a variety of assessments. <ul style="list-style-type: none"> • Aligned with the Lesson Objective • Include multiple types of assessment • Formative/Summative, Performance-Based/Rubric, Formal/Informal • Include brief rationale for each assessment and acceptable criteria for mastery • If assessment is not successful where will you go from there?
<p>Students will show proficiency of the skill through the board exercise and from the equations given at the end of class.</p> <p>Informal: Throughout the lesson I will ask students what answers they have written on the board, allowing them to give their answer and correct them if they need to be corrected. I will provide questions based on the equations, "How far is the y-intercept from the origin?" to assure that they are understanding the material fully.</p> <p>Formative: Their formative assessment of the task will be both the data they record during the game and their accuracy on the equations at the end of class. While working on the boards, I will be checking to see that they have correctly identified the parts of the equation in question. For the equations at the end of the lesson, students will be able to build equations given different parts of the equation to 85% accuracy.</p> <p>Summative: This lesson is part of a larger unit including building equations without certain parts given, interpreting, and graphing equations that they have built. At the end of the unit, students will complete a traditional test or project to show their mastery of the skills.</p>	
RETEACHING / NEXT STEPS	Identify points in your lesson in which you will determine if reteaching is needed, ideas for how you will present additional lessons if needed and what the expected next steps following a successful lesson will include.
Reteaching of different terms and also the parts of the equation.	
COMMUNICATION SKILL	Describe one communication skill related to the learning goal/unit goal that the focus learner will need to participate in the learning tasks and/or demonstrate learning. This should also include academic language.

Students will communicate that they have mastered the skill effectively by showing their thought process on the equations at the end of class. They will have to complete the equations and show me the work that they have done before being able to leave.	
COMMUNICATION SKILL SUPPORTS	Describe the supports you will use to support the development of this skill (you should also make note (CSS) throughout the plan where this occurs)
During direct instruction I will model this skill by thinking aloud. During the time when students are finishing the equations I will walk around the classroom and make sure no students are falling behind or need help.	
MATERIALS	Include all materials including published curricula and how each is: <ul style="list-style-type: none"> • Aligned with the Lesson Objective • Rigorous & Relevant • Note materials that will include accommodations/modifications as provided to individual students
<ul style="list-style-type: none"> • Markers for board • Erasers • Individual marker boards • Worksheet with equations 	
DIFFERENTIATION	Identify the differentiation needs of your classroom. This can be specific to students or generalized for groups. It should be detailed enough for anyone to implement
Make sure to keep all students on topic at all times.	
ACTIVATING STRATEGY Motivator/Hook	<ul style="list-style-type: none"> • An Essential Question encourages students to put forth more effort when faced with a complex, open-ended, challenging, meaningful and authentic questions. • Engage prior learning, experiences, and/or interests
When students enter the room, I will already have the white boards, markers, and erasers out on their tables. This will help to intrigue and interest them in the lesson before it begins. To start the lesson, I will ask students to think-pair-share what they know about equations and building them. This will allow students to think about the lesson and allow me to observe what they already know Essential Question: What do you know about equations and how to build them?	
INSTRUCTION	
DIRECT INSTRUCTION	Discover/Explain – Direct Instruction and Modeling Expectations – “I Do” *Be clear about what you want your students to know and be able to do by the end of each lesson <ul style="list-style-type: none"> • Questioning/Encourages Higher Order Thinking • Grouping Strategies (how your groups will be organized) • Differentiated Instructional Strategies to Provide Intervention & Extension
Include role of teacher, co-teacher, assistants, peer helpers, etc.	
After we complete the activating strategy, we will move on to direct instruction, and I will start out by explaining how to build equations. I will explain the different parts of an equation. We will first look to figure out what the slope is, the slope is identified using rise over run or taking the number of y-coordinates and dividing it by the number of x-coordinates. You start counting these at the y-intercept, which is another part of the equation that will be need-to-know. After I explain this, I will model some equations and more importantly some graphs that will help the students understand what they are trying to do in this exercise. Next, I will move onto writing equations and drawing graphs on the board. These equations and graphs will challenge the students learning from the day and will let me gauge any aspect of the lesson that I will need to reteach.	
GUIDED PRACTICE	“We Do”-Guided instruction and group work * Give your students time to practice new things while supporting the process

	<ul style="list-style-type: none"> • Encourage Higher Order Thinking & Problem Solving • Relevance • Differentiated Strategies for Practice to Provide Intervention & Extension • If grouping is used, this should be included in your plans
Include role of teacher, co-teacher, assistants, peer helpers, etc	
<p>To start the exercise with the marker boards I will write some equations on the front board. I will also draw some graphs. After this, the students will need to fill out the different parts of the equations that I request from them (the y-intercept and slope). When looking at the graphs, the students will need to build the whole equation from start to finish, making sure it follows the $y=mx+b$ format. During this period when the students are working, I will walk around and observe everything that they are doing, making sure that none of them are getting stuck or not understanding a concept. If any students have a question, they simply must raise their hand and wait till I come over to help them.</p>	
INDEPENDENT PRACTICE	<p>"You Do" - independent work, may include assessment and exit tickets</p> <p>* Give your students time to practice/demonstrate what they have learned with minimal support</p> <ul style="list-style-type: none"> • Encourage Higher Order Thinking & Problem Solving • Relevance • Describe plans to move toward generalization, maintenance, and/or self-directed use of knowledge and skills
Include role of teacher, co-teacher, assistants, peer helpers, etc	
<p>For independent practice, students will receive a worksheet at the end of class that they are to take home and complete to be brought back for the next class. After we finish the activity on marker boards, I will pass out the worksheet and review the instructions, emphasizing that they must build all equations and graph everything that is asked for. I will allow them to start it in class to see if they have any questions, but they will have to complete it at home. I will help as little as possible on this assignment in order to gather data on the students' independent mastery of the skill.</p>	
SELF-ASSESSMENT OR SELF-DETERMINATION PLAN	Strategies for developing self-assessment or self-determination in your students
<p>Students will self-assess on the worksheet at home. They may write down any questions they have and bring them to class the next day. I will go over all the answers the next day and make sure there are no further questions.</p>	
CLOSURE	<p>Reflection/Wrap-Up</p> <ul style="list-style-type: none"> • Summarizing, Reminding, Reflecting, Restating, Connecting to Upcoming Lessons
<p>To close the lesson, we will summarize everything we have learned. We still have another think-pair-share, and students will list the important factors of equations and how to build them. During this, I will listen to see how their answers have changed from the think-pair-share at the beginning of the lesson, specifically listening for them to discuss the importance of slope. I will add anything necessary, making sure all key steps of building equations have been restated.</p>	
CROSS-CURRICULAR CONNECTIONS	Identify the curricular areas that you will be incorporating into your lesson. This could be strategies you are using to present, practice, assess or types of examples you incorporate into the lesson
<p>Throughout the lesson, students are working on multiple skills that they will be able to use in other tasks in math and even in other classes. In order to build equations, students will use skills that involve following steps, listening to specific instructions during a task, and building off of previous knowledge.</p>	
REFLECTION	To be completed after the lesson is taught. This should have results from the assessments and include a brief analysis of lesson.

NOTES: