

## Lesson Plan Template

<b>Grade: 10</b>		<b>Subject: Algebra II</b>	
<b>Materials:</b> Algebra II textbook, notebook, writing utensils, calculator.		<b>Technology Needed:</b> iPad, laptop or technology of some sort if preferred over pen and paper	
<b>Instructional Strategies:</b> <ul style="list-style-type: none"> <li>🍏 Direct instruction</li> <li>🍏 Guided practice</li> <li>🍏 Socratic Seminar</li> <li>🍏 Learning Centers</li> <li>🍏 Lecture</li> <li>🍏 Technology integration</li> <li>🍏 Other (list)</li> </ul> <ul style="list-style-type: none"> <li>🍏 Peer teaching/collaboration/ cooperative learning</li> <li>🍏 Visuals/Graphic organizers</li> <li>🍏 PBL</li> <li>🍏 Discussion/Debate</li> <li>🍏 Modeling</li> </ul>		<b>Guided Practices and Concrete Application:</b> <ul style="list-style-type: none"> <li>🍏 Large group activity</li> <li>🍏 Independent activity</li> <li>🍏 Pairing/collaboration</li> <li>🍏 Simulations/Scenarios</li> <li>🍏 Other (list)</li> </ul> <ul style="list-style-type: none"> <li>🍏 Hands-on</li> <li>🍏 Technology integration</li> <li>🍏 Imitation/Repeat/Mimic</li> </ul> <p>Explain: During the independent practice problems, students will be able to work by themselves or work on the problems in groups of 2-3 if they work better collaboratively. Also, they can take notes on their technology device if they want. I will also have the notes on my classroom page so they can follow along if they are better visual learners. Through my lesson they will watch what I do, then imitate what I do for each step and then repeat.</p>	
<b>Standard(s):</b> HS.F-IF.8* Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.  -Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.		<b>Differentiation</b> <p><b>Below Proficiency:</b> Print out the class notes for these students and pair them up to work with other students. Also allow group work on assignment</p> <p><b>Above Proficiency:</b> Give harder independent practice problems and assign 1 or 2 bonus problems that are more difficult than the rest.</p> <p><b>Approaching/Emerging Proficiency:</b> Allow working in groups with students of similar proficiency.</p>	
<b>Objective(s):</b> Students will be able to <ul style="list-style-type: none"> <li>➤ Solve equations by completing the square.</li> </ul> <p><b>Bloom's Taxonomy Cognitive Level:</b> Application</p>		<p><b>Modalities/Learning Preferences:</b></p> <p><b>Visual Preference:</b> Have notes online on the class page for students to view either during or after the class. While also displaying everything in my notes up on the board.</p> <p><b>Audio Preference:</b> Verbally explain what I am doing and what each part of the class notes means. Notes online will allow them to listen to my lesson and then go back and look at anything discussed in class.</p> <p><b>Tactile Preference:</b> Write up on the board everything from the class notes so the students who best learn by copying notes will have exactly what are in my notes and what I have said verbally.</p> <p><b>Kinesthetic:</b> Have any student who likes to move around, come up to the board and attempt a problem or have them copy down the steps as the class goes through them during the guided practice.</p>	
<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b> The answers to the previous assignment will be displayed at the front on the board. The students will take out their previous day's assignment, and grade their assignment themselves, then putting their score at the top of the paper for me to come around and record what their scores were.		<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b> Expect students to be quiet while I am explaining and laying out the basis to the topic, and raising their hands to ask a question or make a comment about the topic. Once into guided practice problems, students can give out answers and steps without raising hands in order to get the flow of conversation going.	
<b>Minutes</b>	<b>Procedures</b>		
<b>2</b>	<b>Set-up/Prep:</b> Review basic properties of functions and properties of functions. As well as factoring and finding zeros.		
<b>3</b>	<b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b>  Have students do quick warm up review problems.		

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<b>7</b>	<p><b>Explain: (concepts, procedures, vocabulary, etc.)</b></p> <p>Introduce new vocab words and properties.</p>	
<b>13</b>	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <p>Start with 2-3 guided practice problems where as a class I help them through each step and problem to get to the correct answer. Then move to 2-3 independent practice problems that they can attempt by themselves or in groups of 2-3. They can do the problems on a technology device or with pen/paper.</p>	
<b>5</b>	<p><b>Review (wrap up and transition to next activity):</b></p> <p>We will then go over the answers to the independent practice problems and clear up any confusion or questions, and then assign the homework problems for the lesson, allowing the rest of class for the students to work on the homework.</p>	
<p><b>Formative Assessment: (linked to objectives)</b></p> <p><b>Progress monitoring throughout lesson-clarifying questions, check-in strategies, etc.</b></p> <p>Asking if there are any questions or if they're understanding the steps as I am going through the guided practice problems. Having the students check their answers from the independent practice problems, and answering any questions or clarifying why a student may have gotten a wrong answer.</p> <p><b>Consideration for Back-up Plan:</b> Have 3 more guided practice and 3 more independent practice problems in case students are having difficulty understanding the topic.</p>	<p><b>Summative Assessment (linked back to objectives)</b></p> <p><b>End of lesson:</b></p> <p>Homework problems related to the lesson.</p> <p><b>If applicable- overall unit, chapter, concept, etc.:</b></p>	
<p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p>		

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