

Lesson Plan - Math

Grade: 10		Subject: Mathematics	
Materials: My own computer		Technology Needed: Computers	
Instructional Strategies: X Direct instruction X Peer teaching/collaboration/ X Guided practice cooperative learning <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> Learning Centers <input type="checkbox"/> PBL <input type="checkbox"/> Lecture <input type="checkbox"/> Discussion/Debate X Technology integration <input type="checkbox"/> Modeling <input type="checkbox"/> Other (list)		Guided Practices and Concrete Application: <input type="checkbox"/> Large group activity <input type="checkbox"/> Hands-on X Independent activity X Technology integration X Pairing/collaboration <input type="checkbox"/> Imitation/Repeat/Mimic <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:	
Standard(s) HS.F-BF.5* Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.		Differentiation Below Proficiency: Individual work – 1-on-1 Above Proficiency: Complete remainder of worksheet Approaching/Emerging Proficiency: Working with partners to finish worksheet Modalities/Learning Preferences: Visual/Spatial, Logical/Mathematical, Interpersonal	
Objective(s) Students will practice and demonstrate appropriate use of logarithmic properties Bloom's Taxonomy Cognitive Level: Comprehension		Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) Students should not be doing anything on the computer but their homework unless they're done, at which point they are expected not to be disruptive with what they do or they lose their computer privileges.	
Classroom Management- (grouping(s), movement/transitions, etc.) Standard classroom procedures for using computers: single-file line, sign computer out, log in to school account, other websites are blocked			
Minutes	Procedures		
5	Set-up/Prep: Computers are needed; otherwise, standard classroom materials		
5	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) Review logarithmic properties on <i>Investigative</i> worksheet -Addition (Multiply) -Subtraction (Divide) -Multiplication (Power)		
25	Explain: (concepts, procedures, vocabulary, etc.) Today we are using <i>Kahoot!</i> To review logarithmic properties and example problems. We will use https://create.kahoot.it/details/properties-of-logarithms/7765ab9e-c3da-49a9-a11f-8973184b9e0c to review. For each problem, I will take a couple of minutes to explain each solution in detail. The last two problems will require a little more detail to work through.		
10	Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions) Once we have worked through <i>Kahoot!</i> , I will prompt them by telling them that we did some of the examples from the packet they have. They now have time to themselves to work on the packet questions and practice. Mr. Walsted and I will be available to help them with any questions they may have.		
5	Review (wrap up and transition to next activity): Pose an equation to them. $4^x = 11$. We will learn how to solve this equation tomorrow.		
Formative Assessment: (linked to objectives) Progress monitoring throughout lesson - clarifying questions, check-in strategies – “Can someone repeat back to me what I just said?” Gradual progress through Kahoot! Consideration for Back-up Plan: If technology fails, I can write the problems on the board and we can play competitive games during class.		Summative Assessment (linked back to objectives) End of lesson: Class average on Kahoot! Quiz – did they retain what they learned yesterday? If applicable- overall unit, chapter, concept, etc.: There will be a test on logarithms within the current unit.	
Reflection (What went well? What did the students learn? How do you know? What changes would you make?):			