## Lesson Plan Template

Grade:11		Subject: Trigonometry
Materials:	Pen/pencil, whiteboard,	Technology Needed: smartboard
marker, paper		
Instruction Strategies: Direct instruct n Guide practic Lectur	nal Visuals/Graphic organizers etio d ce re	<ul> <li>Guided Practices and Concrete Application:</li> <li>Independent activity</li> <li>Explain: Traditional direct instruction where I will show students how to do problems and scenarios on the board. Then I will guide them through example problems, and then have them practice a few problems on their own and then go over the steps and answers. They can use either pen/pencil and paper for notes and examples or some sort of technology they can write out on such as an iPad. In the PowerPoint, different colored slide backgrounds differentiate between guided problems, and notes.</li> </ul>
Standard(s)         HS.F-TF.1         Understand that the radian measure of an angle is the ratio of the length of the arc to the length of the radius of a circle.         Objective(s)         The student will be distinguishing the relationship between an angle and a radian. The student will convert radians to degrees and degrees to radians.         Bloom's Taxonomy Cognitive Level: Comprehension		<ul> <li>Differentiation         Below Proficiency: Print out the class notes for these students and pair them up to work with other students. Also allow group work on assignment         Above Proficiency: Give harder independent practice problems and assign 1 or 2 bonus problems that are more difficult than the rest.         Approaching/Emerging Proficiency: Allow working in groups with students of similar proficiency.         Modalities/Learning Preferences:         Visual Preference: 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.         Audio Preference: 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.         Tactile Preference: 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.         Kinesthetic: 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.     </li> </ul>
Classroom Management- (grouping(s), movement/transitions, etc.) 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. I will open up to questions students may have about the previous assignment, and then transition into the day's lesson.		Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)         Students are expected to come to class with their needed materials. No phones will be allowed to be out during the lecture time. Once the lesson is over, students will be allowed to work collaboratively on the assignment and/or independent practice.
Minutes		Procedures
	Set-up/Prep:	
5	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)	
	Begin by reviewing some previous geometry terms and refreshing on geometry procedures that will be used in the new topic.	
10	Explain: (concepts, procedures, vocabulary, etc.) Introduce the vocabulary of angle, radian, the Greek letter theta, and arc length from geometry. Show the	

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	students the basic formulas for deriving the relationship between angles and radians and converting back and		
	forth between radians and degrees.		
20	Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)		
	Show the students how to	o do the converting using real examples and applying it to practice problems.	
15	Review (wrap up and transition to next activity):		
	Assign the students the homework activity for the lesson.		
Formative Assessment: (linked to		Summative Assessment (linked back to objectives)	
objectives)		End of lesson:	
Progress monitoring throughout		Homework activity related to the lesson.	
lesson- clarifying questions, check- in strategies, etc.		If applicable- overall unit, chapter, concept, etc.:	
Asking them if they're understanding what I am doing as I go through the steps and procedures. Additionally, check their answers to any practice problems I give them.			
Consider	ation for Back-up Plan:		
Reflection (What went well? What did the students learn? How do you know? What changes would you make?):			
Take out some sentences to simplify it, and then increase font. Good visuals.			