

Name: Mr. Coleman	Program: Secondary Ed.	Course: Mathematics
Lesson Topic/Title: Parallel Lines and their Transversals		
Lesson Date: 09/27-10/04	Lesson Length: 2x90 minutes	Grade/Age: eighth grade
<p>Learning Objectives (Targets): Students will understand the construction of parallel lines and transversals. Students will be able to identify angles formed by transversals and how they relate to their appropriate theorem. Students will be able to relate these theorems and definitions to algebraic properties and proofs. Students will understand fully the converse of the previous transversal theorems Students will be able to boogie Students will collaborate to solve problems.</p>		
<p>Standards: CCSS.MATH.CONTENT.HSG.CO.C.9 Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i></p> <p>Teaching Standards: Learning Differences Reflection and Continuous Growth Assessment</p>	<p>Standards Alignment & Justification:</p> <p>So this whole chapter is focused around proving theorems about lines and their transversals as well as a review of slopes and linear equations. In this chapter we will create some definitions and begin to look at the theorems that will form the foundation for this chapter. The most important focus being on the transversal.</p> <p>As for how I met the teaching standards, I have met Learning Differences, Reflection and Continuous Growth, and assessment. I have met the learning differences because I am branching out a little bit and trying some weird new things in the classroom. An example in this lesson is that I will have students dance. I have found an activity online that I will be implementing where students will play a sort of Dance Dance revolution while testing the definitions of all</p>	

	<p>the new angles that we have learned (see assessment). As for reflection, after finishing my first unit I feel as if I've learned a lot and will be able to apply what I've learned in the first unit to this one. I am also going to vary assessment as we've learned more about proofs and how to properly assess students as we tackle new theorems and postulates.</p>
<p>Assessment: <input type="checkbox"/> Pre <input type="checkbox"/> Formative <input type="checkbox"/> Summative <input type="checkbox"/> Student Self</p> <p>Pre: Review of Chapter test, Dance Dance Transversal Formative: Kahoot, Partner Worksheet Student Self: Partner Worksheet</p>	<p>Assessment (Data & Student Feedback):</p> <p>Pre assessments the students will be reviewing the chapter test and well will be ironing out some of the more common mistakes. In this case they were mistakes relating to domain and range and how to find them when looking at a graph of a function. We will also be starting one class with a good dance dance transversal, which is like a game of DDR only I will be holding signs up and students will have their own parallel line and transversal created by tape on the floor next to their desk. I will play music and have students actively participate in dancing.</p> <p>For a formative assessment we will end the first lesson with a Kahoot, checking to see what students have learned over the course of the lesson. For the second day we will end with a partner worksheet, and they will work together to solve problems. Afterwards they will take this home with them and it will serve as a self-assessment where they can review the material at their own pace and check and see how they did during the in-class activity.</p>
<p>Integration of Other Content Areas: (If appropriate) We will be integrating some music when the students have to dance for the dance dance transversal activity, as well as history. Each math lesson I try and incorporate some of the history of math, so in this lesson we will be focusing in on Archimedes and just a very brief glimpse into how he contributed to geometry.</p>	
<p>Instructional Strategies to Differentiate Whole Class Instruction: In order to incorporate different learning strategies I will be having the students move around frequently and also offer many times for communicational skills. I believe it is important in geometry to talk about what we are learning and discuss the material. This will allow the verbal learners a chance to talk about their learning, and the interpersonal learners the ability to talk and communicate.</p>	

Modifications / Accommodations / Extensions For Individual Students with Identified Needs:

Since there are a couple students who need specific ESL instruction, I will be having a couple group activities where they can work together and communicate with their classmates. Giving them a chance to talk about the material will be very helpful in fully understanding the content. Since there are no graded assessments these sections, I will be checking in with them periodically and during learning labs to make sure they are keeping up.

Technology Integration: (if appropriate)

We will be using Kahoot as a primary assessment tool in this first section. This hits the Modification level on SAMR as it modifies the way students take assessments and allows them some competition with their classmates.

Materials and Resources for Lesson Plan Development

Colored Tape
Worksheets
Laptop

Teaching & Learning Sequence:

Day 1:

Review of Test (10 minutes)
Presentation on 3.1 (30 minutes)
Activity on constructing transversals (10 minutes)
Presentation on 3.2 (30 minutes)
Kahoot (10 minutes)
Homework (remaining time)

Day 2:

Homework (5 minutes)
Youtube video on Archimedes (4 minutes)
DANCE DANCE TRANSVERSALS (15 minutes)
3.3 Presentation (30 minutes)
Partner Worksheets (30 minutes)
Homework Time (10 minutes)

Content Notes: See attached materials**Post-Lesson Reflection:**

This lesson I thought went well. The kids weren't totally into the dancing activity, but they participated regardless and it still turned out to be a great way to vary assessment and keep them engaged with the material. There's still a lot of content for them to go over, and

definitions, so even though the content seems easy a lot of the time I need to find new ways to keep them engaged. Also Having them discover transversals and how they relate to parallel lines on their own turned out to be a very cool activity. Anytime I can have the students discover the theorems and definitions on their own without me telling them, I consider it a major success.

As for what I could improve upon in this lesson, the partner worksheets activity could have gone smoother. I'm trying to place a strong emphasis on presentation problems and coming up to the board. I had the students partner up to work on these presentations and come to the board. It could have gone more smoothly if students worked individually and came up to the board. A lot of the time they would come up to the board and only one student would do the talking.