

**TEACHER EXCHANGE
LESSON PLAN TEMPLATE**

Program: Real World Math

Instructor: Byron Smith

Course Title: Algebra II

Date:	7-26-12
Lesson Length:	52 minutes
Topics:	Trig Functions

OVERVIEW/ANNOTATION:

The students will learn how to solve triangle using trig. Functions to find the missing parts of a triangle. The Students will then have to find how much cable is needed for an power pole order given the length of the pole and the distance for the base the cable is set.

BACKGROUND/PREPARATION:

You need to have the lengths and set distance from each pole ready so the students will have all the information needed to find the lengths of the cable.

PRIMARY LEARNING OBJECTIVES:

The students will learn how to solve triangle using trig. Functions to find the missing parts of a triangle. The Students will then have to find how much cable is needed for an power pole order given the length of the pole and the distance for the base the cable is set.

ESSENTIAL QUESTION(S):

How does the trig functions help you find the length of a missing side of a triangle?
Why and when do you use the each trig function?

MATERIALS, EQUIPMENT AND TECHNOLOGY RESOURCES

<input checked="" type="checkbox"/>	Textbook		Lab Manual		Video		Other
	Adv. Committee		Posters		Multi-Media		
	Speaker		Supplemental Materials		Internet		

CONTENT STANDARDS & TASKS: *Alabama Course of Study: Technical Education*

PROCEDURES, ACTIVITIES, AND LEARNING EXPERIENCES

<input checked="" type="checkbox"/>	Individual work	<input checked="" type="checkbox"/>	Group Work		Lecture		Skills USA
<input checked="" type="checkbox"/>	Class Discussion		Project		Speaker		Live Work
	Visuals		Review		Video		
<input checked="" type="checkbox"/>	Homework		Handout		Field Trip		

ASSESSMENT STRATEGIES

<input checked="" type="checkbox"/>	Homework		Portfolio		Class Work		Test
	Teacher Observation		Other:		Performance	<input checked="" type="checkbox"/>	Feedback from Discussion

LESSON INSTRUCTION INCLUDES:

	Safety Instruction	<input checked="" type="checkbox"/>	Presentation	<input checked="" type="checkbox"/>	Higher Order Reasoning
<input checked="" type="checkbox"/>	Project-Based Learning		Role Playing		Work Ethics
	Integrated Academics		Simulation		Integrated CTSO Experiences
	Employability Skills	<input checked="" type="checkbox"/>	Problem Solving Skills		Management Skills

TEAMWORK ACTIVITIES:

Students will work together to find the length of guy wire on a power pole.

PROVISIONS FOR INDIVIDUAL DIFFERENCES:

The students will be shown how to work the problems visually, step by step, and vocally.

AVAILABLE STUDENT INDUSTRY CREDENTIALS:

This shows the students how to problem solve and how to use higher order reasoning for the work place. This also get the students a custom to working as a group.

COURSE/PROGRAM CULMINATING PROJECT:

The Algebra 2 students will have to find out how much guy cable wire they need for the order that is given.