

Program:							
Instructor: Nick Feldner							
Course Title: 8th Grade Physical Science							
Date:							
Lesson Length:	1 Period (55 min)						
Topics:	Measurements, Significant Digits, Scientific Process, Graphing						
OVERVIEW / ANNOTATION: This lesson provides a problem scenario, related to a manufacturing issue, that allows students to physically collect and interpret data in order to reach a solution. Proper lab technique, measurement standards, and graphing are required to move through the scientific process in order to satisfy scenario.							
BACKGROUND / PREPARATION: Prior to this lab activity, students would have had a lesson reviewing the metric system, significant digits, and uses of charts and data. Cooperative lab groups should have already been established, as well as proper lab safety and instrument usage. Sample "parts" will need to be cut out and blueprints copied for each group.							
PRIMARY LEARNING OBJECTIVES: Students will: 1.) Identify steps within the scientific process.							
ESSENTIAL QUESTION(S): How can data sets prevent physical issues and solve tangible problems?							
MATERIALS, EQUIPMENT AND TECHNOLOGY RESOURCES							
Textbook	X	Lab Manual	X	Video	X	Other electronic	
Adv. Committee		Posters		Multi-Media			
Speaker	X	Supplemental Materials		Internet			
CONTENT STANDARDS & TASKS: <i>Alabama Course of Study</i> COS Standard 1 (see above)							
PROCEDURES, ACTIVITIES, AND LEARNING EXPERIENCES							
	Individual work	X	Group Work		Lecture	Skills USA	
X	Class Discussion		Project		Speaker	Live Work	
X	Visuals		Review	X	Video		
	Homework	X	Handout		Field Trip		
ASSESSMENT STRATEGIES							
X	Homework		Portfolio		Class Work	X	Test
X	Teacher Observation		Other:		Performance		Feedback from Discussion
LESSON INSTRUCTION INCLUDES:							
X	Safety Instruction	X	Presentation	X	Higher Order Reasoning		
X	Project-Based Learning		Role Playing		Work Ethics		
	Integrated Academics		Simulation		Integrated CTSO Experiences		
X	Employability Skills	X	Problem Solving Skills		Management Skills		

TEAMWORK ACTIVITIES: Students work within cooperative lab groups	PROVISIONS FOR INDIVIDUAL DIFFERENCES: Content is taught through auditory, visual, and kinesthetic methods. Peer accountability also offers accommodations.
AVAILABLE STUDENT INDUSTRY CREDENTIALS:	
COURSE / PROGRAM CULMINATING PROJECT: LESSON DEVELOPMENT Engage the students with a short video clip from the TV show How Its Made. Clip should model common progressive assembly type production techniques.	