

TAC Lesson Plan Template

Name: J. Minton	School/Grade/Subject: RES/8th/Science	Date: June 2015
Lesson Title: Solar Panel Project		
Standards & Objectives: SLS 1: . Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. LS 6: Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. W1: Write arguments to support claims with clear reasons and relevant evidence. W 6: Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others. GLE 0807.Inq.2 Use appropriate tools and techniques to gather, organize, analyze, and interpret data. GLE 0807.T/E.1 Explore how technology responds to social, political, and economic needs. GLE 0807.T/E.2 Know that the engineering design process involves an ongoing series of events that incorporate design constraints, model building, testing, evaluating, modifying, and retesting. CLE 3202.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias. CLE 3202.T/E.3 Explain the relationship between the properties of a material and the use of the material in the application of a technology. CLE 3202.2.3 Examine the applications and effects of heat energy. CLE 3202.2.4 Probe the fundamental principles and applications of electricity.		
Tools/Resources Needed For Lesson: Computer Paper Maps Calculator Solar Panels Project Folders		
Lesson Summary: Students will be making a multimedia project to take before a mock "board of directors" as if they were pitching a solar power project to GMSD school district. Students will research background information and put together a portfolio (with powerpoint or prezi) with solar panel placement, diagrams, maps, cost analysis, cost-benefit, justification, and other needed information that will then be presented to a panel that will give feedback and recommendations based on their project proposals. Digital: Word Processing, PowerPoint or Prezi, Excel or Numbers Internet for Research		

Non-Digital:

Maps, papers, project proposal
Solar panels, calculators

Collaboration:

Students will work in small groups to create a solar panel project that will be presented in a multimedia format to a mock “board of directors” for GMSD.

Back-Up Plan:

The agenda for each day can be modified depending on the access to the technology. Students will have paper copies of articles and their materials regardless of the ability to use the computers.

Assessment/Outcome:

Each part of the project will be assessments leading up to the final multimedia project and the presentation. A rubric will be given to the students and be addressed accordingly.

Reflection: