TEMPLATE FOR CMaP PROJECT

Project Title: The Enterprise Constant: Wind
Created by: Quintin Jones
Class: Summer 2012 Cmap Class

Project Description	In the town of Enterprise, Utah if there is one thing that you can depend on it is that the wind is going to blow. We would like to take advantage of this seemingly constant wind by harnessing its power to generate some electricity and put it to good use. In town, there are various places that the wind blows harder than others because of the location, large established trees, elevation, etc. We would like to collect data with portable anemometers at various places in town. We will map this data to determine the ideal place to put a wind generator.
Community Issue or Problem Selected -How project evolved?	The wind blows in Enterprise. The city baseball fields do not have lights because of the cost of electricity. What a better way than to harness the constant wind power and use the electricity generated to power lights at the city ball fields.
Community Partner(s)	Enterprise Little League Baseball League City of Enterprise Enterprise Municipal Power
Project Objectives	1. Collect wind speed data in various points within the city boundaries. 2. Map the data points 3. Analyze the data to determine ideal points within the city to place a small wind generator.
Utah Core Standards/Objectives	Earth Systems Standard 6: Students will understand the source and distribution of energy on Earth and its effects on Earth systems. Objective 2: Relate energy sources and transformation to the effects on Earth systems.
Essential Question(s) -Spatial Issue	Where will wind speed be the greatest? How much electricity can be generated? What will be the expense?
Assessments (rubrics, scoring guides)	Project Design Rubric
Project Products	Upon completion we hope to have a layered map with points plotted in town with trends of wind speed and direction. This

	map and data will be used to determine a site for a wind generator.
Project Timeline (include a step by step Procedures)	Day 1: begin discussion on project. Training on GPS and Anemometers. Create groups and prepare for field work. Day 2: discussion with little league leaders and civic leaders to present plan and get approval. Day 3: Collect data in the field. Day 4: Upload Data and create map. Day 5: Present Map to leaders and proceed to purchase and construction.
Resources Needed	15 handheld GPS units 15 handheld portable anemometers
Skills Required	**Basic GPS operational skills** **Basic portable anemometer operational skills** **Basic GSI skills**
Project Team Member Roles	**Teacher(s): Quintin Jones, Dale Nelson, Kelli Staheli, Principal Cal Holt** **Students: All Earth Systems classes** **Partner(s): Enterprise Little League** **City of Enterprise** **Enterprise Municipal Power**
Celebration/Presentation	Classroom Presentations Enterprise Little League Board Meeting Enterprise City Council Meeting Enterprise Planning Commission
Project Evaluation	Upon completion of project I would like to present findings in a city council meeting and a little league board meeting. We will then accept feedback and reaction at that time.
Project Bibliography	Esri map. Garmin GPS results.
Plans for Future CMaP Activities	I would like to plot and map prairie dog mounds on various farms to show the infestation and its effects on farming.

Optional:
-Lesson Plans
-Student Artifacts
-Publicity