



9th Grade World Geography Service Learning Project

Term 2–Due January 9-10, 2006



Americans produce more garbage per person than any other country—and most of that garbage ends up in a landfill. Recycling efforts in Utah a relatively new—in fact Lindon just started a curbside recycling program this year, while curbside recycling isn't even available in Pleasant Grove. As part of this project, 9th grade students from Oak Canyon will survey local residents about recycling and report their findings.

Objective:

You will learn GIS/GPS skills while performing community service by surveying local residents about recycling. You and your group will present your findings through a multimedia presentation.

Procedures:

A. Group Selection:

Term 2 is a group project. You will work in groups of 3 or 4 students. You may select 9th graders for your group from different periods as long as they have the same teacher. **CAUTION:** Final presentations will be given by class period. If you are the only one in your group in the class, then you will have to give the entire presentation by yourself. Submit one group request per group to your teacher by Friday, December 2nd. Groups will be assigned by your teacher after December 2nd.

B. GIS/GPS Labs:

GIS stands for Geographic Information System and is a computer software program that helps people store, analyze and display geographic data. Through this project, you will learn how to use ArcView GIS software to make maps. You will also learn GPS skills to collect data. GPS stands for Global Positioning System. Your group will be able to check out a GPS unit when you collect data. The labs will help you learn GIS/GPS skills. In order for you to get full credit on this term project you will need to complete the first two labs. Lab 3 can be used for extra credit:

Lab 1 "Municipalities in Utah County"

Lab 2 "Mapping Waypoints"

Lab 3 Choice of "Map Your Name" or "Mapping My Community"

Directions for each lab will be provided by your teacher. Class time will be provided to complete Lab 1 and Lab 2. In addition, the computer lab hours will be extended until 3:30 pm for geography students after school on certain days to work on labs, GPS download and presentations.

Monday, December 5	Extended Lab Hour Dates:	Wednesday, January 4
Wednesday, December 7	Tuesday, December 13	Thursday, January 5
Thursday, December 8	Wednesday, December 14	Friday, January 6
Monday, December 12	Monday, December 19	
	Tuesday, January 3	

Extended Lab Hour Dates:

C. Neighborhood Survey

Each group will be assigned a small neighborhood to survey. At least 2 people in each group must be present for the survey. You will survey each household about recycling and record your data on a data sheet. You will also check out a GPS unit to record the location data of the houses surveyed. The data will be downloaded from the GPS unit into the GIS software to make a map of your results.

D. Multimedia Presentation

Each group will make a multimedia presentation using Microsoft PowerPoint or Corel Presentations. The presentation should answer the question: "How does my community recycle and why or why not?"

The multimedia presentation must include a minimum of 7 slides. **All** presentation must include the slides with a *. Other ideas are listed to help meet the requirement of at least 7 slides:

*a. Introduction—first slide should introduce the question being answered and names and class periods of each member of the group

*b. Self produced map created using GIS software—at least one slide in your presentation should include a self produced map of the neighborhood surveyed. The map should have at least two layers of information, title, name and class period of the student who made the map, and date.

*c. Summary of data collected—at least one slide should show what you learned about recycling from the data you collected

*d. Graph—at least one slide should include a graph (bar, pie, etc.) made from the data you collected.

*e. Conclusion—at least one slide should answer the "so what?" factor about community recycling.

In addition to the 5 required slides, here are some other ideas for slides to complete the 7 slide requirement:

f. Predictions—make a slide of what your group predicted about recycling in your community compared to what you found out in the survey.

g. Quote—make a slide with a quote from a local resident about recycling. The quote should include the name of the person. Ask for their permission to use their quote in your presentation.

h. Other maps—you may include other maps your group made using GIS to help answer the question about recycling in your community.

i. Pictures—you may include slides with digital pictures that help answer the question about recycling in your community.

j. Solution/Recommendation—propose a solution to any problem you identify with recycling in your community.

E. Outline of Presentation

Each group must submit a printed outline of their presentation notes. This should include a printout of the slides with notes explaining the presentation assignment of each group member and what will be presented with each slide.

F. All presentations will be given in class on Monday, January 9 (periods 2/4/6) or Tuesday, January 10 (periods 1/3/5/7). All labs, data summaries and printed presentation outlines must be submitted **before** the group presentation. Presentations must be submitted by CD-ROM, e-mail, flash drive or disk. The school will provide a PC laptop and projector but students are responsible for technical issues relating to their presentation.

Evaluation	
The project is worth 220 points based on the following areas:	
Individual	100 points
Lab 1 (25 points)	
Lab 2 (25 points)	
Lab 3 (25 points)	
Group Participation (25 points)	
Summary of Survey Data . . .	20 points
Group Presentation	100 points
Multimedia Presentation (70 points)	
Printed Presentation Outline (20 pts)	
Oral Presentation (10 points each)	