

Technology Education Lesson Plan

Name: Tim Linkenheimer

Course: Drawing & Design

Grade Level: 9-12 **Period:** 2-3

Instructional Topic: Travel Itinerary

Date: October 16-31, 2003

Pennsylvania Standard(s):

Science and Technology

- 3.1.10A 3.1.10B 3.1.10C 3.1.10D
 3.1.10E 3.1.12A 3.1.12B 3.1.12C
 3.1.12D 3.1.12E 3.2.10A 3.2.10B
 3.2.10C 3.2.10D 3.2.12A 3.2.12B
 3.2.12C 3.2.12D 3.6.10A 3.6.10B
 3.6.10C 3.6.12A 3.6.12B 3.6.12C
 3.7.10A 3.7.10B 3.7.10C 3.7.10D
 3.7.10E 3.7.12A 3.7.12B 3.7.12C
 3.7.12D 3.7.12E 3.8.10A 3.8.10B
 3.8.10C 3.8.12A 3.8.12B 3.8.12C

Mathematics

- 2.1.11A 2.2.11A 2.2.11B 2.2.11C
 2.2.11D 2.2.11E 2.2.11F 2.3.11A
 2.3.11B 2.3.11C 2.4.11A 2.4.11B
 2.4.11C 2.4.11D 2.4.11E 2.5.11A
 2.5.11B 2.5.11C 2.5.11D 2.6.11A
 2.6.11B 2.6.11C 2.6.11D 2.6.11E
 2.6.11F 2.7.11A 2.7.11B 2.7.11C
 2.7.11D 2.7.11E 2.9.11A 2.9.11E
 2.9.11F 2.9.11I

Materials:

1. Computer with Internet
2. Calculator
3. Microsoft Office
4. Tripmaker Software (If Accessible but not needed)
5. Current NFL Schedule

Content Objective(s): At the conclusion of the lesson the student will be able to:

Use strategy to solve a problem when given certain constraints

Calculate fuel mileage for an automobile

Work with others effectively

Give a presentation using presentation software

Assessment Strategies:

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Teacher- Made Tests | <input type="checkbox"/> Demonstrations | <input checked="" type="checkbox"/> Laboratory Experiments | <input checked="" type="checkbox"/> Oral Presentations |
| <input type="checkbox"/> Panel Discussions | <input type="checkbox"/> Charts and Graphics | <input checked="" type="checkbox"/> Teacher Observations | <input type="checkbox"/> Homework Assign. |
| <input checked="" type="checkbox"/> Comp. Lab Part. | <input type="checkbox"/> Notebooks | <input checked="" type="checkbox"/> Portfolios | <input type="checkbox"/> Anecdotal Records |
| <input type="checkbox"/> Student Reflections | <input type="checkbox"/> Research Projects | <input type="checkbox"/> Other: | |

Instructional Strategies:

- | | | | |
|---|--|--|--|
| <input checked="" type="checkbox"/> Lecture | <input type="checkbox"/> Demonstration | <input type="checkbox"/> Audio-Visual Presentation | <input checked="" type="checkbox"/> Student Practice |
| <input checked="" type="checkbox"/> Brainstorming | <input checked="" type="checkbox"/> Cooperative Learning | <input type="checkbox"/> Field Trip | <input type="checkbox"/> Guest Speaker |
| <input type="checkbox"/> Room Maintenance | <input checked="" type="checkbox"/> Peer Tutoring | <input type="checkbox"/> Experimentation | <input checked="" type="checkbox"/> Class Discussion |
| <input type="checkbox"/> Note Taking | <input type="checkbox"/> Other: | | |

Adaptations:

- | | | | |
|--|---|---|---|
| <input checked="" type="checkbox"/> Modified Assignments | <input type="checkbox"/> Cooperative Learning | <input checked="" type="checkbox"/> Modified Expectations | <input type="checkbox"/> Repeated Practice |
| <input type="checkbox"/> Tests Read Orally | <input type="checkbox"/> Task Analysis | <input type="checkbox"/> Acceleration | <input checked="" type="checkbox"/> Computer Reinfor. |
| <input type="checkbox"/> Preferential Seating | <input type="checkbox"/> Other: | | |

Procedures: (Lesson Outline)

- I. Give the Design Brief to the students
- II. Go over all of the requirements of the design brief
- III. Give the students lab time to work on the problem
- IV. Students will create a power point presentation of their trip and present to the class as well as submit a portfolio of their travel itinerary.

Related Concepts:

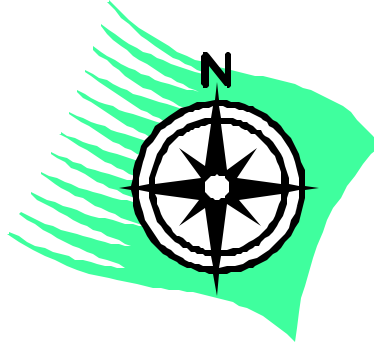
1. Problem Solving
2. Internet Research
3. Groupwork
4. Analysis

Related Web Sites:

www.mapquest.com

www.yahoo.com/travel

Navigation Assignment



Assignment:

As an introduction to navigation, you will present a navigation agenda for a cross country trip. You will design an itinerary for a round trip by car (or tour bus) from Pittsburgh to another destination involving a minimum of ten states. Your trip should involve a minimum fifteen days, with travel limited to 500 miles per day maximum. The itinerary should indicate travel distances per day, routes approximate times, and sites visited and ending destinations for each day. Remember you will be traveling on a student's budget, so you will be required to find campsites for most of your evening stays.

Requirements:

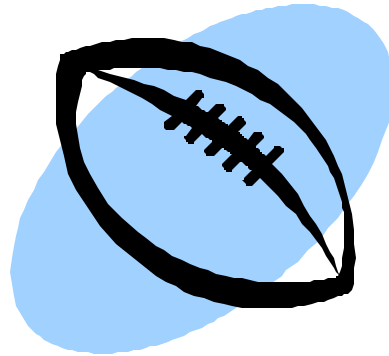
- Daily travel itineraries, including mileage, destination, routes, lodging, visit sites.
- Maps showing travel for each day.
- Final Calculations of fuels costs using 20 miles per gallon average and \$1.55 per gallon
- Cover Sheet with your name
- Power Point presentation.

Evaluation:

Evaluation is based on the following

Completeness of all information	30 points
Creativeness of solution	30 points
Quality of Presentation	30 points
Final Calculations (Show Work)	10 Points
Total	100 Points

Navigation Assignment



Assignment:

As an introduction to navigation, you will present a navigation agenda for an NFL cross country trip. You will be required to attend one NFL game, in its entirety, in each NFL city during the 2003 season. You will travel to each city by automobile. Currently you have a job in New Bethlehem which is Monday through Friday from the hours of 9:00 a.m. to 5:00 p.m. So you must be back at work in time after a game!!! Throughout the season you will have 15 personal days you can use for travel. (These days will most likely be used on Monday's and Friday's for travel purposes.) Your Thanksgiving vacation begins on the day of Thanksgiving and ends the Monday after. Your Christmas vacation begins on Christmas Eve and ends New Year's Day. Games will last an average of three hours.

Requirements:

- Weekly travel itineraries, including mileage, destination, costs & routes.
- Attending one game in each NFL stadium during the 2003 season.
- Maps showing travel for each day.
- Final Calculations of fuels costs using 20 miles per gallon average and \$1.55 per gallon
- Cover Sheet with your name
- Power Point presentation.

Evaluation:

Evaluation is based on the following

Completeness of all information	30 points
Creativeness of solution	30 points
Quality of Presentation	30 points
Final Calculations (Show Work)	10 Points
Total	100 Points