

## Lab Framework

**Text:** AMME

**Unit number and title:** Unit 3—Label Explosions

**Short Description:** To introduce the students on how to read a map with how our highways are numbered.

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**Date:** June 2009

### Lab Title Map Reading 101

#### LAB PLAN

**TEACHER:** Teacher Prep/ Lesson Plan

- **Lab Objective**

To introduce students to how our highways are numbered on a map

- **Statement of pre-requisite skills needed** (i.e., vocabulary, measurement techniques, formulas, etc.)

Know the difference between odd and even numbers

- **Vocabulary**

By pass  
Through  
Odd  
Even

- **Materials List**

US Road Map

- **State Standards addressed**

Math:

A1.2.A Know the relationship between real numbers and the number line, and compare and order real numbers with and without the number line.

A1.6.A Use and evaluate the accuracy of summary statistics to describe and compare data sets.

G.7.B Select and apply strategies to solve problems.

G.7.C Evaluate a solution for reasonableness, verify its accuracy, and interpret the solution in the context of the original problem.

G.7.E Read and interpret diagrams, graphs, and text containing the symbols, language, and conventions of mathematics.

G.7.G Synthesize information to draw conclusions and evaluate the arguments and conclusions of others.

- **Leadership Skills**  
Being able to work in a small group and present information to a group
- **Set-up information**  
Have maps ready to hand out
- **Lab organization**(-Grouping/leadership opportunities/cooperative learning expectations; -**Timeline required**)  
Assign groups  
Pass out maps
- **Teacher Assessment of student learning** (scoring guide, rubric)  
Visual assessment  
Oral presentations
- **Summary of learning** (to be finished after student completes lab)  
-discuss real world application of learning from lab  
-opportunity for students to share/present learning
- **Optional activities**  
Plan a trip and calculate miles
- **Career Applications**  
Being able to travel across country  
Plan trips efficiently

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**LAB TITLE: Map Reading 101**

**STUDENT INSTRUCTIONS:**

- **Statement of problem addressed by lab**  
How do you read a map?  
How are our roads numbered?
- **Grouping instructions and roles**  
Work with the person sitting next to you.
- **Procedures** – steps to follow/instructions  
Assign one person to be the recorder, the other person will report results.  
Report back what the group found.
- **Outcome instructions**  
List as many things you can about the map
- **Assessment instructions** (peer-teacher)  
Your teacher will be watching as your group works for behavior issues and how well you work with each other.

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## Lab Data Collection

**Student:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Unit:** Unit 3—Label Explosions

**Lab Title:** Map Reading 101

**Criteria:** Write the problem/objective in statement form

To be able to recognize patterns in our highway system.

**Data Collection:** Record the collected/given data

Make list of all items noted on the map.

**Summary Statement:**

**Other Assessment(s)**

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