

Project Venture Lesson Plan

Name: Christina Lopez

Time Frame: 2-3 days

Title: Big Cities in the United States

School District: Gateway/Creighton

Grade Level: 6th

Subject Area: Math

Summary: Students will compare the populations of the US cities that have over one million people. Students will round large numbers, population figures over one million and determine decimal value to place on a number line.

Standards:

- 1M-E5 PO1** Represents and use numbers in equivalent forms (integers, fraction, percents, decimals, exponents, scientific notation, and square roots.
- 1M-E5 PO1** Demonstrates the relationship and equivalency: decimals, fractions, ratios, percents
- 1M-E6 PO2** Apply the appropriate strategy (e.g. estimation, approximation, rounding, or exact numbers) when calculating to solve problems.
- 1M-E1 PO3** Read and write whole numbers, integers, common fractions and decimals using real world situations. Rational numbers (millions to millionths).
- 1T-E2** Demonstrate increasingly sophisticated operation of technology components.
- 3T-E2** Use a variety of technology tools for data collection and analysis.

Objective:

- * Students will demonstrate analysis b categorizing populations of US Cities that have over one million people.
- * Students will demonstrate synthesis by creating a number line using AppleWorks drawing.
- * Students will import, copy, and paste graphics to accent their number line.

Assessment: Students will be assessed based on a rubric that breaks down the number line into sections that can be evaluated for completeness. (rubric attached)

Prerequisite Knowledge: Students need to be familiar with AppleWorks Word Processing/Drawing.

Students need basic knowledge on how to access the internet from school. Students need to be familiar with locating web addresses.

Students need to be familiar with the rounding of decimals.

Learning Environment: The learning environment will be in the classroom. Students will be instructed on how to get started in a large group and then they will break up into smaller groups to perform the given task. Roles will be assigned to each student in the group (i.e. secretary - make sure everything is written correctly, leader - organize group - make sure team is on task, staff - complete task) The students will work in groups of 3-4 to make a number line. The teacher's role is that of a facilitator during the project.

Procedures:

Day 1 Students will be presented with a teacher prepared number line of five states in the United States i.e., Washington, Oregon, California, Arizona, and Nevada with the project on the TV connected to the computer. All students will gather around TV so that they may see. They need to bring paper and pencil to take notes. Students may ask any questions related to the lesson at any time.

The students will learn what program that they are working with. The teacher will open up the number line on the AppleWorks program for the students to see. The students will access it from the teacher's server file. They will see how to open it and what it contains.

The students will be assigned to groups of 5-6 students. The number line should reflect the current populations in millions - decimals. The students will need to get on the internet and research the current populations. The web sites will be placed on the board.

Day 2 Teacher will work out of the district curriculum math book "Measure for Measure" pages 31-33. Teacher will follow directions on the teacher page of the math book.

Planning instruction:

Make sure students understand that decimals, fractions, and money can all be used to represent the same quantity. If students do not grasp this concept, they may have difficulty comparing and ordering decimals. However, with the layout of the book they will begin to grow given some time.

5. Teacher will ask students if they understood the examples and explanations of the given task. Teacher will provide student feedback.

Day 2 and 3 Students will work with their groups and teacher will walk around to

make sure students are on task and follow through with the plan. Students will present to class.

Tools and Resources:

Number of computers: 5-6 computers

Software: AppleWorks (Word Processing and Drawing), Internet

Peripherals: Presentation System

Printed Materials: Handout on how to use drawing in AppleWorks, Measure for Measure math book.

Internet URLs: <http://www.census.gov>, <http://wow.bis.census.gov/cps>.

<http://members.aol.com/ntgen/hrtg/census.html>

<http://wow.factmonster.com/ipka/A0774780.html>

Modifications for Differentiated Instruction:

Special Education: Students will be asked to compare three states instead of five. They can choose the three states that they would like to research.

They may choose to do another number line using a different number of facts from factmonster.com

Rubric

4- A complete number line that includes all five state or more. Must have at least 5 graphics (i.e. picture of state - neat report). A number line that has five states with the decimals in their correct spot.

3- A number line that has five states with the decimals in their correct spot. Must have at least 4 graphics.

2- A number line that has 3 or more states with the decimals in or close to their correct order.

1 - A number line with decimals represented in their order.

0- No number lined turned in.