Cartogram of the Great Compromise

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Grade Level: 8 and HS
Duration: 1-2 class periods
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National Standards

GEOGRAPHY
Element 1: The World in Spatial Terms
1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information
2. How to use mental maps (a person’s internalized picture of a part of Earth’s surface) to organize information about people places, and environments in a spatial context
3. How to analyze the spatial organization of people places, and environments on Earth’s surface

Element 4: Human Systems
9. The characteristics, distribution and migration of human populations on Earth’s surface

Element 6: The Uses of Geography
17. How to apply geography to interpret the past

AZ Standards

ELA
Reading
Integration of Knowledge and Ideas
8.RI.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
8.RI.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
11-12.RI.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in print in order to address a question or solve a problem.
11-12.RI.9 Analyze foundational U.S. and world documents of historical and literary significance for their themes, purposes, and rhetorical features.

Arizona Social Science Standards

GEOGRAPHY
The use of geographic representations and tools helps individuals understand their world.
8.G1.1 Use geographic tools and representations to analyze historical and modern political and economic issues and events. Key tools and representations such as maps, globes, aerial and other photos, remotely sensed images, tables, graphs, and geospatial technology
HS.G1.2 Use geospatial tools and related technologies to construct relevant geographic data to explain spatial patterns and relationships. Key tools and representations such as Google Earth, story mapping, wayfaring apps, and other geospatial technologies

Examining human population and movement helps individuals understand past, present, and future conditions on Earth’s surface.
8.G3.1 Evaluate the impact of economic, political, and social decisions that have caused conflict or promoted cooperation throughout time.
HS.G3.1 Analyze the reciprocal nature of how historical events and the diffusion of ideas, technologies, and cultural practices have influenced migration patterns and the distribution of human population.
HS.G3.5 Evaluate the impact of social, political, and economic decisions that have caused conflict or promoted cooperation throughout time.

HISTORY
Cycles of conflict and cooperation have shaped relations among people, places, and environments.
HS.H2.1 Explain multiple causes of conflict.
HS.H2.2 Analyze approaches to conflict management and resolution.

Economic, political, and religious ideas and institutions have influenced history and continue to shape the modern world.
8.H3.4 Investigate a significant historical topic from United States History that has significance to an issue or topic today.
HS.H3.1 Analyze how societies, leaders, institutions, and organizations respond to societal needs and changes.
HS.H3.2 Analyze how ideologies, religion, and belief systems have influenced economic, political, and social institutions over time.

CIVICS
An understanding of civic and political institutions in society and the principles these institutions are
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Overview

The Great Compromise is a well-known event in early American history. As one might recall, at the Constitutional Convention in Philadelphia, a conflict arose between the “large” states and the “small” states. What is not often taught is which states were the “large” states and which states were the “small” states. Students who only have access to a standard map of the time might develop the mistaken concept that geographic size was the determining factor for “large” vs “small”. Creating a cartogram based on population will help clarify this concept.

Purpose

In this lesson students will learn that a cartogram is a thematic map on which the size and shape of a country or state is distorted to represent a statistical value. Using the 1790 U.S. census data, students will create a cartogram of the population of the states that were in existence at that time and then visually determine which states were “large” states and which states were “small” states at the time of the writing of the Constitution.

Materials

- The Great Compromise of 1787 handout
- Student Note Sheet and Answer Key for the Great Compromise
- Great Compromise Worksheet and Answer Key
- United States in 1787 map
- 1790 Census Data
- Slave Population Cartograms to show students (2 different scales- 1 to 1,000 and 1 to 10,000)
- Cartogram Rubric
- Graph Paper (1/4 inch grid works best)
- Rulers (optional)
- Colored Pencils (optional)

Objectives

The student will be able to:

1. create a population cartogram using census data.
2. analyze factors in the Great Compromise using a cartogram

Procedures

SESSION ONE

1. Distribute The Great Compromise of 1787 handout and the Student Note Sheet for the Great Compromise to the students. Explain they...
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are going to be filling out the Note Sheet as they read aloud and discuss the Great Compromise of 1787 handout. Also tell students to save this note sheet as they will be using it later.

2. As a class, read aloud and discuss the Great Compromise of 1787 handout. Give students time to fill in their Student Note Sheet.

3. After the reading and note taking, distribute the Rubric for Population Cartogram, the 1790 Census Data sheet, and graph paper. Explain to students they will be creating a cartogram using the 1790 Census Data. Students probably have not ever seen a cartogram, so show them the one on Slave Population. Explain that a cartogram is a thematic map, and that this one shows the states in proportion to their total slave population. First show the cartogram model with the 1 to 1,000 scale. Highlight how the general shape of the cartogram should mirror the actual shape of the states. Then show the second model with the 1 to 10,000 scale. This one shows how planning is important. This model is too near the bottom of the page and too far to the right.

4. Instruct students that they are going to be making a cartogram of the states showing their total population for representation based on the Great Compromise using the 1790 Census Data sheet. The scale they will be using is 1 square on the grid equals ten thousand people and that they are to round to the nearest grid. Go over the rubric so that the teacher may clarify any questions the students may have, then allow students work on their cartogram. The cartogram will become homework if not completed in class.

SESSION TWO

1. Distribute the United States in 1787 map https://geoalliance.asu.edu/sites/default/files/maps/US1787.pdf and the Great Compromise Worksheet. Explain to students that they are to use the Note Sheet from the last session, the map given out in this session, and their population cartogram to complete the worksheet. This will be completed in class and collected for assessment.

2. Also collect the Population Cartogram for assessment. The Student Note Sheet may also be collected for assessment.

Assessment

The Great Compromise Worksheet may be graded to assess civics, American history, and ELA using the Answer Key provided. There is a total of 32 points. Mastery would be considered 26 points (80%).

Using the Cartogram Rubric provided, the Population Cartograms can be graded to assess geography with 80 points (80%) being considered mastery.

If the Student Note Sheet is assessed for civics, American history, and ELA; use the Answer Key provided. Mastery on it would be considered 14 points (80%) out of the 18 points possible.

Extensions

Students could create population cartograms of the North and the South prior to the Civil War. Cartograms could also be created to show various resources (railroads, factories) or the population in the North and the South at the time of the Civil War.

Sources

http://en.wikipedia.org/wiki/1790_United_States_Census

www.census.gov/

https://www.senate.gov/artandhistory/history/minute/A_Great_Compromise.htm

http://incompetech.com/graphpaper/plain/