

Title: Aerial Photography

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Course: Geonomics

Time Frame: One class period

Subjects:

Map Analysis, World War I

Grade Levels:

9

Classroom/Homework Activity to be performed:

Students will compare an aerial photograph from WWI to a current Google.com satellite map and a street map of the current area. They will answer questions in pairs.

Rationale:

The purpose of this lesson is to have students compare between two or more primary documents (maps) and determine which is best source for desired information.

Lesson objectives - the student will:

- Analyze, compare and contrast between primary documents
- Determine which source to use for given tasks
- Successfully distinguish between large and small map scale

District, state, or national performance and knowledge standards/goals/skills met:

From the Show-Me Standards:

- SS 2. continuity and change in the history of Missouri, the United States and the world
- SS 5. the major elements of geographical study and analysis (such as location, place, movement, regions) and their relationships to changes in society and environment
- SS 7. the use of tools of social science inquiry (such as surveys, statistics, maps, documents)

Kansas Standards

Benchmark 1: Geographic Tools and Location: The student uses maps, graphic representations, tools, and technologies to locate, use, and present information about people, places, and environments.

2. (A) interprets maps and other graphic representations to analyze United States and world issues (e.g., urban vs. urban areas, development vs. conservation, land use in the world vs. local community, nuclear waste disposal, relocation of refugees).

Benchmark 5: The student engages in historical thinking skills.

1. (A) analyzes a theme in world history to explain patterns of continuity and change over time.
2. (A) develops historical questions on a specific topic in world history and analyzes the evidence in primary source documents to speculate on the answers.

Secondary materials (book, article, video documentary, etc.) needed:

- textbook material on Map Scale (our new textbooks are not currently available to me, so page numbers are unknown)

Primary materials (book, article, video documentary, etc.) needed:

- [aerial photograph of Chateau-Thierry, France during WWI](#) (click title)
- [Photograph of American troops at Chateau-Thierry during WWI](#) (click title)
- [Photograph of a bombed out hunting lodge in Chateau-Thierry](#) (Click title)
- access to current maps of the area through Google or Mapquest website(s)

Technology Required:

access to maps.google.com or mapquest.com computer lab or projector

magnifying glasses for visually-impaired learners

Full description of activity or assignment:

Students will be directed to view an aerial map of Chateau-Thierry, France from 1918. They will then view a photo from the war that shows a bombed-out hunting lodge from the area and a photo of American troops at Chateau-Thierry. (A Photo Analysis sheet may be assigned if desired.) Otherwise, students will be directed to read text material about map scales. Then in pairs, students will be directed to maps.google.com (or given copies of different scale maps if internet is unavailable) and directed to specific locations (such as your school) to look at different scales of maps and to distinguish the difference between Street Maps and Satellite Maps. Finally, students will locate Chateau-Thierry, France on the website and find the map and scale most identical to the 1918 aerial photograph. The following questions will be answered:

1. What is map scale?
2. What is large scale? What is small scale?
3. Why are different scales necessary?
4. What is one example of when a person would use a large scale map?
5. What is one example of when a person would use a small scale map?
6. Is it possible to find a specific location on both a small and a large scale map? Give an example.
7. How many bridges crossed the Marne River in 1918? In 2007?
8. What street runs parallel to the south side of the Marne River?
9. Follow Rue ("street" in French) Carnot south to a "round-a-bout." What is it called?
10. Can you see the round-a-bout from #9 on the aerial photograph?
11. How many maps can you find a beach area on?
12. If you wanted to know the distance from Lebanon, MO to Chateau-Thierry, France, would you use a large or small scale map?
13. If you wanted to know the distance from Jefferson City, MO to Washington, D.C., would you use a large scale map or a small scale map?
14. If you wanted to know the distance of Lebanon High School to Mr. Ed's Ice Cream Parlor, would you use a large or small scale map?

15. Look at the picture of the hunting lodge that was bombed in WWI. Would it be easier to rebuild your city or have everyone move to another place after that much damage? Why would the people want to stay? Did they change the entire city after 1918? How can you tell?

Full explanation of the assessment method and/or scoring guide:

A scoring key will be used to grade the aforementioned questions from the lesson. Each question is worth 1 pt (so #2 is worth a total of 2 pts, etc) Similar questions will appear on a unit test covering Map Skills. Those questions will have students distinguish between given large and small scale maps, have them choose the appropriate map for specific purposes, and answer questions referencing specific places on the given maps.