

Exploring Map TODALS

OVERVIEW & OBJECTIVES	GRADES
<p>Basic mapping terminology is essential for understanding and interpreting various types of maps.</p> <p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Create a sketch map • Explore a variety of maps • Analyze maps by observing, thinking, and questioning • Recognize and identify elements (TODALS) of maps • Compare and contrast elements (TODALS) of given maps 	4 th
	TIME
	50 minutes
	REQUIRED MATERIALS
	<ul style="list-style-type: none"> ✓ “Chapman’s New Sectional Map of Minnesota” (1856) http://www.loc.gov/resource/g4140.ct001627/ ✓ “Minnesota Maps Poster Set” from Minnesota Historical Society http://www.mnhs.org/ See Note under Website Resources <ol style="list-style-type: none"> 1. Elevation, Rivers and Lakes 2. Counties and Cities 3. Major Land Cessions of American Indians 4. Modern Ojibwe Reservations and Dakota Communities 5. Forest, Parks, and Wildlife Management Areas 6. Transportation Systems 7. Environment, around 1850 8. Environment, around 2000 ✓ Blank Paper ✓ Magnifying glasses ✓ Post-It notes (8 colors) ✓ Large piece of construction paper (made into a study book previously taught) ✓ Handout: “Essential Questions”

MINNESOTA SOCIAL STUDIES STANDARDS & BENCHMARKS

Standard 1: People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.

4.3.1.1.1 Create and use various kinds of maps, including overlaying thematic maps, of places in the United States and also Canada or Mexico; incorporate the “TODALS” map basics, as well as points, lines and colored areas to display spatial information.

SUGGESTED PROCEDURE

Opening (Pre-assessment)

- Give students a blank sheet of paper and direct them to draw a sketch map of Minnesota.
- Limit any other directions or discussion
- Collect the sketch maps

Development

1. Display “Chapman’s New Sectional Map of Minnesota” (1856) on a Smart Board or use another map to illustrate TODALS

2. Give directions for the activity:
 - Students will be given 5 minutes to work in cooperative groups of three at each station.
 - Each group will provide one set of answers
 - Each station contains a map and a different pack of colored Post-It notes.
 - Each triad will go to a station to analyze and discuss what they notice about the map.
 - Describe observing, thinking, and questioning on the Post-It notes and record individual responses in their study book.
 - Students may use writing, drawing or a combination of both.
3. Using the Chapman map projected on the Smart Board, the teacher models working on the tasks of looking closely at the map (observing), thinking aloud, discussing, and taking notes using the Post-It notes and organizing their information in their study book.
4. Break the students into homogeneous triads
5. Send students off to work.
6. Rotate to all map stations and repeat procedures as time allows. Complete tasks the next day if needed.

Closing

Once all groups have rotated through all map stations the teacher presents the following Essential Questions, which are found on the handout:

- What did you see on ALL of the maps?
- What was important?
- Why were these things important?
- How do you know?
- How were the maps different?
- Why were the maps different?

Groups think about, discuss, and answer essential questions listed on the handout and record responses in their study book.

Assessment

- Sketch Map of Minnesota Pre-assessment
- Review of students' study books
- Observations of groups working together
- "Essential Questions" handout

Website Resources

"Chapman's New Sectional Map of Minnesota" (1856) from the Library of Congress
<http://www.loc.gov/resource/g4140.ct001627/>

"Minnesota Maps Poster Set" from Minnesota Historical Society
<http://www.mnhs.org/>

Note: If teachers are using the *Northern Lights* curriculum, the maps are in the back of the Student Revised 2nd Edition on pages 500-507. You may also purchase poster-sized versions of the map (24" x 30" maps) for \$50 at http://shop.mnhs.org/moreinfo.cfm?Product_ID=3731

Essential Questions

Please read through the following questions. Together with your group review notes in study book, discuss and write your answer to each question.

- What did you see on ALL of the maps?

- What was important?

- Why were these things important?

- How do you know?

- How were the maps different?

- Why were the maps different?