

Learning TODALS

OVERVIEW & OBJECTIVES	GRADES
<p>Basic mapping terminology is essential for understanding and interpreting various types of maps. Knowing where to find these essential elements, and interpreting their meaning, are critical to the development of a 4th grader’s knowledge of geography.</p> <p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Explore a variety of maps • Become acquainted with the elements of maps referred to as TODALS: <ol style="list-style-type: none"> 1. Title 2. Orientation 3. Date 4. Author 5. Legend (Key) 6. Scale • Locate and interpret TODALS from a variety of maps • Compare and contrast elements of given maps while looking for bias • Reflect on the importance of knowing TODALS when understanding and interpreting maps. 	4 th
	TIME
	50 minutes
	<p style="text-align: center;">REQUIRED MATERIALS</p> <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 ✓ Magnifying glasses ✓ Large piece of construction paper (made into a study book previously taught) ✓ Power point visual on TODALS: http://prezi.com/h_6zmf4mih97/todals-6-key-map-components/ ✓ Handout: “TODALS”

MINNESOTA SOCIAL STUDIES STANDARDS & BENCHMARKS

Standard 2: 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

1. Review notes from the previous lesson. (“Exploring Map TODALS”)
2. Show teacher-constructed power point visual on TODALS http://prezi.com/h_6zmf4mih97/todals-6-key-map-components/

Development

1. Give handout, "TODALS", to students and review its content.
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.
 - Each triad will go to a station to analyze and determine TODALS for that particular map.
 - Triads will go to all stations
3. Model the group process using the display map, "Chapman's New Sectional Map of Minnesota" (1856), or another map may be used to illustrate TODALS.
4. Break the students into homogeneous triads.
5. Send students off to work.
6. Rotate groups 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, present the following Essential Questions:

- Why do you think most maps contain these components?
- Which map component do you think is most important? Why?
- What do you know now that you didn't know before?

Assessment

Check for understanding:

- Observations of groups working together
- "TODALS" handout
- Students' responses to the Essential Questions.

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

		Questions to Ask
T	Title	What is the map showing? Where is this place? Why is this a good title for the map?
O	Orientation	Where is the compass? Where is North? South? East? West? Why is this important?
D	Date	When was this map made? Why is this important? Does it make a difference?
A	Author	Who made this map? What is the author trying to show us? What does the author want us to think and know?
L	Legend	What symbols do we see? What do these symbols mean? Why is this important?
S	Scale	How big is this area? What is the scale? Why do we use this idea?

TODALS are tools that help us read maps.
Each component explains more about the map.

Essential Questions:

Why do you think most maps contain these components?

Which one do you think is the most important?

Why?

What do you know now that you didn't know before?