



A GEOGRAPHIC LESSON

Road Trip across Texas & New Mexico

GEOGRAPHY TEKS

6.3 (A), 7.8 (A), 8.10 (A) create thematic maps, graphs, charts, models, and databases depicting various aspects of world regions and countries, Texas and the U.S.; 6.3 (B), 7.8 (B), 8.10 (B) [pose and] answer questions about geographic distributions and patterns shown on maps, graphs, charts, [models, and databases]; 6.4 (A) locate major historical and contemporary societies on maps and globes; 7.9 (A), 8.11 (A) locate places and regions of importance in Texas and the United States during the 18th and 19th centuries; 7.9 (B), 8.11 (B) compare places and regions of the United States in terms of physical and human characteristics;

SOCIAL STUDIES SKILLS TEKS

6.21 (A), 7.21 (A), 8.30 (A) differentiate between, locate and use primary and secondary sources to acquire information about selected world cultures or the United States; 6.21 (C), 7.21 (C), 8.30 (C) organize and interpret information from visuals including graphs, charts, timelines and maps;

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This lesson encourages students to review longitude and latitude coordinates, as well as mapping skills to locate and learn about different National Park Service sites in Texas and New Mexico. Students, working in groups, will research different sites and share their information with the class.

** This lesson is designed to follow a series of sessions that discuss the history and significance of Chamizal National Memorial. However, the lesson can be modified to use this park as one of the sites researched by the student groups. **

Objectives: Students will

- Locate Chamizal National Memorial and other National Park sites on a map.
- Compare estimated and actual latitude and longitude coordinates for Chamizal National Memorial and other

National Park sites.

- Use the internet to find latitude and longitude coordinates and research the significance of NPS sites in Texas and New Mexico.
- Construct a road map showing how to get to different park sites from a common starting point.
- Construct a more detailed map focusing on park information such as the location of public facilities, recreation areas, places to eat, sleep, etc., found in different National Parks.
- Present research in front of the class.

Materials:

- Internet Access
- Pencils, Writing Paper
- Glue, Scissors
- Markers, Color Pencils
- 2 sheets of 11" x 17" paper per group
- Brochures from regional National Park sites (optional)

Time:

Six 45-minute classroom sessions

Procedure:

Introducing the Concept

Revisit concepts concerning longitude and latitude coordinates by looking at a world map. Remind students that longitude lines run north and south on a globe, and measure the eastern or western distance of a location from the prime meridian. Latitude lines run east and west on a globe, and measure the northern or southern distance of a location from the equator. Have students locate the Memorial on the world map and write down their estimates of the longitude and latitude coordinates of the park. Compare student estimates with actual coordinates. Reflect on the significance of the Memorial and some of the activities students and their families can expect to participate in while visiting the park.

Review previous day's lesson. Have students name well-known park sites such as Grand Canyon National Park, Yellowstone National Park, Statue of Liberty National Monument and Gettysburg National Military Park. Ask students to find each site on a continental U.S. map and

write down what they think may be each site's longitude and latitude coordinates. Ask students to also write down what they think the climate of each site would be compared to Chamizal National Memorial just based on longitude and latitude coordinates.

Send students to the internet to find the coordinates for each park site and compare their estimates with what they found on-line. Inform students that most sites will detail the degrees, minutes and seconds of the site's coordinates. Also ask students to compare their estimates of climate conditions with actual information found on the website.

Recommended Site USGS – Geographic Names Information System: geonames.usgs.gov/pls/gnispublic

Learning the Concept

Break students into groups of 2-3. Assign each group a National Park site in Texas or New Mexico. Note that there are 25 sites, excluding the scenic river area and historic trails sites. Each group will be required to research the individual site and construct a four-sided diagram (see page 3) to present their information.

For each of the NPS sites, students will have to break

down researched information into four distinct sections.

Section 1 Answers the *What* question

- Park Name
- Mission of the site
- Images of the park
- What the park is most known for
- Student Names who worked on this project.

Section 2 Answers the *Where* question

- Student drawn scaled road map or pre-printed map from Chamizal National Memorial (or school) to the researched park
- Incorporate as much of the **Date, Orientation, Grid, Scale, Title, Author, Index, Legend and Sources (or DOGSTAILS)** as appropriate in the student map
- Written Driving Directions from Chamizal National Memorial to the researched park
- Longitude and Latitude Coordinates/ Distance from Chamizal National Memorial
- Time Zone (if different from starting point)

Section 3 Answers the *So* *What* question

- What does this site preserve or protect?
- Park History
- What are some of the major issues park rangers

face while trying to service the public and protect the resource?

- Additional Images of the park
- Timeline (if appropriate)

Section 4 Answers the *How & Logistical* questions

- How do people enjoy or use the park? What is there to do?
- Hours, Fees
- Climate conditions
- Height of visitation (when do most people visit this park?)
- What people should know about visiting the park
- Map of the park itself (include DOGSTAILS information)
- Resources available (restaurants, bathrooms, hotels, etc.)

Constructing the three-dimensional diagram

1. Use two sheets of paper. Fold each in half; however, be sure to fold one side $\frac{1}{2}$ an inch shorter than the other side. This will form a tab that is $\frac{1}{2}$ -longer than the other side.
2. Fold the tab over the short side of the sheet.
3. On one of the folded papers, place a small amount of glue on the tab and place the non-folded edge of the second sheet squarely into the folded tab. Press flat until

the glue holds.

4. Repeat with other side. Allow the glue to dry completely before continuing.

Review Learned Concepts

Each group will present their research and diagram in front of the class. Ask students specific questions as to how knowing the longitude and latitude coordinates of a site can clue potential visitors in what they can expect to encounter while visiting the park. Display student work in a predominate area of the classroom or school building.

Adapted from National Geographic's Xpeditions classroom lessons and Dinah Zike's Big Book of Projects. Illustrations from Dinah Zike's Big Book of Projects.

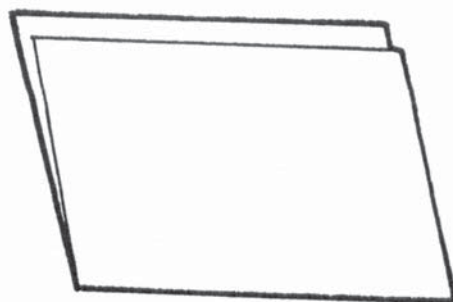


Diagram Steps 1 & 2

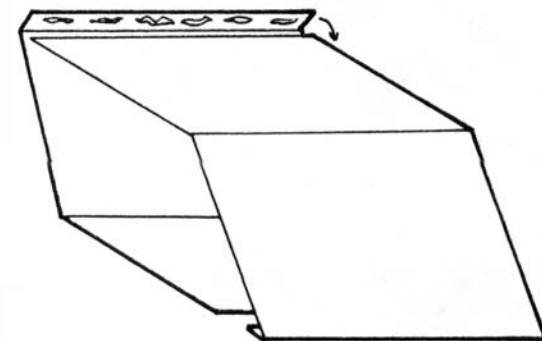
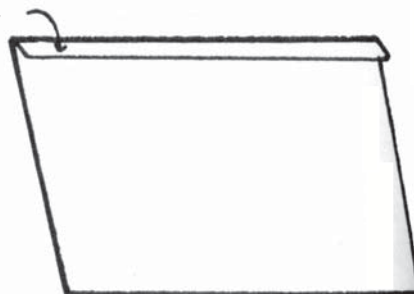


Diagram Steps 3 & 4

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6.21 (F), 7.21 (H), 8.30(H) use appropriate mathematical skills to interpret social studies information such as maps and graphs; 6.22 (B) express ideas orally based on research and experiences; 6.22 (D) create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies; 6.22 (E), 7.22 (B), 8.31 (B) use standard grammar, spelling, sentence structure, and punctuation; 7.22 (C), 8.31 (C) transfer information from one medium to another, including written to visual and statistical to written or visual, using computer software as appropriate; 7.22 (D), 8.31 (D) create written, oral, and visual presentations of social studies information.

Road Trip Rubric

Category	Mastery (25 points each)	Proficient (20 points each)	Adequate (15 points each)	Needs Improvement (10 points each)
Cartographic Skills	Exhibits exceptional cartographic skills by correctly identifying longitude/latitude coordinates, accurately incorporating all map elements, and by providing an accurate, concise and descriptive summary of driving directions.	Exhibits proficient cartographic skills by correctly identifying longitude/latitude coordinates, accurately incorporating most map elements, and by providing an accurate and descriptive summary of driving directions.	Exhibits adequate cartographic skills by correctly identifying longitude/latitude coordinates, accurately incorporating some map elements, and by providing an accurate summary of driving directions.	Exhibits less than average cartographic skills incorporating few map elements, and by providing a descriptive summary of driving directions.
Literary Response - Writing Mechanics	Exhibits exceptional language skills by using interesting vocabulary, superb grammar, and sites multiple sources for researched information.	Exhibits proficient language skills by using appropriate vocabulary, correct grammar most of the time, and sites two sources for researched information.	Exhibits adequate language skills by using some appropriate vocabulary, correct grammar some of the time, and sites one source for researched information.	Exhibits less than average language skills by using inadequate vocabulary, poor grammar and sites no sources for researched information.
Skillful Use of Media	Exhibits exceptional skills in use of media and mapping techniques. Well organized diagram, use of plentiful, appropriate images/colors, easy to comprehend.	Exhibits proficient skills in use of media and mapping techniques. Well organized diagram. neat final product, appropriate use of images/colors, easy to comprehend.	Exhibits adequate skills in use of media and mapping techniques. Neat final product, some use images/color, some-what easy to comprehend.	Exhibits less than average skills in use of media and mapping techniques. Poorly organized diagram, limited used of images/color, hard to comprehend.
Participation	Exhibits extraordinary conversational skills and generously contributes to group discussion. Participates fully in group work and encourages peer participation.	Exhibits proficient conversational skills and frequently contributes to group discussions. Participates fully in group work.	Exhibits adequate conversational skills and occasionally contributes to group discussions. Participates in group work.	Exhibits less than average conversational skills and seldom contributes to group discussion.