

SOUTH DAKOTA

Giant Traveling Map Lesson

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South Dakota ACADEMIC STANDARDS / SUITABLE DISCIPLINES:

South Dakota Social Studies Content Standards
Geography and Civics/Government

4.G.1.1 Locate major political and physical features of South Dakota and the United States on a map or globe

4.G.2.1 Compare and contrast regions of South Dakota to one another

4.G.3.1 Describe how natural and human conditions shape places and regions

5.G.1.1 Apply latitude and longitude to find absolute locations on a globe and map

5.G.1.2 Investigate maps of different types and scales

5.G.2.1 Explain how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas

5.G.2.2 Explain how human settlements and movements relate to the locations and use of various natural resources

8.C.4.1 Describe the election process and the Electoral College

8.C.4.2 Apply the rights and responsibilities of U.S. citizens to students' lives

8.C.4.3 Compare and contrast methods of civic involvement

9-12.C.3.3 Make arguments for and against the use of the Electoral College given its intended purpose

9-12.C.5.3 Explain how democracy relies upon responsible participation of its citizens and identify ways a citizen can effectively participate

9-12.G.5.1 Analyze the characteristics, distribution, and migration of human populations

OBJECTIVES:

Participants will:

- Learn about major cities in South Dakota during three different historical periods
- Practice using grids and cardinal directions to locate cities in the state
- Practice using latitude and longitude lines (if appropriate for grade level)
- Analyze change over time
- Discuss topics such as the census (source of data), distribution of resources in the state, physical features associated with settlements, and implications of changes in population for political representation at various levels of government

RECOMMENDED GRADES: Fourth through adult

TIME NEEDED: 20 to 25 minutes, depending on whether discussion is held as part of the map visit or at a later time

MATERIALS:

- Compass rose
- 15 flat markers
- 15 tall cones
- 15 shorter, flexible cones
- 3 to 4 plastic chains for dividing the state
- List of South Dakota cities by population for 1900/1950/2010

PREPARATION:

- Discuss reasons why people choose to live in different places
- Review historical settlement patterns in South Dakota
- Review South Dakota era info
- Develop predictions by participants about where they think people might live
- Consider push and pull factors in migration

RULES:

- Shoes are not allowed on the map. Please have participants remove shoes before walking on the map.
- Participants should wear socks.
- No writing utensils on the map.
- No sliding on the map.

DIRECTIONS:

Using the list of cities and colored cones, participants will locate the fifteen most populous cities in South Dakota for the years 1900, 1950, and 2010. They will then look for trends based on the east/west axis and north/south axis, waterways adjacent to and within South Dakota, and defensive settlements from the 18th century. Encourage speculation about the factors that contributed to population development among the various regions of the state.

On the map:

1. Provide participants with an overview about exploring the top fifteen populated places in South Dakota in 1900, 1950, and 2010 using U.S. Census data as a source of information.
2. Ask participants about the kinds of jobs they imagine people were doing in South Dakota in 1900. Ask them to predict where people might be living. (If needed, ask the participants to consider where they live and why? What does a location need for people to live there?)
3. Take 15 of the round markers. Pass them out to 15 of the participants (usually just ask them to take one and pass the remainder along).
4. Read the 15 largest cities one at a time, going down the row of participants and asking the participants to place the marker on the dot identifying the town (star in the case of Pierre).
5. Remind the participants that they can provide assistance to their classmates or colleagues about the location of a city based on cardinal directions or the grid. They should avoid shouting “over there”, “this way”, “left/right”, etc. From the beginning of the lesson, model the use of cardinal directions or the grid. Students may use the compass. Place NSEW labels on the walls or around the map.
6. After the flat, round markers are all on the map, ask the participants to interpret the new information that has been added to the map. Remind them that this is similar to adding a layer to a geographic information systems map.
7. Move on to the 1950 census and ask participants what jobs people were doing then. Ask them to predict where people might be living.
8. Pass out the 15 larger cones. Assign individual participants to place their cones on the 15 cities. For cities in the top 15 list by population in both 1900 and 1950, have participants pick up the flat marker and place it on top of the cone.
9. After the larger cones are all on the map, repeat Item 6 above, asking participants to think about what has changed and why.
10. Repeat process with 2010 census data and smaller or flexible orange cones. Have participants put the orange cone on top of the flat, round marker creating a pyramid, or on top of the large cone if the city was previously in the top 15 only in 1950.
11. Discuss where most of the people live and why. What areas of the state have no large settlements? Why? This is also an opportunity to review the concentration of people in the state in terms of electoral districts.

NOTES:

Review the Major Eras in South Dakota History for contextual information for the time periods highlighted in this lesson.

GUIDING QUESTIONS:

Q. What factors influence where people settle(d)?

A. Water, safety, employment opportunities, transportation routes, and physical geography.

Q. How many of the fifteen largest cities are located along a river or lake in 1900? 1950? 2010?

A.

1900	1950	2010
~7	~7	~7

Q. How many of the cities were in the various regions? Are they spread evenly or grouped together?

A. Cities are grouped either East River (i.e., east of the Missouri River), West River, or in the Black Hills.

Region	1900	1950	2010
East River	11	11	11
West River	0	2	4
Black Hills	3	2	0

Q. For what reasons did this pattern exist?

A. Transportation opportunities and employment opportunities. For a review of how South Dakota responded to the boom and bust cycles of immigration and settlement, explore “European Settlement and Ethnicity Patterns on the Agricultural Frontiers of South Dakota” by Robert C. Ostergren.

Q. How did South Dakota compare with the rest of the United States?

A. Consider how much the population of South Dakota increased compared to the increase in the United States.

	1900	1950	2010
South Dakota	401,570	652,740	814,180
United States	76,212,168	150,697,361	308,745,538

Q. How many cities in the new top fifteen in 1950 were also in the top fifteen in 1900? What percentage is that?

A. 13, 87%

Q. How many cities in the new top fifteen in 2010 were also in the top fifteen in 1900? In 1950?

A. 1900: 13 of 15; 1950: 10 of 15

Q. Where are most of the large cities in South Dakota located in 2010? Why?

A. On the eastern border because this is where people can find work.

Q. Are major cities and suburbs significantly more concentrated than they were in 1950?

A. Depending on which suburbs are counted as being part of major cities, the concentration of population in major cities is similar to what it was in 1950.

Q. Generally speaking, how would you describe the majority of population movement and growth in the South Dakota over the past one hundred years?

A. As agricultural work became more mechanized, the number of workers on farms decreased. By the late 20th century, more than half the state’s population was living in urban centers. As a result, by the end of the 1990s, about two-thirds of South Dakota counties had experienced a decrease in population, while many urban centers grew.

Q. Why? What factors have encouraged people to move and live in cities?

A. More jobs and educational opportunities were available in urban areas than in rural areas.

MODIFICATIONS:

For younger participants, focus on the map key and compass rose. For older participants, invite them to have more autonomy in the lesson and incorporate additional mathematical concepts.

EXTENSIONS:

Consider using the census data in math lessons. How much larger is Sioux Falls today than in 1900? How much larger is Sioux Falls than the 15th largest city? How concentrated is the population in Sioux Falls over time? How did the population of your city change?

For use with the GeoCivics activities (<https://www.uccs.edu/geocivics/>), invite participants to think about the current configuration of United States Congressional Districts in the state. Ask them to remember the key characteristics of how districts are drawn (equal population and contiguous). Invite them to pretend that their state has just two Congressional Districts; ask two people to pick up one of the chains and divide the state generally in half by population; invite two more people to divide the state into four districts (they may choose to move the original chain, or not). Discuss why some districts would likely be smaller in area than others. If appropriate, determine how to divide the state into state senate districts.

Consider when a giant floor map is a good tool for understanding geographic phenomena and when other tools (paper maps, online maps) might be more appropriate.

NOTE:

Thanks to National Geographic's Giant Traveling Maps team for the inspiration for this lesson, which is based on "People on the Move", a lesson for the North America Giant Map.

RESOURCES:

South Dakota Department of Education, Social Studies Standards
<https://doe.sd.gov/contentstandards/>

South Dakota State Historical Society
<https://history.sd.gov/default.aspx>

European Settlement and Ethnicity Patterns on the Agricultural Frontiers of South Dakota, by Robert C. Ostergren, South Dakota Historical Society, 1983
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=12&ved=2ahUKEwiEsoKRSPvkAhVjvJ4KHauScr4QFjALegQIABAC&url=https%3A%2F%2Fwww.sdhspress.com%2Fjournal%2Fsouth-dakota-history-13-1%2F-european-settlement-and-ethnicity-patterns-on-the-agricultural-frontiers-of-south-dakota%2Fvol-13-no-1-and-no-2-european-settlement-and-ethnicity-patterns-on-the-agricultural-frontiers-of-south-dakota.pdf&usg=AOvVaw2Kaw9GqHj4Z9IhJTHSo7fz>

	City	1900	v		City	1950	v		City	2010	v
	State	401,570			State	652,740			State	814,180	
1	Sioux Falls	10,200		1	Sioux Falls	52,696		1	Sioux Falls	170,401	
2	Watertown	8,352		2	Aberdeen	21,051		2	Rapid City	72,841	
3	Lead	6,210		3	Rapid City	25,310		3	Aberdeen	27,925	
4	Yankton	4,125		4	Huron	12,788		4	Brookings	23,471	
5	Aberdeen	4,087		5	Watertown	12,699		5	Watertown	22,083	
6	Mitchell	4,055		6	Mitchell	12,123		6	Mitchell	15,566	
7	Deadwood	3,498		7	Brookings	7,764		7	Yankton	14,529	
8	Pierre	2,806		8	Yankton	7,709		8	Pierre	13,974	
9	Huron	2,798		9	Lead	6,422		9	Huron	13,116	
10	Madison	2,550		10	Pierre	5,715		10	Spearfish	11,300	
11	Brookings	2,346		11	Vermilion	5,337		11	Vermillion	10,687	
12	Vermilion	2,188		12	Madison	5,153		12	Brandon	9,731	
13	Canton	1,948		13	Hot Springs	5,030		13	Box Elder	9,277	
14	Hot Springs	1,819		14	Belle Fourche	3,540		14	Rapid Valley	9,034	
15	Webster	1,500		15	Canton	2,530		15	Madison	7,094	

	City	2020*	√
	State	886,667	
1	Sioux Falls	192,517	
2	Rapid City	74,703	
3	Aberdeen	28,495	
4	Brookings	23,377	
5	Watertown	22,655	
6	Mitchell	15,660	
7	Yankton	15,411	
8	Huron	14,263	
9	Pierre	14,091	
10	Spearfish	12,193	
11	Box Elder	11,746	
12	Vermillion	11,695	
13	Brandon	11,048	
14	Rapid Valley	8,098	
15	Sturgis	7,020	

*2020 Census data is from Redistricting Data Hub using the State and Place level PL 94-171 datasets.

<https://redistrictingdatahub.org/data/download-data/#state-menu>

