NEW JERSEY

Giant Traveling Map Lesson

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NEW JERSEY ACADEMIC STANDARDS / SUITABLE DISCIPLINES:

6.1.4.A.7 Explain how the United States functions as a representative democracy, and describe the roles of elected representatives and how they interact with citizens at local, state, and national levels.

6.1.4.B.1 Compare and contrast information that can be found on different types of maps and determine how the information may be useful.

6.1.4.B.2 Use physical and political maps to explain how the location and spatial relationship of places in New Jersey, the United States, and other areas, worldwide, have contributed to cultural diffusion and economic interdependence.

6.1.4.B.3 Explain how and when it is important to use digital geographic tools, political maps, and globes to measure distances and to determine time zones and locations using latitude and longitude.

6.1.4.B.7 Explain why some locations in New Jersey and the United States are more suited for settlement than others.

6.1.4.C.14 Compare different regions of New Jersey to determine the role that geography, natural resources, climate, transportation, technology, and/or the labor force play in economic opportunities.

6.1.12.A.14.e Evaluate the effectiveness and fairness of the process by which national, state, and local officials are elected and vote on issues of public concern.

6.1.12.B.6.a Determine the role geography played in gaining access to raw materials and finding new global markets to promote trade. How do physical geography, human geography, and the human environment interact to influence or determine the development of cultures, societies, and nations?

6.2.8.B.2.a Determine the extent to which geography influenced settlement, the development of trade networks, technological innovations, and the sustainability of early river valley civilizations.

6.1.4.B.10 Identify major cities in New Jersey, as well as in the United States, and the world, and explain how geographic and demographic tools (e.g., maps, globes, data visualizations) can be used to understand cultural differences.

OBJECTIVES:
Participants will:

- Learn about major cities in New Jersey 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 New Jersey cities by population for 1820/1910/2010

PREPARATION:
- Discuss reasons why people choose to live in different places
- Review historical settlement patterns in New Jersey
- Review New Jersey 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 on the map.
- 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 New Jersey for the years 1820, 1910, and 2010. They will then look for trends based on the east/west axis and north/south axis, waterways adjacent to and within New Jersey, 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 New Jersey in 1820, 1910, 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 New Jersey in 1820. 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 makers. 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 Trenton).
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 1910 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 1820 and 1910, 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 1910.
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 New Jersey History for contextual information for the time periods highlighted in this lesson.

GUIDING QUESTIONS:

Q. What factors influence where people settle(d)? Why did so many people settle along the diagonal from Trenton up toward New York City?
A. Water including ports, safety, transportation routes, physical geography as well as access to jobs and settlements. Initially the area was divided into north (with more influence from the British) and south (more influenced by William Penn and the Quakers). The "fall line" marks the boundary between two geologic provinces - the hard rock of the Piedmont and

the softer soil of the Inner Coastal Plain. Along that line water cut rapids and waterfalls, providing a source of power to colonial settlers and representing a barrier to ships trying to sail farther upstream. Many of the "mill towns" in New Jersey grew along the fall line.

Q. Why did Benjamin Franklin call New Jersey "a barrel tapped at both ends"?
It was a reference to the state's position between New York and Philadelphia, which accounted for much of the movement of people and goods through the region.

Q. How many of the fifteen largest cities are located along the ocean, a river, or a lake in 1820? 1910? 2010?
A.

1820	1910	2010
13	12	11

Q. Why are New Jersey's highways located where they are?
Many of our most heavily traveled roads started out as Indian paths cut by the various Lenape tribes. New Jersey had the most miles of roads of any colony in 1765

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

1820	1910	2010
Outer Coastal Plain – 7 Inner Coastal Plain – 6 Piedmont – 2 Highlands Ridge and Valley	Outer Coastal Plain – 8 Inner Coastal Plain – 7 Piedmont Highlands Ridge and Valley	Outer Coastal Plain – 7 Inner Coastal Plain – 7 Piedmont – 1 Highlands Ridge and Valley

Q. For what reasons did this pattern exist?
A. Transportation opportunities, employment opportunities, access to various materials for industrial production. Eventually there was a railroad to Atlantic City, which opened up the coast. The New Jersey Highlands and Pinelands were so lightly settled into modern times because the rocky and/or sandy soil made it difficult to grow food.

Q. How did New Jersey compare with the rest of the United States?
A. Compare how the country's and state's populations grew over these time periods.

	1820	1910	2010
New Jersey	277,575	2,537,167	8,791,894
United States	9,638,453	92,228,496	308,745,538

Q. How many cities in the new top fifteen in 1910 were also in the top fifteen in 1820? What percentage is that?
A. 6 of 15, 40%

Q. How many cities in the new top fifteen in 2010 were also in the top fifteen in 1820? In 1910?
A. 1820: 5 of 15, 33%; 1910: 8 of 15, 53%

Q. Where are most of the large cities in New Jersey located in 2010? Why?
A. Near New York City due to job opportunities. Many people live in New Jersey and travel into New York for many of their resources. Although cities expanded to the western part of the state there are still a lot of suburbs and people right next to the coast. As early as 1821 you could pay 25 cents for a daily carriage ride from Newark to the Spring at Orange, indicating that commuting in New Jersey has been a long tradition.

Q. Are major cities and suburbs significantly more concentrated than they were in 1910?
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 1910. "Mass transit" in New Jersey can be traced to two canals built in the 1830s and 1840s, one called the Morris Canal in North Jersey, the other called the Delaware-Raritan Canal in Central Jersey. The first successful railroad in New Jersey connected Camden and Amboy. This allowed for the movement of people and commerce between Philadelphia and New York City.

Q. Generally speaking, how would you describe the majority of population movement and growth in the New Jersey over the past one hundred years?
A. Cities that are near New York grew. Although there are several places that stayed on the map throughout the century much of the state remains concentrated in just a few areas. There are still historical divides based on the original north / south Jersey line, which can be seen through evidence of the underground railroad and segregation patterns. In the decades following the Underground Railroad and Civil War, hundreds of thousands of African Americans fled the South and came to Northern cities seeking jobs and a better standard of living. In more recent decades, similar numbers of job seekers from Latin America have reshaped not only New Jersey's cities but also its agricultural sector. In the past 10-20 years the fastest growing subset of New Jersey's population comes from India.

Q. Why? What factors have encouraged people to move and live in cities?
A. Farming in North Jersey drops off sharply in the early 19th century as lands to the West were attracting many former New Jersey farmers and the Industrial Revolution shifted jobs to the cities. Millions of European immigrants landed at Jersey City after being processed at Ellis Island. They would take a train to New York, to Philadelphia, to other American cities, or choose to settle in New Jersey. The influx of immigrants from places like Ireland and Italy not only made New Jersey's cities swell, it forever changed the composition of the state's population.

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 Newark today than in 1820? How much larger is Newark than the 15th largest city? How concentrated is the population in Newark 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. Explore some additional information about New Jersey.

Q. Who was the first celebrity to vacation at the Jersey Shore?
A. President Ulysses S. Grant - he was the first of several U.S. presidents to have a summer home in Long Branch, NJ. Eventually Long Branch was superseded by Atlantic City and other shore towns.

Q. Who built the country's first "research and development" facility in New Jersey?
A. Thomas Edison - his factory in Menlo Park helped make North and Central Jersey centers of invention and innovation.

Q. Did the World Wars bring a significant influx of military personnel to New Jersey?
A. Yes - during World War I the Cresskill Camp in Bergen County as the primary staging facility for men headed to the Western Front. During World War II the naval base at Camden and the airfield at Millville were among the busiest in the country.

Q. When did casino gambling come to Atlantic City?
A. Gaming was approved by voters in 1976 and the first casino opened in 1978. Like the railroad and the expressway before it, casino gambling brought a new surge of visitors to New Jersey's shore towns, and families seeking jobs in this new industry.

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:
New Jersey Department of Education
https://www.state.nj.us/education/cccs/2014/ss/standards.pdf
New Jersey Historical Society
https://jerseyhistory.org/
https://www2.census.gov/library/publications/decennial/1910/volume-3/volume-3-p2.pdf

	City	1820	√		City	1910	√		City	2010	√
	State	**277,575**			**State**	**2,537,167**			**State**	**8,791,894**	
1	Amwell	6,749		1	Newark	347,469		1	Newark	277,140	
2	Newark	6,507		2	Jersey City	267,779		2	Jersey City	247, 597	
3	Freehold	5,146		3	Paterson	125,600		3	Paterson	146,199	
4	Northampton (Mount Holly)	4,833		4	Trenton	96,815		4	Elizabeth	124,969	
5	Upper Freehold	4,541		5	Camden	94,538		5	Toms River	88,791	
6	Middletown	4,369		6	Elizabeth	73,409		6	Trenton	84,913	
7	Shrewsberry	4,284		7	Hoboken	70,324		7	Clifton	84,136	
8	North Brunswick	4,275		8	Bayonne	55,545		8	Camden	77,344	
9	Woodbridge	4,226		9	Passaic	54,773		9	Passaic	69,781	
10	Evesham	3,977		10	Atlantic City	46,150		10	Union City	66,455	
11	Trenton	3,942		11	West Hoboken	35,403		11	East Orange	64,270	
12	Pequannock	3,820		12	East Orange	34,371		12	Bayonne	63,024	
13	Notingham	3,633		13	Perth Amboy	32,121		13	Vineland	60,724	
14	Elizabeth	3,515		14	Orange	29,630		14	New Brunswick	55,181	
15	South Amboy	3,406		15	New Brunswick	23,388		15	Lakewood	53,035	

	City	2020*	√
	State	9,288,994	
1	Newark	311,549	
2	Jersey City	292,449	
3	Paterson	159,732	
4	Elizabeth	137,298	
5	Toms River	92,830	
6	Trenton	90,871	
7	Clifton	90,296	
8	Camden	71,791	
9	Bayonne	71,686	
10	Passaic	70,537	
11	East Orange	69,612	
12	Lakewood	69,398	
13	Union City	68,589	
14	Vineland	60,780	
15	Hoboken	60,419	

*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