N E W   Y O R K

Giant Traveling Map Lesson

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NEW YORK SOCIAL STUDIES FRAMEWORK:
Grade 4
4.1a Physical and thematic maps can be used to explore New York State's diverse geography.
4.1b New York State can be represented using a political map that shows cities, capitals, and boundaries.
4.6b In order to connect the Great Lakes with the Atlantic Ocean, the Erie Canal was built. Existing towns expanded and new towns grew along the canal. New York City became the busiest port in the country.
4.7a Immigrants came to New York State for a variety of reasons. Many immigrants arriving in New York City were greeted by the sight of the Statue of Liberty and were processed through Ellis Island.
Grade 7
7.6c Westward expansion provided opportunities for some groups while harming others.
7.8a Early United States industrialization affected different parts of the country in different ways. Regional economic differences and values, as well as different conceptions of the Constitution, laid the basis for tensions between states' rights advocates and supporters of a strong federal government.
Grade 8
8.2a Technological developments changed the modes of production, and access to natural resources facilitated increased industrialization. The demand for labor in urban industrial areas resulted in increased migration from rural areas and a rapid increase in immigration to the United States. New York City became the nation's largest city, and other cities in New York State also experienced growth at this time.

OBJECTIVES:
Participants will:
• Learn about major cities in New York 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 New York, 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 York cities by population for 1820/1880/2010

PREPARATION:
- Discuss reasons why people choose to live in different places
- Review historical settlement patterns in New York
- Review New York 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.
- 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 York for the years 1820, 1880, and 2010. They will then look for trends based on the east/west axis and north/south axis, waterways adjacent to and within New York, 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 York in 1820, 1880, 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 York 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 Albany).
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 1880 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 1880, 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 1880.
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 York 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, transportation routes, physical geography

Q. How many of the fifteen largest cities are located along a river (Hudson, Mohawk, Susquehanna), canal (Erie) or lake (Lake Ontario, Lake Erie or Finger Lakes), in 1820? 1880? 2010?
A.

Body of Water	1820	1880	2010
Rivers	4	10	8
Canals	0	9	6
Lakes	2	4	3

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

1820	1880	2010
South and East	A bit more spread out, including West, but still primarily East and South Most cities are on the Erie Canal or the Hudson River.	Similar to 1880, but Metro NYC is by far the largest city in the state (and the USA).

Q. For what reasons did this pattern exist?
A. Transportation opportunities and employment opportunities. Since water transportation was critical in the 1800s, most cities are located along the Erie Canal-Hudson River corridor. Later, the railroads followed this path, avoiding places with rugged topography.

Q. How did New York compare with the rest of the United States?
A.

	1820	1880	2010
New York	959,049	5,082,871	19,378,102
United States	7,239,881	50,189,209	308,745,538

Q. How many cities in the new top fifteen in 1880 were also in the top fifteen in 1820? What percentage is that?
A. 4 , 27%

Q. How many cities in the new top fifteen in 2010 were also in the top fifteen in 1820? In 1880?
A. 1820: 4 of 15; 1880: 8 of 15 (Brooklyn merged with NYC in 1898).

Q. Where are most of the large cities in New York located in 2010? Why?
A. The largest city is New York City, where the Hudson River meets the Atlantic Ocean. The other large cities are along the Erie Canal (Buffalo, Rochester, Syracuse, Utica, Schenectady, Albany, Troy). The remaining are centered around NYC (Hempstead, New Rochelle, White Plains, Mount Vernon, Yonkers). Binghamton is the sole exception. New York City dominates because of a strong international economy which attracts immigrants.

Q. Are major cities and suburbs significantly more concentrated than they were in 1880?
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 1880. In 2010, Metro New York City has by far the largest concentration of people. This includes Brooklyn.

Q. Generally speaking, how would you describe the majority of population movement and growth in the New York over the past two hundred years?

A. In the early 1800s, almost everyone in New York lived in New York City or one of the smaller cities on the Hudson River. After the Erie Canal opened in 1825, the population moved northward and westward, concentrated along the Canalway. Immigrants came through the Port of New York (Ellis Island). When the canal era ended, after World War II, the population in the canal corridor stagnated and declined, but Metro NYC continued to grow.

Q. Why? What factors have encouraged people to move and live in cities?
A. Jobs. Immigrants prefer to live in communities with people from their home countries. Young people like the opportunities and the "excitement" of city life.

MODIFICATIONS:
For younger participants, focus on the map key and compass rose. They can locate the cities using Grid Numbers. For older participants, invite them to have more autonomy in the lesson and incorporate additional mathematical concepts.

EXTENSIONS:
The modern Erie Canal (a.k.a. "Barge Canal") is shown on the Giant Map. Use a long piece of thick yarn or a plastic chain to trace the route of the original canal. See references.

Consider using the census data in math lessons. How much larger is New York City today than in 1820? How much larger is New York City than the 15th largest city? How concentrated is the population in New York City 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:
US Census Historical Data: https://www.census.gov/prod/www/decennial.html
New York Geographic Alliance (Lessons on NY geography) –
http://www.nygeographicalliance.org
History Timeline of New York: https://www.iloveny.com/things-to-do/history/timeline/
Erie Canal History and Resources: http://www.eriecanal.org

	City	1820	√		City	1880	√		City	2010	√
	State	**212,592**			**State**	**5,082,871**			**State**	**25,145,561**	
1	New York City	152,056		1	New York City	1,206,299		1	New York City	8,175,133	
2	Albany	12,630		2	Brooklyn	566,663		2	Buffalo	261,310	
3	Brooklyn	7,175		3	Buffalo	155,134		3	Rochester	210,565	
4	Hudson	5,310		4	Albany	99,758		4	Yonkers	195,976	
5	Troy	5,264		5	Rochester	89,366		5	Syracuse	145,170	
6	Hempstead	5,084	1810	6	Syracuse	51,792		6	Albany	97,856	
7	Schenectady	3,939		7	Troy	51,747		7	New Rochelle	77,062	
8	Utica	2,972		8	Utica	33,914		8	Mount Vernon	67,292	
9	Hyde Park	2,554	1830	9	Watervliet	22,220		9	Schenectady	66,135	
10	Auburn	2,333		10	Auburn	21,924		10	Utica	62,235	
11	Buffalo	2,095		11	Oswego	21,116		11	White Plains	56,853	
12	Rochester	1,502		12	Elmira	20,541		12	Hempstead	53,891	
13	New Rochelle	1,135		13	Poughkeepsie	20,207		13	Niagara Falls	50,193	
14	Scarsdale	281		14	Cohoes	19,416		14	Troy	50,129	
15	Kingston			15	Yonkers	18,892		15	Binghamton	47,376	
					Kingston	18,341			Freeport	42,860	
					Hempstead	18,164			Valley Stream	37,511	
					Newburgh	18,049			Rome	33,725	
					Binghamton	17,317			Long Beach	33,275	
					Johnstown	16,626			Poughkeepsie	32,736	
					Flushing	15,906			North Tonawanda	31,568	
					Schenectady	13,655			Spring Valley	31,347	
					Lockport	13,522			Jamestown	31,146	
					Cortlandt	12,664			Ithaca	30,014	
					Rome	12,194			Elmira	29,200	
									Port Chester	28,967	
									Newburgh	28,866	
									Middletown	28,086	
									Auburn	27,687	
									Harrison	27,472	
									Lindenhurst	27,253	
									Watertown	27,023	
Source: US Census Bureau									Glen Cove	26,964	