

MARYLAND

Giant Traveling Map Lesson

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Maryland ACADEMIC STANDARDS / SUITABLE DISCIPLINES:

Social Studies Framework

1.0 CONTENT STANDARD: CIVICS- Students will understand the historical development and current status of the fundamental concepts and processes of authority, power, and influence, with particular emphasis on democratic skills and attitudes necessary to become responsible citizens and engage in political participation and contribute to the public process.

3.0 CONTENT STANDARD: GEOGRAPHY – Students will appreciate their own place in the world and foster curiosity about environment and cultures; use geographic reasoning associated with physical and human factors, locations of places and regions, historic changes in political boundaries, economic activities, and cultures; use spatial and environmental perspectives; and apply geographic representation including maps, imagery, and geospatial technologies.

- A. Using Geographic Tools
- B. Geographic Characteristics of Places and Regions
- C. Movement of People, Goods and Ideas
- D. Modifying and Adapting to the Environment

5.0 CONTENT STANDARD: HISTORY- Students will evaluate why and how events occurred; locate and assess a variety of sources; engage in historical inquiry involving acquiring knowledge about significant events, developments, individuals, groups, documents, places, and ideas to support investigations about the past and its connection to the present; and analyze how individuals and societies have changes over time in Maryland, the United States, and the world. Examine significant ideas, beliefs, and themes; organize patterns and events; and analyze how individuals and societies have changed over time in Maryland, the United States, and the World.

- A. Individuals and Societies Change Over Time

Maryland High School Assessment in American Government

Structure and Organization of Legislative Branch

The student will evaluate how the principles of government assist or impede the functioning of the Legislative Branch of government by:

- Describing the bicameral structure, powers, and organization of the United States Congress and the Maryland General Assembly.
- Comparing and contrasting the powers and responsibilities of local, state, and national legislative bodies

Elections

The student will explain roles and analyze strategies individuals or groups may use to initiate change in governmental policy and institutions by:

- Explaining tools used by political parties, interest groups, lobbyists, candidates, the media and citizens to impact elections, public policy, and public opinion.
- Evaluating the effectiveness of tools used to impact elections, public policy, and public opinion.
- Analyzing various methods that individuals or groups may use to influence laws, government policies, and elections including referendum, acts of civil disobedience, voting, boycotts, financial contributions, digital communication, and voting drives.
- Evaluating how the election process, including open and closed primaries, affects political outcomes, individual voter behavior, and public opinion.
- Analyzing how candidates, campaigns, political parties, and financial contributions influence the political process, policy, and public opinion.

Executive Branch

The student will evaluate how the principles of government assist or impede the functioning of the Executive Branch of government by:

- Determining how the nominating process, closed and open primaries, and general elections reflect the principles of representative democracy, consent of the governed, and majority rule.
- Evaluating the utility of the Electoral College over time.

Citizens and Public Policy

The student will explain roles and analyze strategies individuals or groups may use to initiate change in governmental policy and institutions by:

- Analyzing how candidates, campaigns, political parties, the media lobbyists and financial contributions and citizens, influence the political process, policy, and public opinion.
- Evaluating the tools that individuals or groups may use to influence laws, government policies, and elections including referendum, acts of civil disobedience, voting, boycotts, financial contributions, digital communication, and voting drives.
- Identifying the voting patterns of various demographic groups and their impact on governmental policy.

Economic Systems

The student will evaluate how governments affect the answers to the basic economic questions of what to produce, how to produce, and for whom to produce by:

- Evaluating the role of the United States government in answering the basic economic questions.

National Geographic Academic Standards (1994) / Suitable Disciplines:

1. Standard 6: How culture and experience influences people's perceptions of places and regions.
2. Standard 11: Patterns and networks of economic interdependence on earth's surface.
3. Standard 12: Processes, patterns and functions of human settlements.
4. Standard 14: How human actions modify the physical environment.
5. Standard 16: Changes that occur in the meaning, use, distribution, and importance of resources.
6. Standard 17: Apply geography to interpret the past.
7. Standard 18: Apply geography to interpret the present and plan for the future.

OBJECTIVES:

Participants will:

- Compare Maryland major cities during three different historical periods.
- Explore how Maryland's waterways affected the growth of the population.
- Apply and practice using grids and cardinal directions to locate cities in the state.
- Apply and practice using latitude and longitude lines (if appropriate for grade level).
- Analyze change over time and identify that change.
- Discuss topics such as the census (source of data), distribution of resources in the state, and implications of changes in population for political representation at various levels of government.

RECOMMENDED GRADES: Fourth through Adult

TIME NEEDED: 20-25 minutes each for the lesson on population and for the lesson focused on waterways, depending on whether discussion is held as part of the mapping activity or later.

MATERIALS:

- Compass rose
- 15 flat markers
- 15 plastic cones
- 15 shorter, flexible plastic cones or cups
- Yarn or plastic chains (for dividing the state into electoral districts and for marking waterways)
- List of Maryland cities by population in 1850, 1910, and 2010.
- Geographic Regions of Maryland (from the Maryland Geographic Alliance, <https://mdgeography.org/index.php/resources/>)
- Consider using the National Park Service brochures about the three areas being targeted in this lesson.
- Note: If the teacher is conducting this lesson using a paper driving map and LEGOs, use three different colors of LEGOs rather than 3 different types of cones.

PREPARATION:

- Discussion about the reasons why people choose to live in different places.
- Review of the historical settlement patterns in Maryland, including the colonial era.
- Development of predications by participants about where they think people might live and for what reasons (brainstorming).

RULES:

- No shoes are allowed on the map. Please have participants remove their shoes before walking on the map.
- Participants should wear socks on the Giant Map.
- No writing utensils on the map.
- No sliding on the map.

DIRECTIONS:

Using the list of cities and colored cones (or LEGOs), participants will locate the fifteen most populous sites in Maryland for the years 1850, 1910, 2010, speculating about the factors that contributed to populations shifting along the Chesapeake Bay region during the colonial period (approximately 1649-1830s). Participants will also look for trends based on the east/west axis and north/south axis, waterways adjacent to and within Maryland, 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 Maryland in 1850, 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 Maryland in 1850. 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 require for people to live there successfully?)
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 Annapolis).
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 if necessary.
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 1850 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 the 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.

GUIDING QUESTIONS:

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

A. Along with water, safety, transportation routes, and employment opportunities, Maryland has a Fall line which separates the Chesapeake Estuary Region with that of the mainland to the western edge of Maryland. The difficulty with the Maryland Fall line is that it includes both the western shore and the eastern shore, which is confusing to participants in the identification of the physical regions of Maryland. The western shore today is much of the southern area of the state south of the capital of Annapolis.

Q. How many of the fifteen largest cities are located along a river, bay, sound, or inlet in 1850? 1910? 2010?

A.

1850	1910	2010
12	11	5

Q. Are major cities and suburbs significantly more concentrated than they were in 1910?

A. Yes, the distribution of populated areas changes significantly between 1910 and 2010.

Q. How many of the cities were in the various regions? Are they spread evenly or grouped together? Consider waterways as another way to look at regions.

A.

Regions	1850	1910	2010
Appalachian Mountains	4	2	9
Piedmont Plateau	5	2	8
Atlantic Coastal Plain	0	9	6

Q. For what reasons did this pattern exist?

A. Maryland's waterways were critical to providing the economic balance to residents as well as the jobs afforded them along the canal or on the bay.

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

A. Consider how much the population of Maryland increased compared to the increase in the United States. What percentage of the population has lived in Maryland over these time periods?

	1850	1910	2010
Maryland	583,034	1,295,346	5,773,552
United States	7,239,881	92,228,496	308,745,538

Q. How many cities in the new top fifteen in 1910 were also in the top fifteen in 1850? What percentage is that?

A. 9, 60%

Q. How many cities in the new top fifteen in 2010 were also in the top fifteen in 1850? In 1910?

A. 1850: 2 of 15; 1910: 2 of 15

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

A. They are located in the Baltimore-Washington corridor, close to transportation, services, and jobs in biohealth, government, defense, information technology, and cybersecurity.

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

A. Population followed jobs, moving from timber and mining to manufacturing and service.

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

A. While there are not many cities of note in Maryland in the early 1800s, it is interesting that the four largest cities in Maryland during that time period were mostly agricultural center places with Baltimore functioning as an important flour milling center. Jobs, educational opportunities, nearness to cultural events and venues influence settlement.

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 Baltimore today than in 1850? How much larger is Baltimore than the 15th largest city? How concentrated is the population in Baltimore over time? How did the population of your city change? Analysis of the data by older participants may be written in class journals; encourage students to follow English class writing guidelines. Consider asking participants to write about urban growth patterns, employment opportunities, and changes in transportation.

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.

MODIFICATIONS:

For younger students, focus on the map key and compass rose. For the older participants, invite them to have more autonomy in the lesson and incorporate additional mathematical concepts. Not all questions need to be used and the teacher may choose those of her or his own, so that the effort needs to be on ensuring students are able to observe the shifting population patterns.

RESOURCES:

Maryland Department of Education

<http://www.marylandpublicschools.org/about/Pages/DCAA/Social-Studies/MSSS.aspx>

For more information about Maryland and Maryland's independent cities, visit Encyclopedia Maryland website:

https://www.encyclopediamaryland.org/Cities_of_Maryland

Maryland Industries in General

<http://www2.census.gov/library/publications/decennial/1910/volume-9/volume-9-p5.pdf>

Maryland Regions, <https://sos.state.md.us/mdkids/Pages/maps.aspx>

Participants may benefit from the use of the following maps in order to visualize the shift in population settlement over time in the 18th and 19th centuries.

Delaware and Maryland. Morse & Gaston, cartographer, publisher. Colored to distinguish boundaries (1857). Relief by hachures. Prime Meridians: Greenwich and Washington, DC. <https://www.loc.gov/item/2017593569>

The State of Maryland from the best authorities. Contributors: Samuel Lewis (1753/1754 – 1822); William Barker (1795-1803); Mathew Carey (1760-1839); and William Guthrie (1708-1770). Publisher: Mathew Carey (1795). Relief shown pictorially engraved for Carey's American Geography with inset "Continuation of the Potowmac [Potomac] River, from Fort Cumberland". <https://www.loc.gov/resource/g3840.ct004150>

Map of the part of Virginia containing the whole of Maryland: with part of Pensilvania [Pennsylvania], New Jersey, and North Carolina. <https://www.loc.gov/item/74693168>

Chesapeake & Ohio Canal National Historical Park, <https://www.nps.gov/choh/>

NOTES:

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.

A special thank you to Dr. Todd Kenreich, Professor, Towson University; Secondary and Middle School Education; and Co-Director, Maryland Geographic Alliance for his assistance and guidance with this lesson. He also ensured that my classroom had access to the map for the testing of this lesson.

Thank you also to the former Chair of the Geography Department at Townson University as well as the current Reference Librarian both of whom took time from their busy schedules to provide the LOC references and insights on Maryland in the 1830s. These insights are on the attached chart.

	City	1850	v		City	1910	v		City	2010	v
	State	583,034			State	1,295,346			State	5,773,552	
1	Baltimore	169,054		1	Baltimore	558,485		1	Baltimore	620,961	
2	Cumberland	6,073		2	Cumberland	21,839		2	Columbia	99,615	
3	Frederick	6,028		3	Hagerstown	16,507		3	Germantown	86,395	
4	Hagerstown	3,879		4	Frederick	10,411		4	Silver Spring	71,452	
5	Annapolis	3,011		5	Annapolis	8,262		5	Waldorf	67,752	
6	Easton	1,413		6	Salisbury	6,690		6	Glen Burnie	67,639	
7	Havre de Grace	1,335		7	Cambridge	6,407		7	Ellicott City	65,834	
8	Elkton	1,099		8	Frostburg	6,028		8	Frederick	65,239	
9	Williamsport	1,091		9	Havre de Grace	4,212		9	Dundalk	63,597	
10	Sharpsburg	1,001		10	Brunswick	3,721		10	Rockville	61,209	
11	Port Deposit	988		11	Chrisfield	3,468		11	Bethesda	60,858	
12	Salisbury	947		12	Westminster	3,295		12	Gaithersburg	59,933	
13	Westminster	884		13	Easton	3,083		13	Towson	55,197	
14	Saint Michaels	863		14	Chestertown	2,735		14	Bowie	54,727	
15	Snow Hill	714		15	Westernport	2,702		15	Aspen Hill	48,759	

	City	2020*	v
	State	6,177,224	
1	Baltimore	585,708	
2	Columbia	104,681	
3	Germantown	91,249	
4	Waldorf	81,410	
5	Silver Spring	81,015	
6	Frederick	78,171	
7	Ellicott City	75,947	
8	Glen Burnie	72,891	
9	Gaithersburg	69,657	
10	Bethesda	68,056	
11	Dundalk	67,796	
12	Rockville	67,117	
13	Towson	59,553	
14	Bowie	58,329	
15	Bel Air South	57,648	

*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>

How the shape of Maryland determines the location of population centers

Some population centers are not on the map and will need to be found using latitude and longitude lines at the sides of the map. Population centers are counties or independent cities, although in certain cases independent cities have been merged with the county from which it was created.

A. Accessing Prior Knowledge:

Before students use the large map, they need to have been exposed to the state of Maryland map. I try to use road maps from AAA so the students can see I-95 and I-495 (the Beltway) as location markers before branching out to other areas of the state. On their individual paper maps, the students will have already labeled the state capital Annapolis and the Chesapeake Bay and Ocean City, as most students have been to the beach there. As a class we also label Washington, DC and the bordering states (Virginia, Pennsylvania, West Virginia).

B. On the Map:

1. Can participants predict how the shape of Maryland determines where population centers are? What are key physical features in Maryland? Why is it important to know the physical features to understand population settlement?
2. Students will use yarn to identify the three waterways in this lesson: Chesapeake Bay, C & O canal, and the Potomac River. Teachers need to instruct students during this first step that waterways provided Maryland residents with a water boundary for protection, food, escape, and transportation. Are there other features?
3. Starting with the Potomac River, ask students to use the yarn to show how the Potomac River flows into the bay. Read the 15 largest population centers one at a time going down the row of students and ask each student to place the cone on the city. What cities are identified along this route? Hand out cones to students asking them to mark these cities. Are there others?

Teacher Note: Start with the Potomac River first because it is the connector waterway in this lesson. It flows into the Chesapeake Bay at Pt. Lookout, and the C & O canal is a waterway on the north bank of the Potomac River starting in Washington, DC and ending in Cumberland (184.5 miles).

4. Can the students identify where the C & O Canal is in Maryland? Ask them to use yarn to mark the location of the canal.

Teacher Note: I use National Park Service brochure about the C & O canal. Inside is a map that will assist students in locating the Canal on the larger map.

5. What jobs do the students imagine people might have had along the canal in the 1830s? How might those jobs affect where people lived? Pass out cones for students to show where the population centers were / are. What features (see #1) did the canal provide people in the 1830s? Students need to interpret the population

centers on the map: What pattern do they see in the placement of the cones? Why do they think this pattern existed in 1830? Are the cities clustered together for a reason other than jobs?

Teacher Note: To link this lesson to real life, ask students if they have visited the C & O canal with their family. Do they know how people use the canal today?

6. Do the students think the Potomac River provided the residents in the cities the same features as the Chesapeake Bay did (see #1)? What are the differences?
7. Ask what kinds of jobs might people have had along the water during the 1830s? the 1940's? How might these jobs be similar to those 2010 jobs still available around or on the Chesapeake Bay? Can the student speculate what problems the population centers may have had around the waterways in the 1830s? Might these problems be recurring today? If not, what advances in society might have led to developments stopping the problems?

Teacher Note: Hint for students: Consider showing photos of the skipjack, blue crab, and oysters.

8. The Chesapeake Bay: have the students use the rest of the cones to locate the cities around the bay area. Have students predict the changes the residents may have experienced in the 1940's compared to those residents living along the canal and Potomac river. What population centers may have had its population shifted during the 1940's? Why?

Teacher Note: During WWII German U-boat 701 did breach the bay to lay a mine during the Battle of the Atlantic.

Teacher Note: To link this lesson to real life, ask students if they have visited the Chesapeake Bay with their family. Have they seen the lighthouses, the Chesapeake Bay bridge? Do they know how people use the bay today?

9. Describe the population patterns in the 1940s? How many population centers are in this region? How does this compare with that around the canal and Potomac river?
10. What has changed between the three waterways and the three dates? What reasons have contributed to these changes?
11. How does Maryland's total population compare with that of the United States in 2010? What accounts for the changes?
12. Can students estimate the percentage of the people in Maryland living along the waterways?

Repeat any of the process for each census data point for the population centers as needed.

Conclusion:

Tell the participants how the population centers were presented, and the challenges encountered.

County/Independent City	1830	County/Independent City	1940	County/Independent City	2010
Maryland State Population	447,040		1,821,244		5,773,552
Baltimore City* Agricultural Center	80,620	Baltimore City	859,100	Baltimore City	620,961
Cumberland "Queen City" – named the 2 nd largest city	unclear	Cumberland	39,483	Ellicott City	65,834
Frederick City	4,427	Hagerstown	33,491	Frederick City	65,239
Hagerstown Town	3,371	Frederick City	17,637	Rockville City	61,209
Annapolis City* Takes in St. Mary's population once capital city is moved to Annapolis (1695)	2,623	Cambridge Town	11,945	Gaithersburg City	59,933
Ellicott City - family owned	unclear	Annapolis City	9,595	Bowie City	54,727
		Westminster	8,588	Hagerstown City	39,662
		Freedom	6,538	Annapolis City	38,394
		Port Deposit	6,058	College Park City	30,413
		Elkton	5,890	Salisbury City	30,343
		Solomon Island	3,513	Laurel City	25,115
		Ellicott City* This is the 1930 census. Ellicott City is included in the 1940 census using this data.	2,342	Greenbelt City	23,068
Population of largest population centers	91,041	Population of largest population centers	994,180	Population of largest population centers	2,035,754