

# *Historical Inquiry with*

## **The Statistical Atlas of the United States (1870) State Population Chart**

---

### **About the Historical Document**

The *Statistical Atlas of the United States Based on the Results of the Ninth Census 1870* was published in 1874 and compiled under the authority of Congress by Francis A. Walker, M.A., the superintendent of the ninth Census and a professor of political economy and history at the Sheffield Scientific School of Yale College (now Yale University). As stated on its title page, the document includes “contributions from many eminent men of science and several departments of the government.”

Walker supervised the Census using scientific methods and sought to make the Census information gathered more accessible to the general public by producing the *Statistical Atlas*, which provides explanations and charts and maps of the data collected. He expanded the amount of information collected in the Census and applied statistical techniques to more accurately reflect the development of the United States after the Civil War.

One page of the atlas, “Chart Showing the Principal Constituent Elements of the Population of Each State,” displays the U.S. populations of the 37 states at the time of the 1870 Census as color-coded boxes. These boxes indicate for each state (i) the population according to limited categories: “native colored,” “native white,” and “born out of the United States” and (ii) “white” and “colored” people living in other states.

---

### **Uses for This Activity**

This activity reviews the general layout and content of the population chart. It also provides historical inquiry questions for students to evaluate the chart. The questions are divided into the following topics: observe, reflect, question, and analyze. This activity may be used to introduce and engage students in the process of historical inquiry and/or to process and reflect about race in the United States. The historical inquiry questions can be used to examine other charts as well.

---

### **Standards and Benchmarks** (see page 15)

---

### **Grade Level**

8-12

---

## Materials

- Internet access and a whiteboard to display PDF 1 (page Pl.XX, “Chart Showing the Principal Constituent Elements of the Population of Each State,” in the *Statistical Atlas of the United States Based on the Results of the Ninth Census 1870*): [https://www.stlouisfed.org/~media/Education/Lessons/pdf/maps/PDF1\\_SA1870Population.pdf](https://www.stlouisfed.org/~media/Education/Lessons/pdf/maps/PDF1_SA1870Population.pdf). (The third page of Handout 3 is a copy of PDF 1.)

NOTE: The PDF is provided because it has better resolution than the *Statistical Atlas* online version. The full *Statistical Atlas* is available at <https://fraser.stlouisfed.org/title/?id=64#scribd-open>. The chart in PDF 1 is on page 70 of the online version.

- Visuals 1 and 2
- Handout 1, one copy for each student
- Handout 1—Answer Key, one copy for the teacher
- If using the (optional) extension activity, Handouts 2 and 3, one copy of each for each student

---

## Procedure

1. Display *PDF 1: SA1870 Population* (as noted in the Materials section). Explain to the students that this is a primary source document. It is a population chart from a document called the *Statistical Atlas of the United States Based on the Results of the Ninth Census 1870*. In this activity, they will practice historical inquiry by examining the chart and answering questions about it. Explain the following:
  - The *Statistical Atlas* was published in 1874 and is considered a watershed moment for statistics in the United States, bringing us on a par with our European counterparts.
  - The chart shows the population of each of the 37 states at the time of the 1870 Census.
  - The chart is ordered from the state with the smallest population—thus the smallest square (Nevada)—to the state with the largest population—and the largest square (New York). Thus, the sizes of the squares are relative to the sizes of the populations.
  - The different-colored sections refer to the different categories of people counted by the Census.
  - There is an explanatory paragraph at the top left of the page and a legend at the top right.
2. Display *Visual 1: Explanation*. Tell the students that the visual shows an enlarged copy of the explanatory paragraph from the chart. Invite a student to read the “Explanation.”

## *Historical Inquiry* with the SA (1870) State Population Chart

---

3. Display *Visual 2: Legend*. Review the categories and then explain the following:
  - Each square inch represents approximately 350,000 people (so the size of the squares matters). You would have to look at the chart in its original size to interpret this measure.
  - Each square is divided into three rectangles, and the colors represent different groups of people.
  - The tan left-hand rectangle represents persons born outside the United States—the foreign born. Some states do not have any foreign-born persons recorded.
  - The middle rectangle represents native colored people, where “native” means born in the United States. The gray (top) part represents colored people born *within* the state. The burgundy (bottom) part represents colored people born *outside* the state.
  - The right-hand rectangle represents native white people. The light-red (top) part represents white people born *within* the state. The dark-red (bottom) represents white people born *outside* the state.
  - The separate rectangle to the right of the square represents people who have moved to others states. The light-red (top) portion represents white people. The dark-red (bottom) portion represents colored people.
  
4. Note the population squares for Arkansas and New York shown on *Visual 2*. Ask the students to compare the two. (Likely comparisons follow.)
  - Arkansas has more blacks than it has persons born out of the United States—in fact, it has proportionally few persons born out of the United States.
  - New York has fewer blacks than it has persons born out of the United States—in fact, it has proportionally very few blacks.
  - There are proportionally far fewer colored people in New York than in Arkansas; the colored population appears to be about 25 percent in Arkansas and far less in New York.
  - The numbers of whites born in and out of Arkansas are about equal. The majority of whites in New York were born in New York.
  - More whites than blacks have moved out of both states.
  
5. Display PDF 1 again. Distribute a copy of *Handout 1: Historical Inquiry* to each student. Have the students work in pairs and instruct them to look at the population chart together to find the answers to the questions on Handout 1. After students complete the activity, discuss their findings, referring to the Handout 1—Answer Key as needed.

## Assessment

6. Instruct the students to write an essay that (i) summarizes their findings and (ii) provides evidence gathered from this inquiry and classroom learning that supports their findings.

---

## Extension (Optional)

7. Distribute a copy of *Handout 2: U.S. Map* to each student. Instruct the students to shade the 37 states represented in the 1870 Census population chart.
8. Discuss where your state fits in the overall 1870 Census data.
9. Distribute a copy of *Handout 3: Historical Inquiry* to each student. Tell the students that the links on the handout will take them to population maps of the United States based on the most recent Census. They are to look at each of the maps and then choose one map for which they will answer the questions on the handout. They should be ready to discuss similarities and difference between the reporting of current Census population data and 1870 Census population data. The links below are also on Handout 3 and can be accessed in a computer lab or viewed by the class on a whiteboard.

NOTE: When each map is opened, if the legend is not shown, the user will need to scroll down in the "Map Layers" box on the right-hand side to find the checked box, under which is the title of the map and the legend.

- Foreign Born Population (Non-Citizen or Naturalized), Percent by State  
[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=3757&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,places&vm=3757&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)
- White (Non-Hispanic), Percent by State  
[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,&vm=7389&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,&vm=7389&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)
- Black or African American, Percent by State  
[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=7381&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,places&vm=7381&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)

## *Historical Inquiry* with the SA (1870) State Population Chart

---

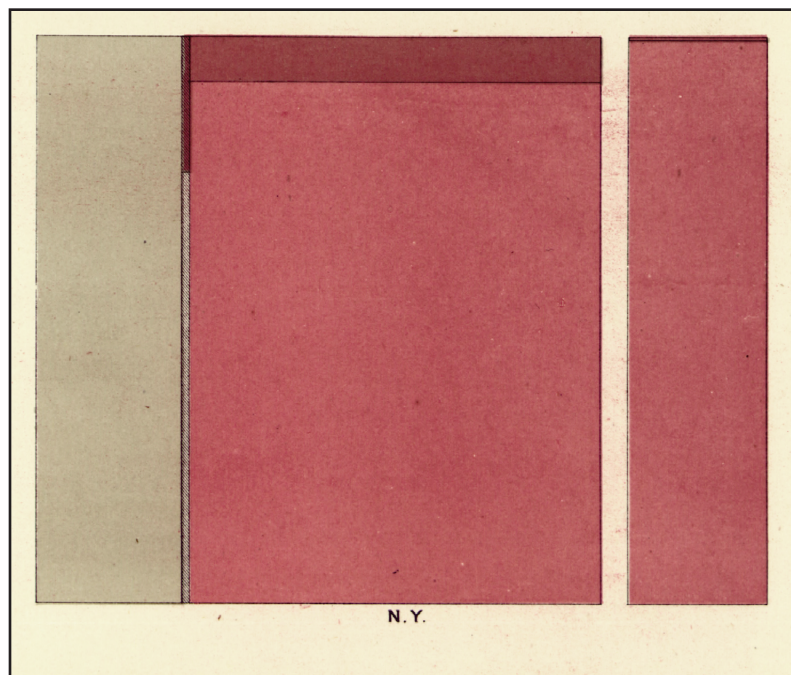
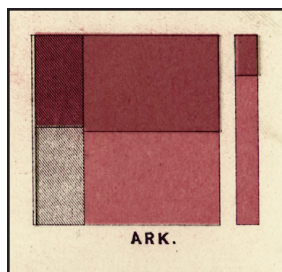
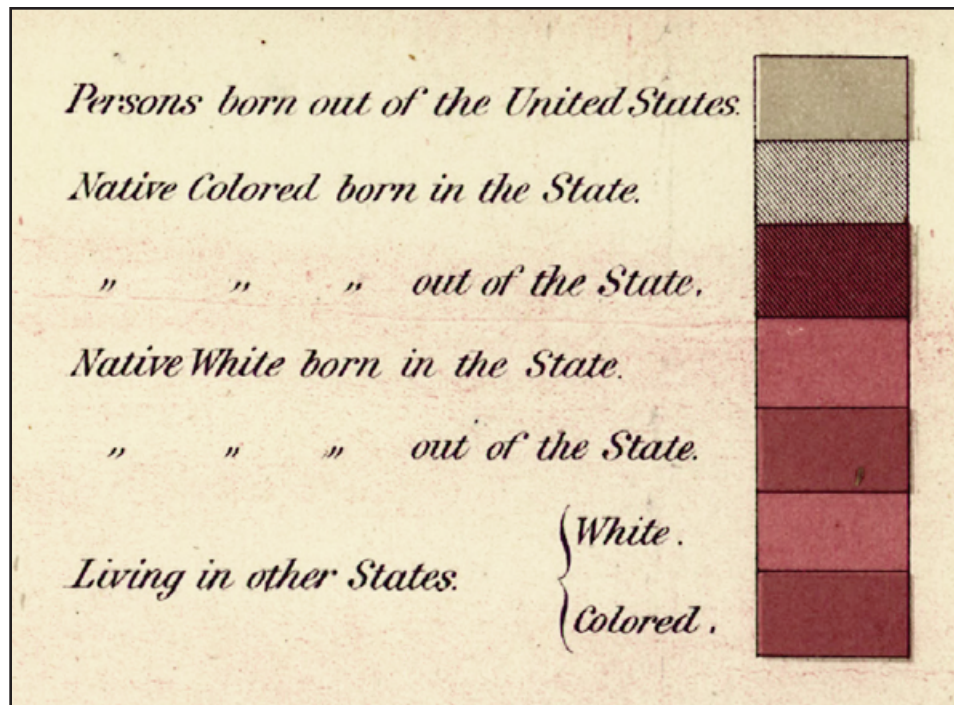
- Asian, Percent by State  
[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,stsens,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=7380&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,stsens,us_cong,tracts,placebnd,counties,State,roads,places&vm=7380&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)
  - Native American/Alaskan Native, Percent by State  
[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,stsens,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=7384&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,stsens,us_cong,tracts,placebnd,counties,State,roads,places&vm=7384&vr=gray-base,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)
10. Discuss the students' findings and discuss similarities and differences between the reporting of current Census population data and 1870 Census population data.

## Visual 1: Explanation

*Explanation . The squares are proportional to the population of the States respectively represented ( 350,000 inhabitants to the sq. in ) Each square is divided by vertical lines into three rectangles, the left representing the foreign, the middle the native colored, and the right the native white population. Each of the last two rectangles is divided by a horizontal line to exhibit the proportion of each class of the population represented born respectively within and without the State itself. The lower portions of these rectangles thus divided represent the number native to the State, the upper portions represent the number born in other States and Territories of the Union. Each square has a rectangle of equal height upon its right, which exhibits, in proportion, the number of persons born in the State, who have become residents of other States. This rectangle is divided by a horizontal line, the upper portion representing colored, the lower, white.*

*Caution: Care will in a few cases require to be taken in the use of these figures, where the number of foreign or of colored inhabitants, in the State under representation, is so small as to reduce the enclosed rectangle to a width scarcely perceptible to the eye. Civilized Indians are included in the native white population. In California and Michigan alone is the difference caused by this treatment perceptible to the eye.*

Visual 2: Legend



## Handout 1: Historical Inquiry

### Observe

1. What is the time period of this document?
2. What do you first notice about this document?
3. Describe what you see in this document.
4. What is (are) the source(s) of information for this document?
5. What does the legend (if there is one) tell you about this document?
6. Is there anything that does not look like it belongs in this document?

### Reflect

7. Who was the audience for this document?
8. Why is this document important?
9. What did the author(s) intend to communicate with this document?
10. How might this document be biased?
11. What can you learn from examining this document?
12. Is there anything significant missing from this document?
13. Why was this document likely made?

### Question

14. What does this document tell you about the United States and the world at this time?
15. Where can you find further information related to topics addressed in this document?

### Analyze

16. How has the United States changed since this document was made?
17. How does the information depicted on this document foreshadow the future?



## Handout 1: Historical Inquiry—Answer Key (page 1 of 2)

### Observe

1. What is the time period of this document? (1870)
2. What do you first notice about this document? (Answers will vary.)
3. Describe what you see in this document. (Squares representing the population are shown for each state and represent persons born outside the United States and colored and white people born within and outside the state. It also shows for each state the people who have moved to other states. There are 37 states on the chart.)
4. What is (are) the source(s) of the information for this document? (Statistical Atlas of the United States Based on the Results of the Ninth Census 1870)
5. What does the legend (if there is one) tell you about this document? (The legend shows what the colors on the chart represent and how people were categorized in the Census: persons born outside the United States, native colored, and native white.)
6. Is there anything that does not look like it belongs in this document? (Answers will vary but may include the following: the focus on birthplace either in or out of a state, classifying Native Americans as civilized, or classifying Native Americans as native whites.)

### Reflect

7. Who was the audience for this document? (Answers will vary. The chart is for a general-interest audience—anyone interested in this type of information.)
8. Why is this document important? (Answers will vary, but students may say it provides a record of the U.S. population in 1870 and captures the culture of that time period.)
9. What did the author(s) intend to communicate with this document? (Answers will vary, but students may say a simple, visual way to show the population breakdown of each state.)
10. How might this document be biased? (Answers will vary but may include the following: Native Americans were not counted unless they were considered “civilized” and then were counted as native whites. Importance is placed on tracking birthplace (native born and foreign) and movement between states.)
11. What can you learn from examining this document? (Answers will vary, but students may say the chart shows how many people lived in the United States, where those people lived, and how people were categorized to be counted in 1870.)

**Handout 1: Historical Inquiry—Answer Key (page 2 of 2)**

12. Is there anything significant missing from this document? (*Native Americans were not counted unless they were considered civilized and then they were counted as whites.*)
13. Why was this document likely made? (*Answers will vary, but students may say to document the makeup of the population and its migration.*)

**Question**

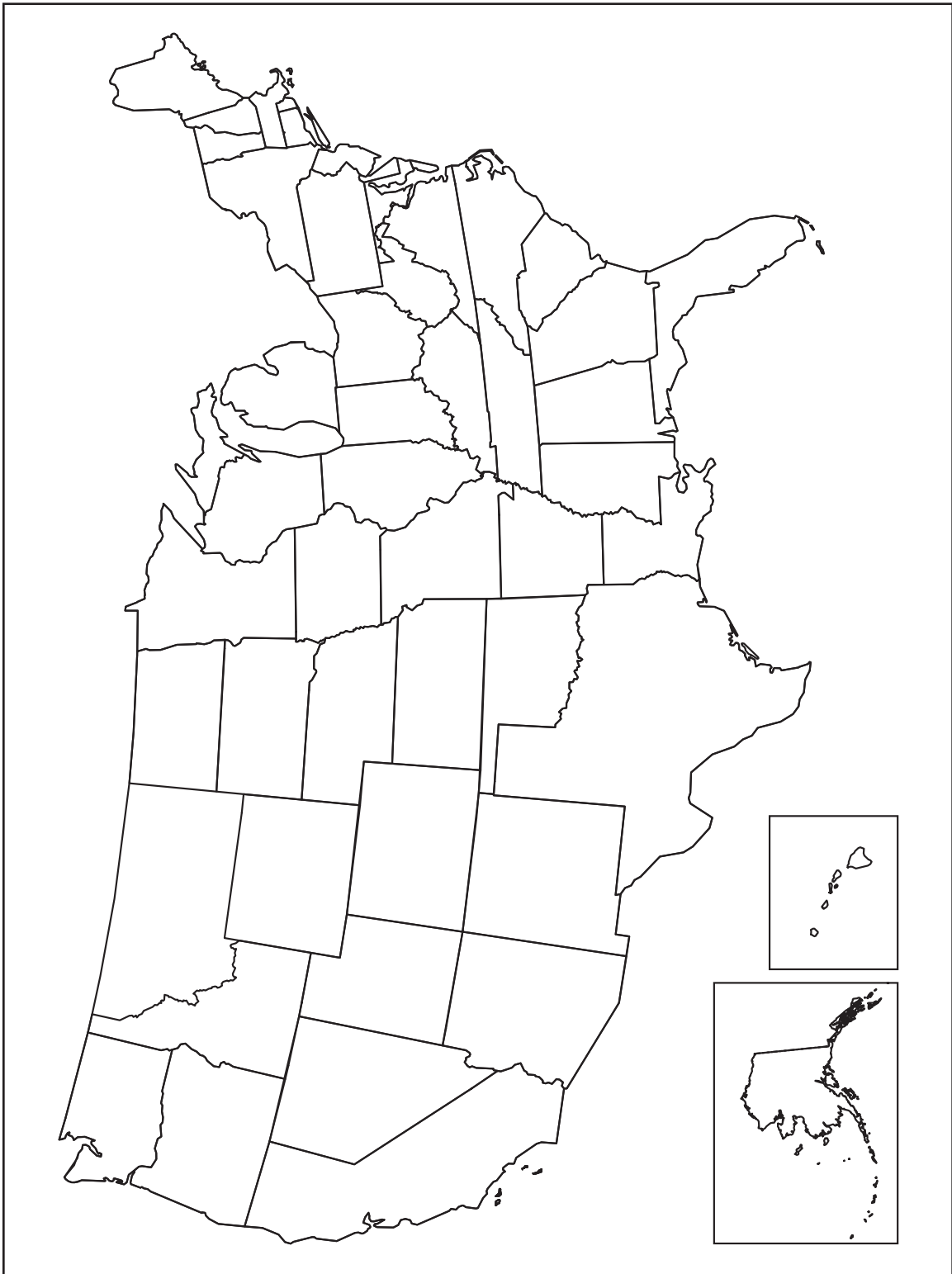
14. What does this document tell you about the United States and the world at this time? (*Answers will vary but may include the following: The United States is expanding and now has 37 states, up from the original 13. The number of foreigners listed shows that people from other countries were still coming to the United States. In general, the states with a smaller colored population are more likely to have a foreign population and vice versa. There were relatively more colored people in southern states than northern states.*)
15. Where can you find further information related to topics addressed in this document? (*Answers will vary but may include the following: They could refer to the full Statistical Atlas for additional information or the government’s Census website.*)

**Analyze**

16. How has the United States changed since this document was made? (*Answers will vary but some likely ones include the following: We now have 50 states. The population is much larger. The language we use to describe ourselves is different. We use more ethnic classifications. The size rankings of the states have changed. Indians—now called Native Americans—now have their own classification and all are counted.*)
17. How does the information depicted in this document foreshadow the future? (*Answers will vary but may include the following: It shows the language and thinking of how populations were segregated at the time this atlas was created. These divisions among African Americans, whites, and the foreign born are still felt today.*)

## Handout 2: U.S. Map

Directions: In the map below, shade the 37 states in 1870 represented in the "Chart Showing the Principal Constituent Elements of the Population of Each State."



### Handout 3: Historical Inquiry (page 1 of 3)

Directions: Look at the U.S. Census Bureau data maps at the links on the next page. Choose one of the five maps and then answer the questions below based on that map.

#### Observe

1. What is the time period of this document?
2. What do you first notice about this document?
3. Describe what you see in this document.
4. What is (are) the source(s) of information for this document?
5. What does the legend (if there is one) tell you about this document?
6. Is there anything that does not look like it belongs in this document?

#### Reflect

7. Who was the audience for this document?
8. Why is this document important?
9. What did the author(s) intend to communicate with this document?
10. How might this document be biased?
11. What can you learn from examining this document?
12. Is there anything significant missing from this document?
13. Why was this document likely made?

#### Question

14. What does this document tell you about the United States and the world at this time?
15. Where can you find further information related to topics addressed in this document?

#### Analyze

16. How has the United States changed since this document was made?
17. How does the information depicted on this document foreshadow the future?

### Handout 3: Historical Inquiry (page 2 of 3)

#### Links

##### Foreign Born Population (Non-Citizen or Naturalized), Percent by State

[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=3757&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,places&vm=3757&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)

##### White (Non-Hispanic), Percent by State

[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,&vm=7389&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,&vm=7389&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)

##### Black or African American, Percent by State

[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=7381&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,places&vm=7381&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)

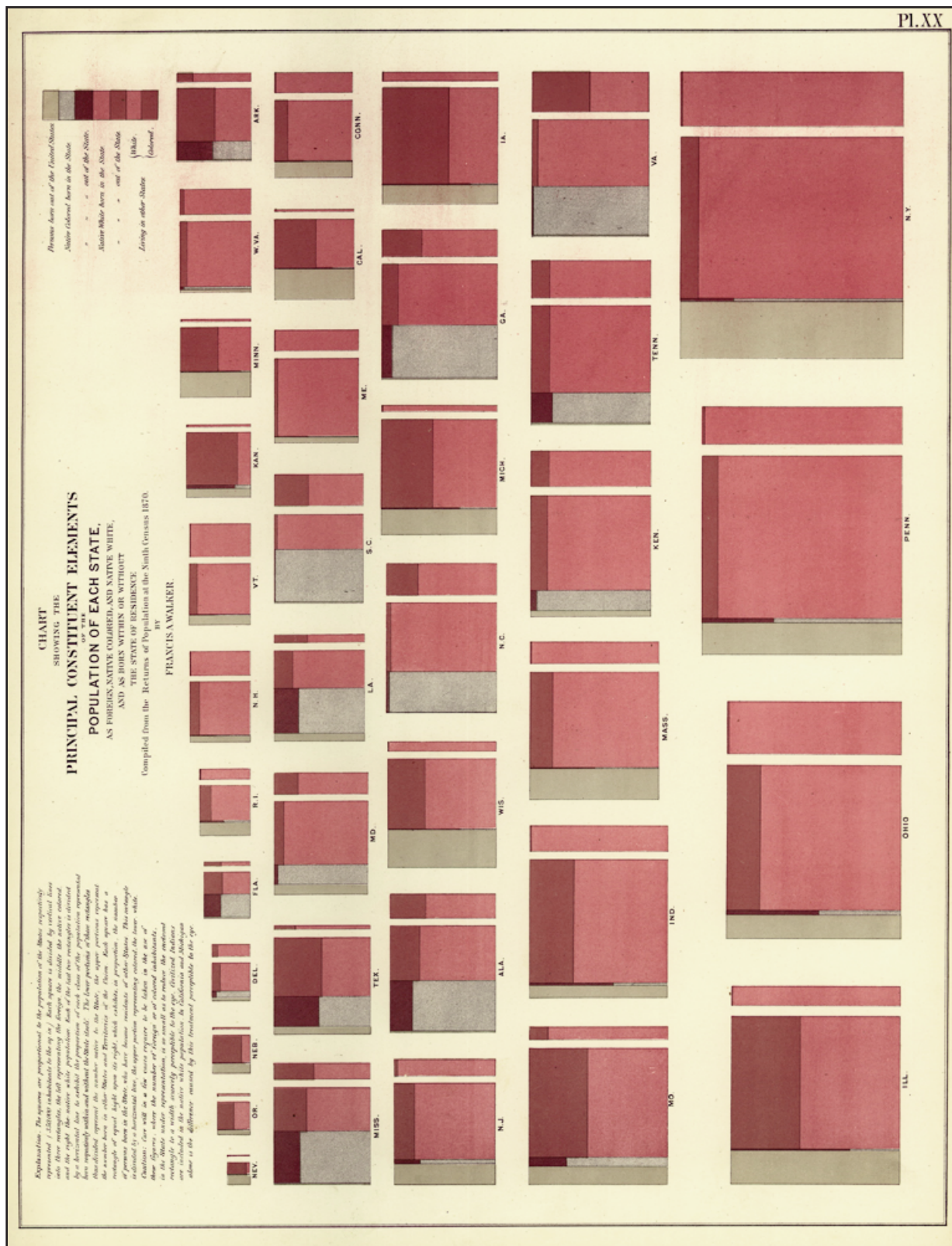
##### Asian, Percent by State

[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=7380&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,places&vm=7380&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)

##### Native American/Alaskan Native, Percent by State

[http://maps.communitycommons.org/viewer/?action=link\\_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st\\_hou,st\\_sen,us\\_cong,tracts,placebnd,counties,State,roads,places&vm=7384&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933](http://maps.communitycommons.org/viewer/?action=link_map&ids=ve,gray-base,7389,7390,3757,7381,7380,7384,water,MSA,zctas,schSec,schEL,st_hou,st_sen,us_cong,tracts,placebnd,counties,State,roads,places&vm=7384&vr=graybase,water,State,places&bbox=-14095008.019118562,2670585.0127684493,-7265818.16400959,6456969.645901933)

# Handout 3: Historical Inquiry (page 3 of 3)



## Standards and Benchmarks

### College, Career & Civic Life C3 Framework for Social Studies State Standards

#### Dimension 2, Applying Disciplinary Tools and Concepts

- **Historical Sources and Evidence, By the End of Grade 8**

D2.His.11.6-8. Use other historical sources to infer a plausible maker, date, place of origin, and intended audience for historical sources where this information is not easily identified.

D2.His.12.6-8. Use questions generated about multiple historical sources to identify further areas of inquiry and additional sources.

D2.His.13.6-8. Evaluate the relevancy and utility of a historical source based on information such as maker, date, place of origin, intended audience, and purpose.

- **Causation and Argumentation, By the End of Grade 8**

D2.His.14.6-8. Explain multiple causes and effects of events and developments in the past.

D2.His.15.6-8. Evaluate the relative influence of various causes of events and developments in the past.

D2.His.16.6-8. Organize applicable evidence into a coherent argument about the past.

- **Historical Sources and Evidence, By the End of Grade 12**

D2.His.11.9-12. Critique the usefulness of historical sources for a specific historical inquiry based on their maker, date, place of origin, intended audience, and purpose.

D2.His.12.9-12. Use questions generated about multiple historical sources to pursue further inquiry and investigate additional sources.

- **Causation and Argumentation, By the End of Grade 12**

D2.His.14.9-12. Analyze multiple and complex causes and effects of events in the past.

D2.His.15.9-12. Distinguish between long-term causes and triggering events in developing a historical argument.

D2.His.16.9-12. Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.