### ACTIVITY 13 Population Density



#### Objectives

- Read a population map.
- Locate areas with high and low population densities.

#### Materials

Political Desk Maps
 Social Studies Place Mats
 map markers

#### **Getting Started**

Introduce the lesson by writing **Population Density** on the board. Say:

- How many of you have heard the term population?
- *Population* usually means the total number of people in a specific place, such as a city or country.
- Population density is the number of people in a certain amount of space, such as a square mile.
- Today we will compare population densities.

#### Teaching

#### 1 Read a population map.

- a. Divide students into six groups. Distribute Political Desk Maps, Social Studies Place Mats, and map markers to each group.
- b. Have students turn to pages 44–45 of the atlas. Read the title question to the class. Ask a student to read the introduction aloud. Have other students read the captions and the fact box. Review the map, photos, and illustrations. Then say:
  - The colors on the map show different population densities. Which color shows 0 to 5 people per square mile? (yellow)
  - Which color shows 50 to 250 people per square mile? (orange)
  - The photos on pages 44–45 show areas with different population densities. Why do some areas have few people? (dry, cold, mountainous)
  - Which areas have the highest population density? (big cities and their suburbs)

# **2** Locate areas with high and low population densities.

 Remind students that population density is the number of people in a specific amount of space. Have students look at their United States Political Desk Maps. Then say:

- Give the United States Political Desk Map a title. Above the main map, write **Population Density**.
- Point to the Population map on pages 44–45 of the atlas. In the legend, underline with your finger the title of the map.
- The colors on the population map show different population densities. Find a state that is mostly light yellow. What is its population density? (0 to 5 people per square mile)
- On the Desk Map, find the same state. On this state, draw one person symbol no people.
- On the Population map, find a state that has mainly 5 to 50 people per square mile. What color is most of the state? (light orange)
- On the Desk Map, find the same state. On this state, draw two people symbols few people.
- On the Population map, find a state that is mostly dark orange. What is its population density? (50 to 250 people per square mile)
- On the Desk Map, on the same state, draw three people symbols 22 and write some people.
- On the Population map, find a state that mainly has over 250 people per square mile. What color is most of the state? (dark pink)
- On the main map, on that state, draw four people symbols ???? and write many people.
- **b.** Help students identify population patterns. Say:
  - The colors on the map make it easy to see population patterns. On your United States Political Desk Map, draw a wavy line along the 100°W line of longitude.
  - Look at the Population map on pages 44–45 of the atlas. Are there more places with high population density in the East or in the West? (East)
  - On the Desk Map, east of the line, write higher density.
  - West of the line, write lower density.
  - Population densities vary among states and within states. On the Desk Map, outline Montana and

Florida. Then find those states on the Population map in the atlas.

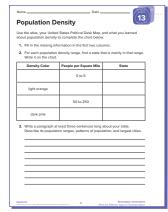
- Which is more densely populated, Montana or Florida? (Florida)
- On the Desk Map, outline Washington and Oregon. Then find both states on the population map. In these states, where are there more people—on the east side or the west side? (west side)
- On the Desk Map, outline Colorado. Then find it on the Population map. Look at the area of highest population density in Colorado.
- Big cities and their suburbs have the highest population density. On the Desk Map, outline the symbol for the largest city in Colorado.
- What is the largest city in the state? (Denver)
- Look at the legend of the Population map in the atlas. What is the population range for this city? (over 250 people)
- **c.** Discuss shifting population patterns. Have students look at their Social Studies Place Mats. Say:
  - On Side A, find the pie charts showing the urban and rural populations of the United States.
  - In general has the United States become more urban or rural over time? (urban)
  - On the Place Mat, draw a pie chart showing what you think the urban and rural populations of the United States will be in the year 2040.

#### Summarizing and Assessing

- 1. Distribute Activity Sheet 13, Population Density.
  - **a.** Tell students that they will use what they learned about population density to complete the activity sheet.
  - b. To help students write their paragraph, help them find your state on the Population map on pages 44–45 of the atlas and on the United States Political Desk Map.

#### Extending

**<u>CRITICAL THINKING</u>** Have students look for major mountains and deserts on the United States Physical Map. Then have them look at the population patterns in these areas. Have them do the same for the tundra or ice natural region.



**Activity Sheet 13** 



# **Population Density**

Use the atlas, your United States Political Desk Map, and what you learned about population density to complete the chart below.

- **1.** Fill in the missing information in the first two columns.
- **2.** For each population density range, find a state that is mainly in that range. Write it on the chart.

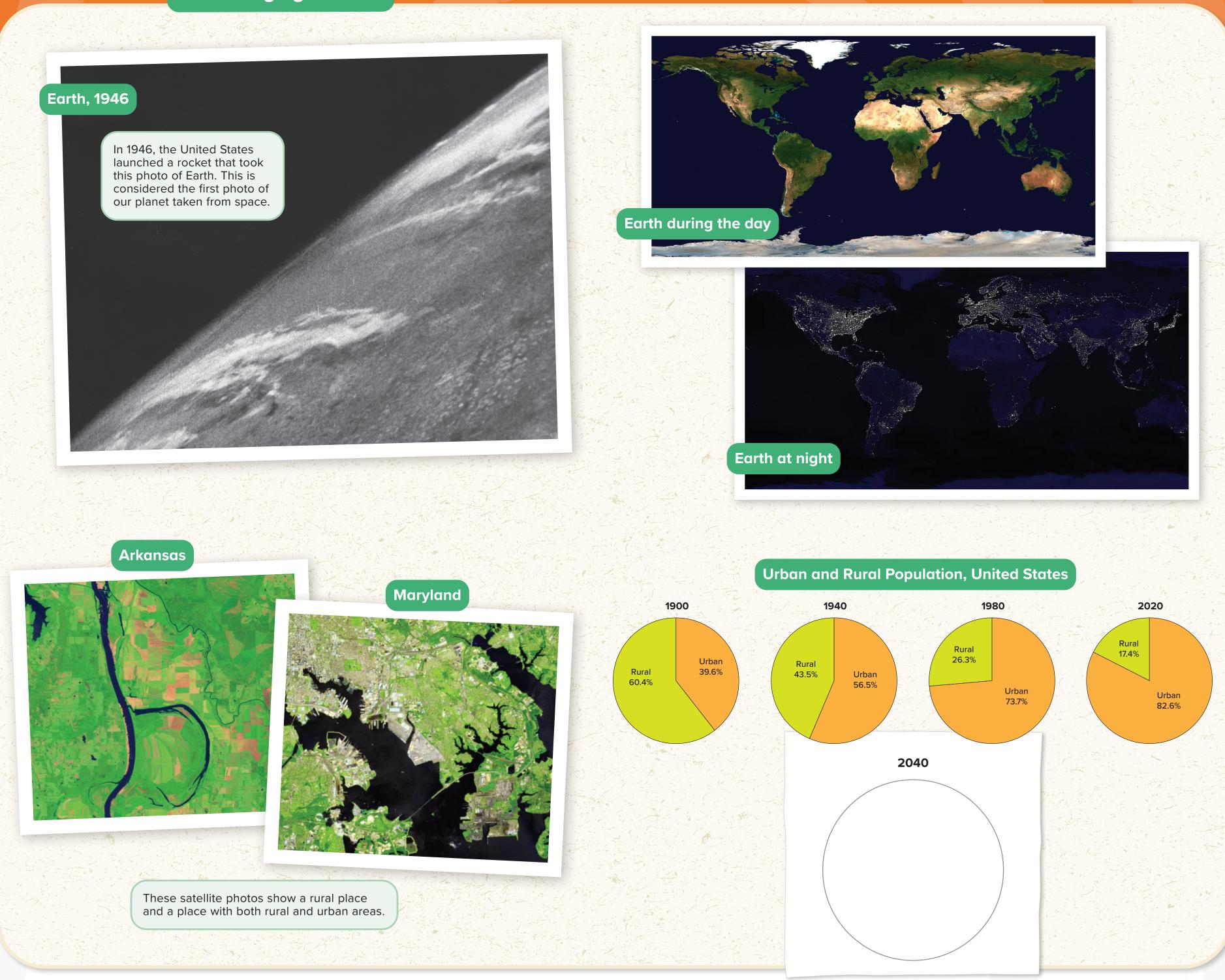
Density Color	People per Square Mile	State
	0 to 5	
light orange		
	50 to 250	
dark pink		

**3.** Write a paragraph at least three sentences long about your state. Describe its population ranges, patterns of population, and largest cities.

66

# A Changing World

# PLACEMAT



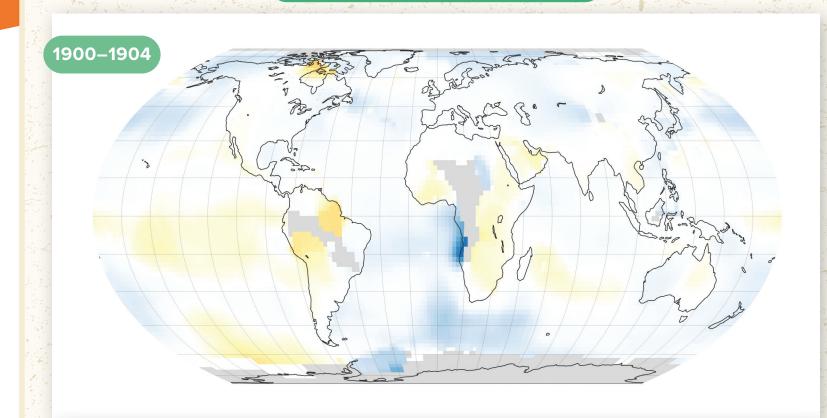
upper left: Courtesy of U.S. Army White Sands Missile Range/Johns Hopkins Applied Physics Laboratory; all other images courtesy of NASA's Earth Observatory.

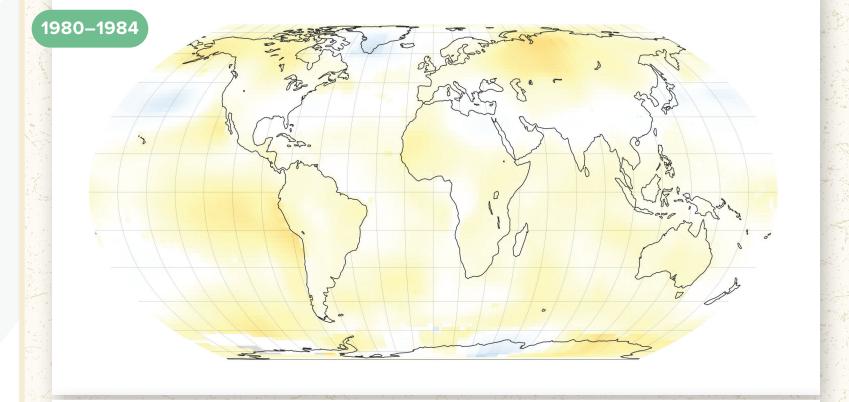
### NYSTROM

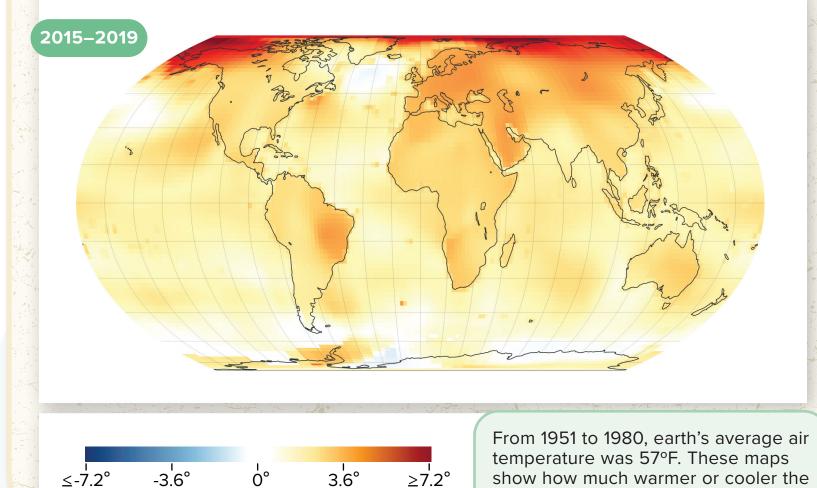
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## **Taking Action**

**Global Temperature Change** 







air was during other periods of time.

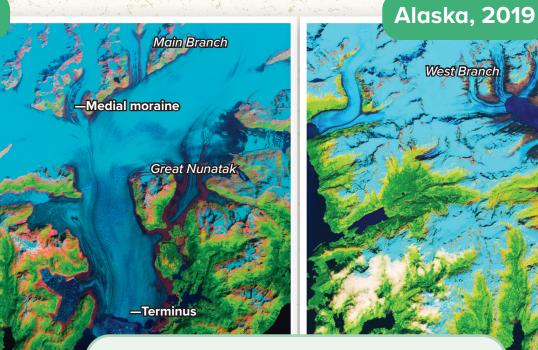
Alaska, 1986

I always look at art as a visual tool to bring people together. It's an easy way to get a message across, because people don't like to listen to what others are saying. But if you look at a visual piece, hear music or experience a piece of artwork, they contain symbols and messages that are universal to most people. Art is a key element to help movements. It brings people together on a common issue they're passionate about.

I would like people to know that youth can come up with innovative climate actions that reach people from all walks of life globally, including those who do not have access to the internet.



All images courtesy of NASA's Earth Observatory.



Satellite photos show the impact of rising temperatures in Alaska. The light blue color shows ice, while the dark blue shows water.

### **Youth Voices**

—Nadia Nazar

—Karida Niode

Older generations were able to enjoy and do whatever they wanted without worrying about climate refugees and extreme climate disasters. ... [But now] we see that the world around us is actually deteriorating, and we're not going to be able to live in a world that is clean and stable. That's why youth are rising up.

—Xiye Bastida Patrick

It is our future and world

—Chiara Sacchi

leaders should hear us.

