The Cultural Landscape
strengthens readers’ connection to geography through active, discovery-based learning
California's extended drought is stressing agriculture, which uses 80 percent of the state's distributed water. Homeowners and businesses in California have been required to make substantial cuts in their water usage. California farmers produce one-third of U.S. vegetables and two-thirds of fruits and nuts. It takes a lot of water to grow these fruits and vegetables. So if you are living in any of the 50 U.S. states, you are consuming California water indirectly through consuming produce. In fact, the average American consumes around 40 gallons of California water per day. Table 9-2 has examples of the amounts of California water that go into growing some fruits and vegetables.

### Table 9-2: Amount of Water Needed to Grow Selected Fruits and Vegetables in California

<table>
<thead>
<tr>
<th>Fruits and nuts</th>
<th>Gallons</th>
<th>Your produce consumption</th>
<th>Your water consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 apple, peach, pear, or plum, ½ melon</td>
<td>7.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 strawberries</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 almond</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 walnut</td>
<td>5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 grapes</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 lemon, orange, grapefruit, or clementine</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 avocado</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 broccoli or cauliflower floret</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lettuce, cabbage, spinach (salad portion)</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 carrot or celery stalk</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 slice tomato, onion, or potato</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What's Your Food and Agriculture Geography?

**Your California Water Consumption**

How much California water did you consume today in your fruits and vegetables?

1. Determine from Table 9-2 the quantities of the listed fruits and vegetables that you have consumed today (or another day specified for your class).

2. What was your total consumption of California water from eating produce?

3. How does your total consumption compare to the national average of 40 gallons?

4. What factors might account for having consumption that is higher or lower than the national average?

DEBATE IT! Immigration reform: Tougher controls or legal status?

Debate over authorized immigration centers on border security and on appropriateness of a path to legal status for unauthorized immigrants in the United States.

**TIGHTEN SECURITY AND DO NOT OFFER A PATH TO LEGAL STATUS**

- **THE WRONG MESSAGE.** People breaking the law by crossing the U.S. border without proper documentation sends the wrong message to people who obey the law.
- **ENCOURAGE OTHERS.** Rewarding people for illegal behavior will encourage others to enter without documents.
- **POOR SECURITY.** The border is not sufficiently secure, especially in small towns and rural areas.

**OFFER A PATH TO LEGAL STATUS; SECURITY IS ALREADY TIGHT ENOUGH**

- **IMPRactical.** It would be a practical impossibility for law enforcement officials to actually find the 11 million unauthorized immigrants.
- **ECONOMIC IMPACT.** Pulling unauthorized immigrants out of their jobs would cripple the U.S. economy.
- **AGENTS.** The numbers of border agents and deportations of unauthorized immigrants have doubled since 2000.
- **LAW-ABIDING.** Unauthorized immigrants are productive and otherwise law-abiding members of U.S. society.
SUSTAINABILITY & OUR ENVIRONMENT

Rising Oceans and the Future of Nauru

The sustainability of the world’s smallest island state, Nauru, as well other island microstates, is in danger due to rising ocean levels. Sea levels rose around 17 centimeters (6.7 inches) during the twentieth century. Scientists working for the United Nations forecast another rise of between 18 and 59 centimeters (between 7 and 23 inches). The rising oceans will submerge a large percentage of the tiny island. Another Pacific Ocean microstate, Kiribati, a collection of approximately 32 small islands, has already witnessed the disappearance of two of its islands under rising oceans.

Nauru, Kiribati, and other Pacific island microstates are atolls—that is, islands made of coral reefs (Figure 8-16). A coral is a small sedentary marine animal that has a horny or calcareous skeleton. Corals form colonies, and the skeletons build up to form coral reefs. Coral is very fragile. Humans are attracted to coral for its beauty and the diversity of species it supports, but handling coral can kill it. The threat of climate change to the sustainability coral is especially severe. Coral stays alive in only a narrow range of ocean temperatures, between 23°C and 25°C (between 73°F and 77°F), so global warming threatens the ecology of the portions of the islands that remain above sea level.

SUSTAINABILITY & OUR ENVIRONMENT

Remanufacturing

Remanufacturing contributes to a more sustainable environment. The principal challenge is to increase its economic sustainability.

- **Paper.** Most types of paper can be recycled. Newspapers have been recycled profitably for decades, and recycling of other paper, especially computer paper, is growing. Rapid increases in virgin paper pulp prices have stimulated construction of more plants capable of using waste paper. The key to recycling is collecting large quantities of clean, well-sorted, uncontaminated, dry paper.

- **Plastic.** The plastic industry has developed a system of numbers marked inside triangles. Symbols 2 (milk jugs), 4 (shopping bags), and 5 (such as yogurt containers) are considered to be safest for recycling. The plastics in symbols 3 (such as food wrap), 6 (Styrofoam), and 7 (such as iPad cases) may contain carcinogens. Symbol 1 (soda and water bottles) can allow bacteria to accumulate.

- **Aluminum.** The principal source of recycled aluminum is beverage containers. Aluminum cans began to replace glass bottles for beer during the 1950s and for soft drinks during the 1960s. Aluminum scrap is readily accepted for recycling, although other metals are rarely accepted.

- **Glass.** Glass can be used repeatedly with no loss in quality and is 100 percent recyclable. The process of creating new glass from old is extremely efficient, producing virtually no waste or unwanted by-products. Though unbroken clear glass is valuable, mixed-color glass is nearly worthless, and broken glass is hard to sort.

NEW! Sustainability & Our Environment relates the principal topics of human geography to overarching issues of economic, social, and environmental sustainability for our planet.
KEY ISSUE 2

Why Is Each Point on Earth Unique?

- Place: A Unique Location
- Region: A Unique Area
- Culture Regions

LEARNING OUTCOME 1.2.1
Identify the distinctive features of a place, including toponym, site, and situation.

PAUSE & REFLECT 1.2.1
What is the origin of the toponym of your hometown?

CHECK-IN KEY ISSUE 2

Why Is Each Point on Earth Unique?

- Location is identified through name, site, and situation.
- Regions can be formal, functional, or vernacular.
- Culture encompasses what people care about and what people take care of.

NEW! Check Ins conclude each section, summarizing the main points of each Key Issue.

NEW! Key Issues are summarized at the end of the chapter, followed by NEW! Thinking Geographically questions and NEW! Explore activities using Google Earth.

UPDATED! Key Issues highlight the four critical “big questions” around which each chapter is organized.

UPDATED! Learning Outcomes emphasize the skills and knowledge students should gain from each section.

UPDATED! Pause & Reflect questions allow students to check and apply their understanding as they read each section.

THINKING GEOGRAPHICALLY

3. What are elements of the site and situation of your hometown?
4. Can you name another place to which your hometown has strong connections?
5. What is an example of a feature that connects your town to another?

FIGURE 1-59 SITE AND SITUATION OF BOSTON
The site is Boston Harbor and several rivers. Logan Airport is an example of the connections found in Boston to other places.
**Visualizing Earth’s People & Places**

**FIGURE 1-24** SPATIAL ASSOCIATION IN BALTIMORE
(a) Income, (b) life expectancy at birth, (c) crime, (d) nonconforming liquor stores.

**FIGURE 8-39** REGIME TYPE, 2014
Most states are either democratic, autocratic, or anocratic. In a few “failed” states, such as Libya and South Sudan, government institutions have broken down because of civil war, extreme poverty, or natural disasters—or some combination of the three.

**FIGURE 3-46** IMMIGRANTS IN EUROPE
Africans trying to reach Italy are rescued by the Italian navy after their boat sunk trying to cross the Mediterranean Sea.

**FIGURE 10-36** WORLD TRADE ORGANIZATION PROTEST
Protestors outside the Department of Agriculture in the Philippines demonstrate during a speech delivered by the director of the World Trade Organization in 2015.

**NEW & REVISED!**
Cartography.
All maps have been thoroughly updated with current data and contemporary cartographic styles, for optimal spatial visualization and analysis.

**UPDATED!**
Continuous Learning
Before, During, and After Class

BEFORE CLASS
Mobile Media and Reading Assignments Ensure Students Come to Class Prepared.

Pre-Lecture Reading Quizzes are easy to customize & assign

NEW! Reading Questions ensure that students complete the assigned reading before class and stay on track with reading assignments. Reading Questions are 100% mobile ready and can be completed by students on mobile devices.

NEW! Dynamic Study Modules personalize each student's learning experience. Created to allow students to acquire knowledge on their own and be better prepared for class discussions and assessments, this mobile app is available for iOS and Android devices.

Pearson eText in MasteringGeography gives students access to the text whenever and wherever they can access the internet. eText features include:
- Now available on smartphones and tablets.
- Seamlessly integrated videos and other rich media.
- Fully accessible (screen-reader ready).
- Configurable reading settings, including resizable type and night reading mode.
- Instructor and student note-taking, highlighting, bookmarking, and search.
DURING CLASS
Learning Catalytics and Engaging Media

What has Professors and Students excited? Learning Catalytics, a ‘bring your own device’ student engagement, assessment, and classroom intelligence system, allows students to use their smartphone, tablet, or laptop to respond to questions in class. With Learning Catalytics, you can:

• Assess students in real-time using open ended question formats to uncover student misconceptions and adjust lecture accordingly.

• Automatically create groups for peer instruction based on student response patterns, to optimize discussion productivity.

“My students are so busy and engaged answering Learning Catalytics questions during lecture that they don’t have time for Facebook.”
Declan De Paor, Old Dominion University

Enrich Lecture with Dynamic Media
Teachers can incorporate dynamic media into lecture, such as Videos, MapMaster Interactive Maps, and Geoscience Animations.
AFTER CLASS

Easy to Assign, Customizable, Media-Rich, and Automatically Graded Assignments

**UPDATED!** MapMaster Interactive Map Activities are inspired by GIS, allowing students to layer various thematic maps to analyze spatial patterns and data at regional and global scales. This tool includes zoom and annotation functionality, with hundreds of map layers leveraging recent data from sources such as NOAA, NASA, USGS, United Nations, and the CIA.

**NEW!** Geography Videos from such sources as the BBC and The Financial Times are now included in addition to the videos from Television for the Environment’s Life and Earth Report series in MasteringGeography. Approximately 200 video clips for over 25 hours of video are available to students and teachers and MasteringGeography.

**NEW!** GeoVideo activities integrate BBC videos at the end of chapters, encouraging students to log into MasteringGeography to view the videos and answer questions. These video clips can also be assigned for credit.

Human Impacts on Water Resources

Humans use water for many purposes, including manufacturing, agriculture, and recreation, as well as direct consumption. Access to fresh clean water is not possible for many people in the world. The poor condition of infrastructure restricts access to fresh clean water for some people. Other people live in arid locations.

1. What are the principal uses of water resources other than direct consumption by people and animals?
2. Given that the world’s total supply of water is constant, how might we increase the world’s supply of water suitable as a resource for use by people?
3. What steps, if any, are being taken in your school or community to conserve water?
**NEW! GeoTutors.** Highly visual coaching items with hints and specific wrong answer feedback help students master the toughest topics in geography.

**UPDATED!** Encounter (Google Earth) activities provide rich, interactive explorations of human geography concepts, allowing students to visualize spatial data and tour distant places on the virtual globe.

**Map Projections**
Interactive tutorial media helps reinforce and remediate students on the basic yet challenging introductory map projection concepts.