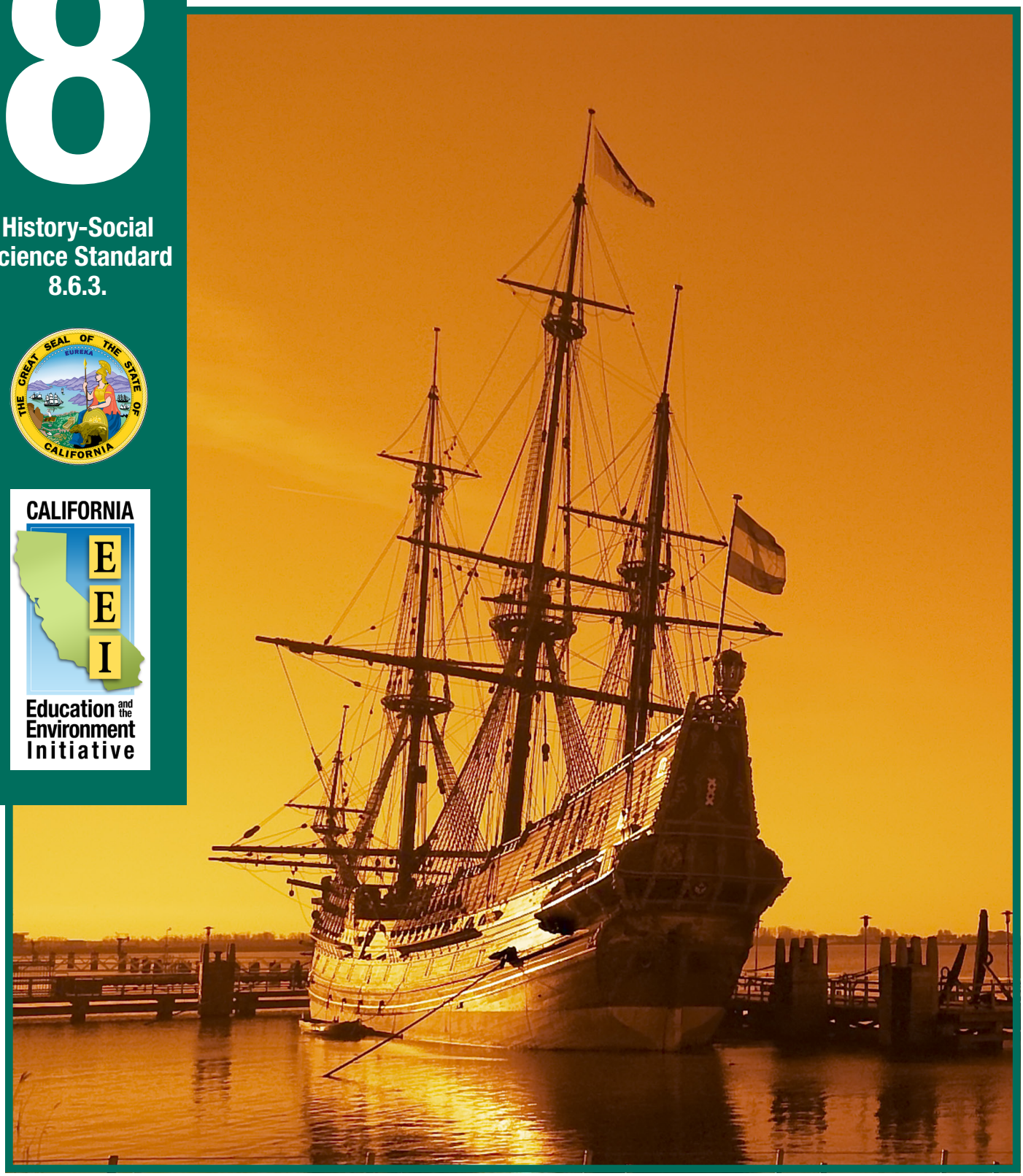
8

History-Social Science Standard 8.6.3.

Student Workbook

California Education and the Environment Initiative



America Grows

California Education and the Environment Initiative

Approved by the California State Board of Education, 2010

The Education and the Environment Curriculum is a cooperative endeavor of the following entities:

California Environmental Protection Agency
California Natural Resources Agency
Office of the Secretary of Education
California State Board of Education
California Department of Education
California Integrated Waste Management Board

Key Leadership for the Education and Environment Initiative:

Linda Adams, Secretary, California Environmental Protection Agency
Patty Zwarts, Deputy Secretary for Policy and Legislation, California Environmental Protection Agency
Andrea Lewis, Assistant Secretary for Education and Quality Programs, California Environmental Protection Agency
Mark Leary, Executive Director, California Integrated Waste Management Board
Mindy Fox, Director, Office of Education and the Environment, California Integrated Waste Management Board

Key Partners:

Special thanks to **Heal the Bay,** sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the **National Geographic Society** under a contract with the State of California.

Office of Education and the Environment
1001 I Street • Sacramento, California 95812 • (916) 341-6769
http://www.calepa.ca.gov/Education/EEI/

© Copyright 2010 by the State of California
All rights reserved.
This publication, or parts thereof, may not be used or reproduced without permission from the Office of Education and the Environment.

These materials may be reproduced by teachers for educational purposes.

Contents

Lesson 1 In Search of Ecosystem Goods and Ecosystem Services

Key Unit Vocabulary 2

The Push and Pull of Basque Migration 3

Lesson 2 Blowin' in the Wind

Comparing Two Natural Disasters 4

Effects of Natural Systems on Human Social Systems 5

Lesson 3 Across the Sea: U.S. Cities in the 1800s

City Planning Pages 7

City Planners' Meeting Agenda 9

City Planners' Notes 10

Growing Cities 12

Lesson 4 Settling In and Moving On

Go West 15

Census: The periodic counting of a population and recording of age, gender, and other data.

City planner: A person who develops long- and short-term plans to use land and provide resources for the operation and growth of communities.

Climate: The prevailing, average weather conditions of a particular area over time.

Emigrate: To leave a place, usually a native country, to travel to and settle in another country.

Epidemic: A widespread, contagious disease.

Famine: A severe shortage of food that results in widespread hunger and starvation.

Immigrate: To move to a new country or region in order to settle there.

Migrate: To move from one location to another in order to live in the new place.

Natural resources: Materials such as water, minerals, energy, and soil, that people use from nature and natural systems.

Natural system: The interacting components, processes, and cycles within an environment, as well as the interactions among organisms and their environment.

Pollute: To contaminate the environment (including air, water, and soil) with chemicals or other damaging materials.

Settle: To populate a community or area.

Wastewater: Water that may contain contaminants as a result of use by humans in their homes, businesses, and industries.

Name: _____

Instructions: Use the dictionary to define each of the following words.

emigrate: _____

_____

immigrate: _____

_____

migrate: _____

_____

Instructions: List three reasons that the Basque people emigrated from Europe to other parts of the world.

_____

_____

_____

Instructions: Use the **Basque Region Map**, **Argentina Map**, and the **View from Space** wall map to identify some physical features of these three areas, then answer the question below.

Basque Region: _____

_____

Argentina: _____

_____

California: _____

_____

Why do you think many Basque immigrated to California?

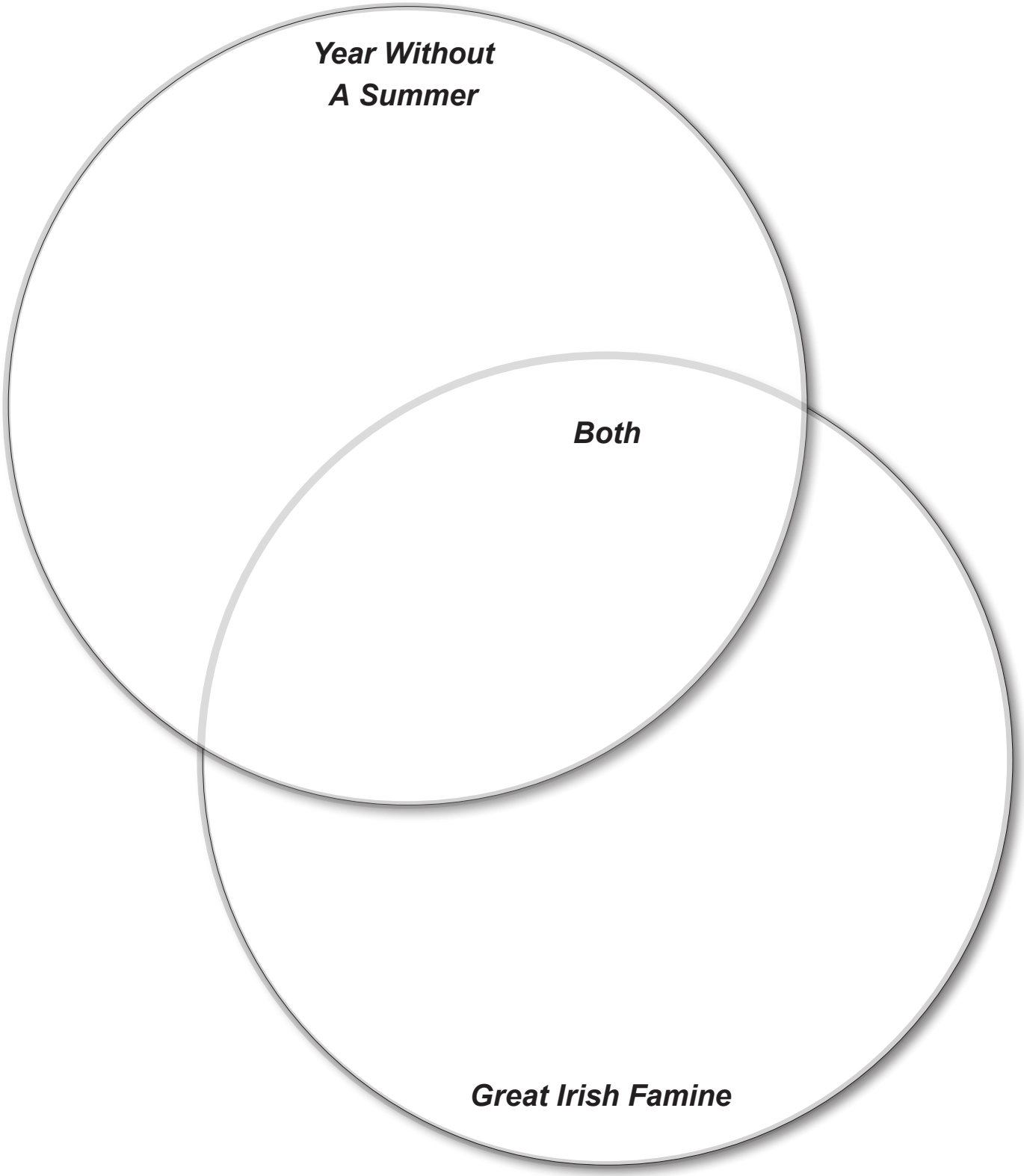
_____

_____

_____

Name: _____

Instructions: Fill in the diagram below with the similarities and differences between these two natural events and their effects on the environment of Europe in the 1800s.



Name: _____

Instructions: Select the best answer and circle the correct letter. (2 points each)

1. Volcanoes in Indonesia were the cause of Northern Europe's _____.
   a. Year Without a Winter
   b. Year Without a Summer
   c. Year of the Potato Famine
   d. Year of the Potato Fungus

2. What part of the natural system was blocked by ash in the upper atmosphere?
   a. sunlight
   b. fresh water
   c. grasses and crops
   d. rain and floods

3. How did this change in the natural system threaten Northern Europe's plant and animal life?
   a. Temperatures got warmer.
   b. Wildfires produced ash and soot, blocking the Sun's warmth.
   c. The weather became extremely cold, rainy, and damp.
   d. Riots broke out against the government.

4. The ecosystem good or ecosystem service most affected by the change of seasons in Northern Europe was _____.
   a. the number of fish in the lakes
   b. the crops that farmers could grow
   c. the space available to grow potatoes
   d. the people living in the cities

5. The change to Ireland's agricultural system in 1845 was caused by _____.
   a. a disease called famine fever
   b. the "Year Without a Summer"
   c. a fungus blown to Ireland on the wind
   d. the Revolution of 1845

Name: _____

6. The ecosystem good or ecosystem service most affected in Ireland during 1845 and 1847 was _____.
   a. clean air
   b. space for farms
   c. butter
   d. food

7. Changes in the goods and services in Europe caused people to _____.
   a. go hungry
   b. get ill
   c. be unable to make an income
   d. All of the above.

8. Most of the people in Northern Europe during the 1880s had jobs in which industry?
   a. agriculture
   b. mining
   c. sailing
   d. banking

9. Famine results in _____.
   a. reliance on potatoes as a staple food
   b. global climate change
   c. widespread starvation
   d. growth in agriculture

10. What did many people in Ireland and other parts of Europe choose to do to survive the "Year Without a Summer" and the "Great Irish Famine"?
    a. start a revolution
    b. emigrate to another country
    c. grow a different kind of potato
    d. All of the above.

Name: _____

Instructions: As a city planner, the mayor has asked you to explain how your city has changed. You will make your presentation at a City Planners' Meeting in Washington, D.C. President Garfield will attend.

Answer the following questions to help your group prepare notes for the meeting.

Use the information in the **Student Edition** to answer the four questions below.

Name of your city: _____

Dates of your maps: _____ and _____

1. Describe the natural system (ecosystem) in which your city is built.

_____

_____

_____

2. What major changes in your city have taken place during the past 30 years (1850–1880)?

_____

_____

_____

_____

_____

_____

_____

3. How have changes in the city affected parts of the natural system (ecosystem)?

_____

_____

_____

_____

_____

Name: _____

4. What specifically caused changes to these parts of the natural system?

Instructions: Have one person in your group read aloud the **City Facts** for the city you are studying. Use information from the article to answer the next three questions.

5. What was a major city problem regarding natural resources during the 1800s?

6. What did city leaders and planners do to address this problem?

7. Did their actions solve the problem? Why or why not?

Name: _____

President Garfield welcomes you to the 1881 City Planners' Meeting in Washington, D.C. Your teams have been asked to represent America's four largest cities at the meeting. Each team will share information with the other cities and learn about the new ideas and creative problem solving going on in our growing nation.

Today, each of your groups must report on what is happening in your city. Specifically, in five minutes or less, answer the following questions:

- Where is your city located, and what natural resources does it have?
- What has been happening to the population of your city recently?
- What resource or resources are in "high demand" by the population?
- What problems has your city faced in getting these resources?
- What has your city done to solve the problems?

After your presentation, the other cities' planners will have two minutes to ask your team questions about your city.

You may use any notes or visual aids you wish during your presentation.

Presentation Order:

1. City Planners from Chicago (established 1833)
2. City Planners from Philadelphia (established 1701)
3. City Planners from New York (established 1664)
4. City Planners from Boston (established 1630)

While in the Audience:

- Listen to your classmates' presentations and take notes.
- Ask good follow-up questions to make sure you understand each city's story.

Name: _____

City Planner for: _____

Instructions: Use the spaces below to take notes on the other three cities' presentations. (You will need your notes to help you complete a homework assignment.)

City: _____

Location: _____

Natural resources: _____

Population: _____

Resource(s) in "high-demand:" _____

Problem(s): _____

Solution(s): _____

City: _____

Location: _____

Natural resources: _____

Population: _____

Resource(s) in "high-demand:" _____

Problem(s): _____

Solution(s): _____

Name: _____

City: _____

Location: _____

Natural resources: _____

Population: _____

Resource(s) in "high-demand:" _____

Problem(s): _____

Solution(s): _____

Name: _____

Instructions: Select the best answer and circle the correct letter. (2 points each)

1. The population of the United States increased greatly up to 1850, in large part due to _____.
   a. better health of its "native-born" people
   b. the United States Census
   c. immigration from Northern Europe
   d. migration to the western United States

2. When the number of people in a city grew larger than the number of houses, people first _____.
   a. cleared more land for houses
   b. built skyscrapers
   c. drained wetlands and lakes
   d. brought livestock into the city

3. Overcrowding in the cities led to _____.
   a. a lack of resources
   b. epidemics
   c. problems disposing of sewage
   d. All of the above.

4. Clean water in U.S. cities in the early 1800s was supplied by _____.
   a. natural reservoirs like rivers, streams, and aquifers
   b. human-made wells and waterworks
   c. Both of the above.
   d. None of the above.

5. Which city was built on a swamp because it offered settlers plenty of fresh water?
   a. Chicago
   b. New York
   c. Philadelphia
   d. Boston

6. Besides drinking, cooking, and cleaning, water in the cities was (and is) used for _____.
   a. waterworks and damming rivers
   b. flooding towns and waterworks
   c. removing waste and waterworks
   d. removing waste and flooding towns

7. The increase in the cities' populations in the 1800s caused the clean water sources of the cities to _____.
   a. catch fire
   b. become limited
   c. turn into wetlands
   d. All of the above.

8. When natural waterways became contaminated by sewage, the cities _____.
   a. used them to put out fires
   b. asked people to drink from them
   c. drained them to prevent disease
   d. All of the above.

9. As cities improved their supplies of clean water _____.
   a. people migrated to the west
   b. the population of the cities increased
   c. more fires broke out
   d. fewer businesses survived

10. What was the biggest problem for city planners in the 1800s?
    a. the number of firefighters in the cities
    b. where to build parks
    c. immigration from Europe
    d. supplying resources to the growing population

Instructions: Use the information from the lesson to answer the questions below. (10 points each)

11. In general, how did the large number of immigrants affect natural systems and their natural resources in the four cities studied?

_____

_____

_____

_____

_____

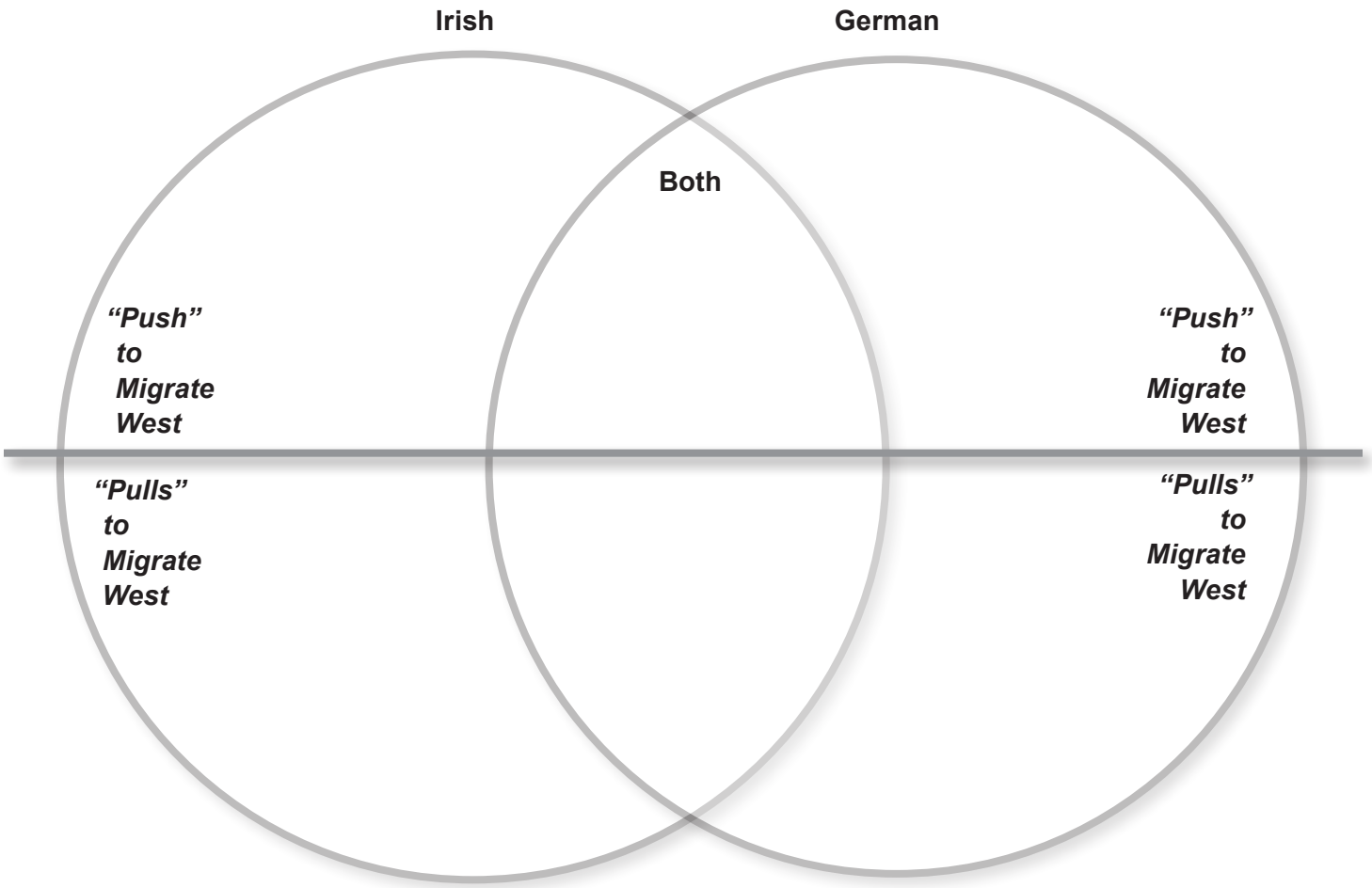
_____

Name: _____

12. In your opinion, which city solved their resource problem in the best way? Give reasons to support your answer.

Name: _____

Instructions: Use the diagram below to describe the "pushes" and "pulls" of the Irish and German migration across the United States in the 1800s.



California Education and the Environment Initiative

Printed on post-consumer recycled paper