



Lesson Title: Where Are California's Commodities Produced?

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Grade Level(s): 4

Time/Duration: 4-5 40-minute sessions (1-2 for direct instruction with 2 additional sessions for research, and 1 session for group presentations.)

Context for Lesson: With over 24 million acres of land dedicated to crops and livestock, California is the number one agricultural producing state in the United States and the fifth largest producer in the world. California agricultural exports totaled **\$22.5 billion in 2021**, an increase of 7.0 percent from 2020. (California Department of Food and Agriculture (<https://www.cdfa.ca.gov/Statistics/>))

This lesson and its accompanying activity affords students the opportunity to take a deeper dive into answering the question *How is land organized?*

Goals and Objectives

Using the appropriate CGA CA atlas maps:

- Students will identify and locate the CA regions that produce one of the state's leading agricultural commodities.
- Students will describe and summarize (orally and in writing) the physical geography and climate of the commodity's production region(s).

Learning Targets (standard, theme, skill, competency, etc.)

- **H/SS Standard 4.4.6:** Describe the development and locations of new industries since the turn of the century, such as the aerospace industry, electronics industry, large-scale commercial agriculture and irrigation projects, the oil and automobile industries, communications and defense industries, and important trade links with the Pacific Basin.
- **Historical and Social Sciences Analysis Skills**
 - **Chronological and Spatial Thinking**
 - Students use map and globe skills to determine the absolute locations of places and interpret information available through a map's or globe's legend, scale, and symbolic representations.
 - Students judge the significance of the relative location of a place (e.g., proximity to a harbor, on trade routes) and analyze how relative advantages or disadvantages can change over time.
 - **Research, Evidence, and Point of View**
 - Students pose relevant questions about events they encounter in historical documents, eyewitness accounts,

oral histories, letters, diaries, artifacts, photographs, maps, artworks, and architecture.

- **Historical Interpretation**

- Students conduct cost-benefit analyses of historical and current events.

- **Instructional Strategies:**

- Setting objectives and providing feedback
- Reinforcing effort and providing recognition
- Summarizing and note taking
- Cooperative learning
- Cues, questions, and advance organizers

- **Required Background**

- Teachers:
 - Understanding of the vocabulary *commodity* and *yield*.
 - Familiar with the commodity and its background information used for instruction and guided practice (Use one of the commodities from [Learn About Ag](#) website).
- Students:
 - Basic map reading skills and knowledge of the regions of California
 - Collaborative group skills

Evidence of Student Learning (assessments)
<ul style="list-style-type: none">● Commodity Data Collection Sheet● <i>Where Are California Commodities Produced?</i> Rubric<ul style="list-style-type: none">○ Provide an opportunity for students to reflect on the development of their understanding, and use of these skills on their individual rubric sheet (See bottom section of the rubric).

Instructions for Learning Activities
<p>Direct Instruction</p> <ol style="list-style-type: none">1. Display a brainstorm chart and sample or pictures of sample commodity (strawberries).2. Introduce standard and objectives from the lesson.3. Ask students what they know about a sample commodity and write comments on chart paper/lined paper for the graphic organizer.4. Explain that strawberries are something that are bought and sold, or a <i>commodity</i>. The berries produced to be sold/bought can also be called the <i>yield</i>.

5. Looking at the CA Leading Producers map (page and the labeled county map transparency, point out unique features and have students locate the leading counties for that commodity.
6. Record the information on the Commodity Data Collection Sheet.
7. Look at the Physiographic Regions map of CA (page 13) and determine in which region this commodity thrives and add this information to the Commodity Data Collection Sheet.
8. Look at the Urban Areas and Agricultural Lands map (page 36). Try to determine whether the land is predominantly urban, agricultural, or other in nature. Add this information to the Commodity Data Collection Sheet.
9. Red the Temperature maps (pages 14 and 15) with the class and record temperature information on the data sheet.
10. Read Precipitation map (page 17) with class, pointing out the station location portion of the Climographs and Elevation Profiles (page 16) to use as an approximate example.
11. Provide export information for strawberries to be added to the fact sheet.

Guided Practice

12. Give table groups a new sample commodity, a Commodity Data Collection Sheet, a commodity fact sheet to use with their atlases for research.
13. Direct table groups to use their maps and fact sheets to generate a commodity summary for the sample.
14. After 10-15 minutes, call on groups to share information from their tables.

Independent Practice

15. Pairs of students will now choose their own commodity to research from the Agricultural Products map (page 37) or from the *Learn About Ag Fact Sheets* set.
16. Once pairs of students have chosen their commodity, explain that they will complete a new Commodity Data Collection Sheet and County map that summarizes what they learned from their research.
17. Review elements of the assessment rubric with students, so they will be aware of the levels of expectation.
18. Set a deadline for teamwork to be completed and ready to share.

Closure

Review concepts and lesson progression. Answer any questions posed.

On the due date for Commodity Data Collection Sheet and map, have students share and display their work.

Extension Activity:

After all work is shared and posted in the classroom, create a new map that shows all the counties that contribute to agricultural production in California. Which counties are missing? What do they contribute to California's economy? What is their *commodity*? What kind of themed map could you create to show their contribution to California? Which CA atlas maps (and their data) can you use, or create, to support your work?

Teacher Reflection

- Which themes need additional support?
- Where can I add clarification for these points in the next lesson?
- Based on rubric scores, what patterns for remediation become apparent?

Resources and Materials

Instructional Materials

- California County map-1 per student /team
- Chart paper for commodity brainstorm
- Vocabulary chart for commodity and yield
- commodity samples/pictures
- Commodity Data Collection Form
- Blank CA County map
- *Commodity Fact Sheet* for specific commodities (e.g. Almonds, Milk & Cream, Grapes, etc.) from Learn About Ag website
- Assessment rubric
- pencils

Resources

- *California: A Changing State Atlas* (Second Edition)-1 for every two students, using the following specific maps:
 - o Agricultural Products, 2019 (page 37)
 - o Physiographic Regions (page 13)
 - o Urban and Agricultural Lands (Page 36)
 - o Minimum January Temperatures (page 14)
 - o Maximum July Temperatures (page 15)

- o Climographs and Elevation Profiles (page 16)
 - o Annual Precipitation (page 17)
 - o Agricultural Exports of California and the Top 15 Importing Countries, 2018 (Page 38)
 - o California and the World: Leading Export Markets (Page 39)
- If students choose Almonds as their commodity.***
- CA County transparency overlay
 - Internet access for research
 - o <https://learnaboutag.org/resources/fact/> (Commodity Fact Sheets home page)
 - o home website for chosen CA commodity

Commodity Data Collection Sheet for _____					
Leading Counties Producing this Commodity	Physiographic Region	Majority of land in this county is urban, agricultural, undefined	Minimum January Temperature	Maximum July Temperature	Annual Precipitation

Advantages

Challenges

_____ % of this commodity is exported to the following countries:

Other interesting information

“Where Are California’s Commodities Produced?” Rubric

Score	4	3	2	1
Geography Content	Uses and cites more than two appropriate maps and reference materials. Synthesizes the above material to provide an accurate interpretation of geographic content.	Uses and cites at least two appropriate maps and reference materials. Synthesizes the above materials to provide an adequate interpretation of geographic content.	Uses and cites a single source. Synthesizes the above material to provide an interpretation of geographic content.	Uses reference materials, but fails to cite sources. Synthesizes the above materials to provide an accurate interpretation of geographic content.
Speaking	Speaker makes an excellent presentation using appropriate volume, rate and articulation.	Speaker makes a good presentation using appropriate volume, rate, and articulation.	Speaker makes a minimal presentation using appropriate volume, rate, and articulation.	Speaker makes a poor presentation using appropriate volume, rate, and articulation.

Student Reflections

Before the lesson I ...

Now I ...

I’d like to learn more about ...

Teacher Reflections



