

Lesson 5: New Industries in California

Focus Question:

How have each of the following industries helped California become an agricultural and industrial power – aerospace, electronics, commercial agriculture, oil and automobile, communication and defense, and entertainment?

Activity # 1 Development of New Industries in California

Preparation: : Using a document camera, a transparency or large butcher paper chart, display a copy of the graphic organizer *Development of New Industries in California (Since the turn of the 20th Century)* (**Handout # 5.1**). Duplicate a copy for each student.

Development of New Industries in California (Since the turn of the 20th Century)

How did these industries help California become an agricultural and industrial power?

	Location	When? Key Dates	Key People	Why? (Cause)	Impact? (Effect)
Aerospace					
Electronics (Technology)					
Large-scale Commercial Agriculture					
Oil and Automobile					
Communications and Defense					
Entertainment					

Discuss what the students already know about the types of industries listed. Review some of the Startling Statements presented earlier in the unit. Record the information from the fact statements into the proper category on the organizer. Ask if any of the students know someone who is employed by a company in one of these industries? Ask, “How can we find out more information about these industries to add more information to the organizer?”

Conducting Research

Divide students into six groups, one for each of the industries. (Note: An alternative is to select one industry, such as agriculture, for the entire class to research together.) Provide them with a variety of resources related to their topic.

Conduct a textbook walk and a gallery walk using available resources. Encourage students to find additional resources, including appropriate web sites. Refer to the SCORE website <http://score.rims.k12.ca.us/> for Grade 4, Modern California.

It is helpful if students identify one or two major companies to research within their industry. A business letter may be sent to each company requesting information about the company and its history.

Activity # 2 Cause and Effect

Ask students why they think farming or agriculture has been so successful in California. What is it about California that has helped the industry be so successful? Record their responses in the “cause” box. Some sample responses have been recorded.

CAUSE EFFECT

- Water projects made agriculture possible in more areas of California.
- The favorable climate and long growing season enables California farmers to produce many crops, some of which are grown exclusively in California.
- Railroads allowed farmers to ship their products to new markets.
- For more than 50 years, California has been the nations’ #1 farming state.

A “Sample” of cause and effect questions:

- How do you think the different industries we are studying helped California become an agricultural and industrial power? Why were these industries so successful in California rather than in certain other parts of the nation? How does being in California affect each of these industries? Is each of these industries still important to California today? What other parts of the country are also important to these industries?
- How did immigrants help California become an agricultural and industrial power?
- Many newcomers continue to come to California. How does this affect the economy of California?
- How does the growth of California’s population affect the growth of other businesses?

Activity # 3 Write An Information Report - Development of New Industries in California (Since the turn of the 20th Century)

Prompt: Write an information report describing how one of the following industries helped California become an agricultural and industrial power: Aerospace, Electronics, Commercial Agriculture, Oil and Automobile, Defense and Communications, or Entertainment. (Handout # 5.2).

The research report should include details about:

- The area/location of California affected
- Dates when key events occurred
- Key people
- Why the changes occurred (cause)
- Impact of the change (effect)

The research report should:

- Frame a central question
- Include facts and details supported by research
- Show the significance of the topic in history
- Draw from more than one source of information (e.g., speakers, books, newspapers, media sources)
- Link the topic to today

Rubric

Indicator: Research, Evidence and Point of View

Indicator: Historical Interpretation and Analysis of Significance

Indicator: Supports the Topic with Accurate Examples

Recommended Correlation: Information Report Writing Rubric and Literacy Unit 7

Students should revise selected drafts to improve coherence and progression by adding, deleting, combining and rearranging text.

Activity # 4 Information Presentation - Development of New Industries in California (Since the turn of the 20th Century)

Standard 4.4 Make an Information Presentation on the Development of a New Industry in California since the turn of the 20th Century (Handout # 5.3)

Prompt: Present major ideas and supporting evidence describing how one of the following industries helped California become an agricultural and industrial power: Aerospace, Electronics, Commercial Agriculture, Oil and Automobile, Defense and Communications, or Entertainment.

The information presentation should include details about:

- The area/location of California affected
- Dates when key events occurred
- Causes of the changes (Why the changes occurred)
- Effect (Impact) of the change
- Key people

The presentation should:

- Frame a central question
- Include facts and details supported by research
- Draw from more than one source of information (e.g., speakers, books, newspapers, media sources)
- Show the significance of the topic in history
- Link the topic to today
- Present effective introductions and conclusions that guide and inform the listener's understanding of key ideas
- Emphasize points to assist the listener/viewer in following ideas
- Use appropriate volume, pitch, phrasing, pace and gestures expressively to communicate meaning
- Draw from more than one source of information

Rubric

Indicator: Research, Evidence and Point of View

Indicator: Historical Interpretation and Analysis of Significance

Indicator: Supports the Topic with Accurate Examples

Recommended Correlation: Grade 4 Listening and Speaking Rubric

Activity # 5 Biographical-Sketch of a Prominent Individuals of the 20th Century Who Helped California Grow to be an Agricultural and Industrial Power

Prompt: From the list of people provided by your teacher, select one person to research and write a biographic sketch that tells the story of the person’s life and accomplishments as it relates to the growth of California as an agricultural and industrial power.

Rubric

Indicator: Research, Evidence and Point of View

Indicator: Historical Interpretation and Analysis of Significance

Indicator: Supports the Topic with Accurate Examples

Recommended Correlation: Information Report Writing Rubric and Literacy Unit 7

With students, review the graphic organizers developed during the unit to identify some of the prominent individuals of 20th century California. Have each student select one person to research and write a brief biographic sketch that tells the story of the person’s life and accomplishments as it relates to the growth of California as an agricultural and industrial power.

Key People to Research (Refer to Handout # 5.4 for the following list.)

If desired, duplicate the list for the students. Add names as appropriate.)

Water

- William Mulholland (engineer of Los Angeles Aqueduct in the early 1900s)
- George Chaffey (built a canal in 1901 to bring water from the Colorado River to the Imperial Valley.)

Great Depression and the Dust Bowl

- Woody Guthrie (singer and songwriter who wrote songs about the Great Depression)
- John Steinbeck (author who described the experiences of migrant workers in the novel *The Grapes of Wrath*)
- Dorothea Lange (Photographer known for her pictures of migrant workers and families during the Great Depression)

Agricultural and Industrial Growth of 20th Century California

Aerospace

- Howard Hughes (pilot and business leader in the aviation industry)
- Claude T. Ryan (builder of the plane named Spirit of St. Louis, that Charles Lindberg flew across the Atlantic in 1927)
- Glenn Martin (builder of California’s first airplane factory in Santa Ana in 1909)
- Chuck Yeager (Air Force test pilot who in 1947 flew faster than the speed of sound)
- Sally Ride (first woman astronaut from the United States who in 1983 flew in space on the space shuttle, *Challenger*)
- Allan, John K. and Malcolm Lockheed (founded an aviation company in the early 1900s)
- John L. Northrup (founded an aviation company in the early 1900s with the Lockheed brothers)

Defense

- Henry Kaiser (owned shipyards in California - built many of the ships used in World War II)

Oil and Automobiles

- Edward Doheney (discoverer of oil in 1893 in Huntington Beach)

Commercial Agriculture

- Eliza Tibbets and Luther Calvin Tibbets (growers whose seedless oranges in the late 1800s sparked the California citrus industry)
- Luther Burbank (agricultural scientist who mixed seeds from different kinds of plants to create new and better plants)
- Cesar Chavez (Labor leader and organizer of the United Farm Workers)
- George Shima (Japanese immigrant who was known as the “Potato King”)

Electronics and Technology

- Steven Jobs (began Apple Computers with Steve Wozniak in 1976 in Silicon Valley)

Entertainment Industry

- Louis B. Meyer,
- Walt Disney (creator of animated movies and builder of Disneyland in Anaheim)
- John Wayne (star of many Western movies)
- Ansel Adams (photographer known for his photographs of the West, including the Sierra Nevadas)
- Woodie Guthrie

Other Key People to Consider:

John Muir, NgPoon Chew, Marie Mason Potts, Tye Leung Schultz, Sylvia Stark, Domingo Ghirardelli, Levi Strauss, Ishi, and Ted Geisel.

(Optional) Activity # 6 A *Living History Museum: California in the 20th Century*

Each student selects a different key person to portray for the *Living History Museum*. He/she uses the biographical-sketches written in the previous activity. Students should be encouraged to use props or a simple costume and to wear a nametag identifying his/her character. (See Activity #5 key people.)

Each student is to design an exhibit for his/her area of the *Living History Museum*. Students working on the same topic should be encouraged to develop their exhibit together. The exhibit may include graphic organizers, research reports, and any other resources on the topic.

Prepare a map or floor plan for visitors to receive as they arrive to tour the *California in the 20th Century Living History Museum*. The map should show the location of each exhibit. When a visitor arrives at a specific exhibit, the living history characters “come to life” and summarize the major ideas of their exhibit.

Activity # 7 Time Line of California History

Prompt: Construct a time line of either the 18th, 19th or 20th century of California. Divide the dates on the time line into decades. Accurately place at least five key events or people of the historical era into chronological sequence on the time line and explain why the events shown are significant to the history of California.

Rubric

Indicator: Knowledge of Historically Accurate Content
Indicator: Knowledge of Chronological Thinking
Indicator: Historical Interpretation and Analysis of Significance
Indicator: Supports the Topic with Accurate Examples

OR

Prompt: Working in group of 5, construct a 3-D time line for either the 18th, 19th or 20th century of California. Divide the dates on the time line into decades. As a group, students decide upon five events to show on your 3-D time line. Use art materials and realia to build three-dimensional models to illustrate the events. As your group presents their time line to the class, explain why the events shown are important to the history of California.

Rubric

Indicator: Knowledge of Historically Accurate Content
Indicator: Knowledge of Chronological Thinking
Indicator: Historical Interpretation and Analysis of Significance
Indicator: Supports the Topic with Accurate Examples

Assessment

Title	Teacher Directions	Handout for students with the prompt and rubric
Information Report on the Development of a New Industry in California since the turn of the 20 th Century	Pages 33-34	Page 39 (Handout # 5.2)
Information Presentation on the Development of a New Industry in California since the turn of the 20 th Century	Page 34	Page 40 (Handout # 5.3)
Biographical-Sketch of a Prominent Individuals of the 20 th Century Who Helped California Grow to be an Agricultural and Industrial Power	Page 35-36	Pages 41 and 42 (Handout # 5.4)
Time Line of California History	Pages 36-37	Pages 43 or 44 (Handout #5.6 or #5.7)

Additional assessment of this unit is integrated with the instruction and occurs throughout the lesson. The focus questions provide a framework for the evaluation of the unit.

- Using a variety of resources, conduct research on California Water Systems, Key Historic Events of the 1930s and 1940s, and development of an industry in California since the turn of the 20th Century.
- Portray one of the key people in 20th century California (Refer to Handout # 5.4).
- (Optional) Design an exhibit for one area of the *Living History Museum*
- Work collaboratively to complete a project.

Development of New Industries in California

(Since the turn of the 20th Century)

How did these industries help California become an agricultural and industrial power?

	Location	When? Key Dates	Key People	Why? (Cause)	Impact? (Effect)
Aerospace					
Electronics (Technology)					
Large-scale Commercial Agriculture					
Oil and Automobile					
Communications and Defense					
Entertainment					

Write an Information Report on the Development of a New Industry in California since the turn of the 20th Century

Prompt: Write an information report describing how one of the following industries helped California become an agricultural and industrial power: Aerospace, Electronics, Commercial Agriculture, Oil and Automobile, Defense and Communications, or Entertainment.

The research report should include details about:

- The area/location of California affected
- Dates when key events occurred
- Key people
- Why the changes occurred (cause)
- Impact of the change (effect)

The research report should:

- Frame a central question
- Include facts and details supported by research
- Show the significance of the topic in history
- Draw from more than one source of information (e.g., speakers, books, newspapers, media sources)
- Link the topic to today

INDICATORS	ADVANCED	PROFICIENT	BASIC	BELOW BASIC
RESEARCH, EVIDENCE AND POINT OF VIEW	Student has a clear and knowledgeable thesis which supports the topic with research; shows an in-depth understanding of the point of view.	Student presents the thesis which supports the topic with research; shows a clear understanding of the point of view.	Student uses limited research to present the topic; shows a limited understanding of the point of view.	Student uses little or no research to present the topic; shows little or no understanding of the point of view.
HISTORICAL INTERPRETATION AND ANALYSIS OF SIGNIFICANCE	Student shows an in-depth understanding of the significance of the topic in history; has a clear conclusion with historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with adequate historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with some historical evidence; attempts to link the topic to today.	Student makes no statement or suggestion that the topic is significant; uses vague or no evidence; fails to link the topic to today.
SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES	Student supports the topic with insightful historical and/or geographic examples.	Student supports the topic with several historical and/or geographic accurate examples.	Student supports the topic with limited Historical and/or geographic examples.	Student has few or no historical and/or geographic examples.

Information Presentation on the Development of a New Industry in California since the turn of the 20th Century

Prompt: Present major ideas and supporting evidence describing how one of the following industries helped California become an agricultural and industrial power: Aerospace, Electronics, Commercial Agriculture, Oil and Automobile, Defense and Communications, or Entertainment.

The informational presentation should include details about:

- The area/location of California affected
- Dates when key events occurred
- Causes of the changes (Why the changes occurred)
- Effect (Impact) of the change
- Key people

The presentation should:

- Frame a central question
- Present effective introductions and conclusions that guide and inform the listener’s understanding of key ideas
- Include facts and details supported by research
- Draw from more than one source of information (e.g., speakers, books, newspapers, media sources)
- Show the significance of the topic in history
- Link the topic to today

INDICATORS	ADVANCED	PROFICIENT	BASIC	BELOW BASIC
RESEARCH, EVIDENCE AND POINT OF VIEW	Student has a clear and knowledgeable thesis which supports the topic with research; shows an in-depth understanding of the point of view.	Student presents the thesis which supports the topic with research; shows a clear understanding of the point of view.	Student uses limited research to present the topic; shows a limited understanding of the point of view.	Student uses little or no research to present the topic; shows little or no understanding of the point of view.
HISTORICAL INTERPRETATION AND ANALYSIS OF SIGNIFICANCE	Student shows an in-depth understanding of the significance of the topic in history; has a clear conclusion with historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with adequate historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with some historical evidence; attempts to link the topic to today.	Student makes no statement or suggestion that the topic is significant; uses vague or no evidence; fails to link the topic to today.
SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES	Student supports the topic with insightful historical and/or geographic examples.	Student supports the topic with several historical and/or geographic accurate examples.	Student supports the topic with limited Historical and/or geographic examples.	Student has few or no historical and/or geographic examples.

Biographical-Sketch of a Prominent Individual of the 20th Century Who Helped California Grow to be an Agricultural and Industrial Power

Prompt: From the list of people provided by your teacher, select one person to research and write a biographic sketch that tells the story of the person’s life and accomplishments as it relates to the growth of California as an agricultural and industrial power.

INDICATORS	ADVANCED	PROFICIENT	BASIC	BELOW BASIC
RESEARCH, EVIDENCE AND POINT OF VIEW	Student has a clear and knowledgeable thesis which supports the topic with research; shows an in-depth understanding of the point of view.	Student presents the thesis which supports the topic with research; shows a clear understanding of the point of view.	Student uses limited research to present the topic; shows a limited understanding of the point of view.	Student uses little or no research to present the topic; shows little or no understanding of the point of view.
HISTORICAL INTERPRETATION AND ANALYSIS OF SIGNIFICANCE	Student shows an in-depth understanding of the significance of the topic in history; has a clear conclusion with historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with adequate historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with some historical evidence; attempts to link the topic to today.	Student makes no statement or suggestion that the topic is significant; uses vague or no evidence; fails to link the topic to today.
SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES	Student supports the topic with insightful historical and/or geographic examples.	Student supports the topic with several historical and/or geographic accurate examples.	Student supports the topic with limited Historical and/or geographic examples.	Student has few or no historical and/or geographic examples.

Key People to Research

Water

- William Mulholland (engineer of Los Angeles Aqueduct in the early 1900s)
- George Chaffey (built a canal in 1901 to bring water to the Imperial Valley.)

Great Depression and the Dust Bowl

- Woody Guthrie (singer and songwriter who wrote songs about the Great Depression)
- John Steinbeck (author who described the experiences of migrant workers in the novel *The Grapes of Wrath*)
- Dorothea Lange (Photographer known for her pictures of migrant workers and families during the Great Depression)

Aerospace

- Howard Hughes (pilot and business leader in the aviation industry)
- Claude T. Ryan (builder of the plane named Spirit of St. Louis, that Charles Lindberg flew across the Atlantic in 1927)
- Glenn Martin (builder of California's first airplane factory in Santa Ana in 1909)
- Chuck Yeager (Air Force test pilot who in 1947 flew faster than the speed of sound)
- Sally Ride (first woman astronaut from the United States who in 1983 flew in space on the space shuttle, *Challenger*)
- Allan, John K. and Malcolm Lockheed (founded an aviation company in the early 1900s)
- John L. Northrup (founded aviation company in the early 1900s with the Lockheed brothers)

Defense

- Henry Kaiser (owned shipyards in California, built many of the ships used in World War II)

Oil and Automobiles

- Edward Doheney (discoverer of oil in 1893 in Huntington Beach)

Commercial Agriculture

- Eliza Tibbets and Luther Calvin Tibbets (growers whose seedless oranges in the late 1800s sparked the California citrus industry)
- Luther Burbank (agricultural scientist who mixed seeds from different kinds of plants to create new and better plants)
- Cesar Chavez (Labor leader and organizer of the United Farm Workers)
- George Shima (Japanese immigrant who was known as the "Potato King")

Electronics and Technology

- Steven Jobs (began Apple Computers with Steve Wozniak in 1976 in Silicon Valley)

Entertainment Industry

- Louis B. Meyer
- Walt Disney (creator of animated movies and builder of Disneyland in Anaheim)
- John Wayne (star of many Western movies)
- Ansel Adams (photographer known for his photographs of the West, including the Sierra Nevadas)

Other Key People to Consider:

John Muir, Ng Poon Chew, Marie Mason Potts, Tye Leung Schultz, Sylvia Stark, Domingo Ghirardelli, Levi Strauss, Ishi, and Ted Geisel.

Time Line of California History

Prompt: Construct a time line of either the 18th, 19th or 20th century of California. Divide the dates on the time line into decades. Accurately place at least five key events or people of the historical era into chronological sequence on the time line and explain why the events shown are significant to the history of California.

INDICATORS	ADVANCED	PROFICIENT	BASIC	BELOW BASIC
KNOWLEDGE OF HISTORICALLY ACCURATE CONTENT	Student demonstrates an in-depth understanding of the historical content; all main ideas are supported by facts with no obvious inaccurate facts; contains substantial supportive evidence.	Student demonstrates a clear understanding of the historical content; all main ideas are supported by facts; contains no obvious inaccurate facts; would be improved with more evidence.	Student demonstrates a limited understanding of the historical content; most main ideas are supported by facts, no obvious inaccurate facts; would be improved with more evidence.	Student demonstrates little understanding of the historical content; facts may be inaccurate; lacks supportive evidence.
KNOWLEDGE OF CHRONOLOGICAL THINKING	Student correctly places key events and/or people of the historical era they are studying into a chronological sequence and explain in-depth the significance of the events.	Student correctly places key events and/or people of the historical era they are studying into a chronological sequence and explain the significance of the events.	Student correctly places a few key events and/or people of the historical era they are studying into a chronological sequence and/or provides limited significance of events.	Student fails to correctly place key events and/or people of the historical era they are studying into a chronological sequence and/or provides no significance of events.
HISTORICAL INTERPRETATION AND ANALYSIS OF SIGNIFICANCE	Student shows an in-depth understanding of the significance of the topic in history; has a clear conclusion with historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with adequate historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with some historical evidence; attempts to link the topic to today.	Student makes no statement or suggestion that the topic is significant; uses vague or no evidence; fails to link the topic to today.
SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES	Student supports the topic with insightful historical and/or geographic examples.	Student supports the topic with several historical and/or geographic accurate examples.	Student supports the topic with limited Historical and/or geographic examples.	Student has few or no historical and/or geographic examples.

3-D Time Line of California History

Prompt: Working in groups of 5, construct a 3-D time line for either the 18th, 19th or 20th century of California. Divide the dates on the time line into decades. As a group, students decide upon five events to show on your 3-D time line. Use art materials and realia to build three-dimensional models to illustrate the events. As your group presents their time line to the class, explain why the events shown are important to the history of California.

INDICATORS	ADVANCED	PROFICIENT	BASIC	BELOW BASIC
KNOWLEDGE OF HISTORICALLY ACCURATE CONTENT	Student demonstrates an in-depth understanding of the historical content; all main ideas are supported by facts with no obvious inaccurate facts; contains substantial supportive evidence.	Student demonstrates a clear understanding of the historical content; all main ideas are supported by facts; contains no obvious inaccurate facts; would be improved with more evidence.	Student demonstrates a limited understanding of the historical content; most main ideas are supported by facts, no obvious inaccurate facts; would be improved with more evidence.	Student demonstrates little understanding of the historical content; facts may be inaccurate; lacks supportive evidence.
KNOWLEDGE OF CHRONOLOGICAL THINKING	Student correctly places key events and/or people of the historical era they are studying into a chronological sequence and explain in-depth the significance of the events.	Student correctly places key events and/or people of the historical era they are studying into a chronological sequence and explain the significance of the events.	Student correctly places a few key events and/or people of the historical era they are studying into a chronological sequence and/or provides limited significance of events.	Student fails to correctly place key events and/or people of the historical era they are studying into a chronological sequence and/or provides no significance of events.
HISTORICAL INTERPRETATION AND ANALYSIS OF SIGNIFICANCE	Student shows an in-depth understanding of the significance of the topic in history; has a clear conclusion with historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with adequate historical evidence; links the topic to today.	Student shows the significance of the topic in history; concludes with some historical evidence; attempts to link the topic to today.	Student makes no statement or suggestion that the topic is significant; uses vague or no evidence; fails to link the topic to today.
SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES	Student supports the topic with insightful historical and/or geographic examples.	Student supports the topic with several historical and/or geographic accurate examples.	Student supports the topic with limited Historical and/or geographic examples.	Student has few or no historical and/or geographic examples.