7

History-Social Science Standard 7.3.5.

CALIFORNIA EEI Education and the Environment Initiative

Student Workbook

California Education and the Environment Initiative

Genius Across the Centuries

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:

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Key Partners:

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Lesson 4 Natural Influences of Inventions

None required for this lesson.

Lesson 5 Social Influences of Inventions

None required for this lesson.

Lesson 6 The Influence of Chinese Genius on the World

None required for this lesson.

Artisan: A worker in a skilled trade (usually making things by hand).

Consumption: The process of obtaining energy and matter from a natural system, such as by eating other organisms; the process of using goods produced by natural or human social systems; or, in the context of energy resources, the use and conversion of an energy source from one form to another.

Commodity: A good that is mined, grown, or manufactured, and then bought or sold.

Diffusion: The process of spreading something widely, such as ideas, products, or practices.

Economy: Activities related to the production, distribution, and consumption of goods and services.

Extract: To remove, pull, or take out, such as removing metal from ore.

Innovation: The process of creating a new way of doing things, or the resulting product or process.

Invention: A new device or process that somebody has created.

Mass-produce: To make goods in large quantities.

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.

Tribute: Money or goods paid by one ruler or nation to another, often resulting from war or a show of force.

Name: _____

Instructions: Use information from ***California Connections: The First Jeans*** (Student Edition, pages 2–5) to complete the flowchart below.

The Need:

_____
_____
_____
_____
_____

The Resources (available):

_____
_____
_____
_____
_____

The Invention:

_____
_____

The Influence:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Name: _____

2. The Need:

1. The Resources (available):

Sources of the Resources:

The Invention:

The Influence

3. On Natural Systems:	4. On Human Social Systems:

Name: _____

Instructions: Read the section "Methods of Making and Using _____" in **The Facts About: _____**" (Student Edition, pages 6–9, 10–13, 14–17, 18–21, or 22–25). Use this information to complete the tasks below and create a "How To" manual for your invention. (5 points each)

1. List the materials and tools needed to produce the invention:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

2. Describe how the raw materials for your invention were obtained:

_____

_____

_____

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_____

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_____

_____

Name: _____

3. Describe how the raw materials were transported to the processing or assembly center:

4. Describe the steps required to process the raw materials into the finished product:

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