

Scientific and Cultural Advancements of Early China **Grade 7**

Virginia Ressa

Purpose:

Students will recognize the significance of scientific and cultural advancements made during ancient China and China's early Imperial age.

Ohio Academic Content Standards:

Social Studies

History

- Grade 6-8, Benchmark B: Describe the political and social characteristics of early civilization and their enduring impact on later civilizations.
- Grade 7, Grade-Level Indicator 2: Describe the enduring impact of early civilizations in India, China, Egypt, Greece and Rome after 1000 B.C. including:
 - a. The development of concepts of government and citizenship;
 - b. Scientific and cultural advancements;
 - c. The spread of religions;
 - d. Slavery and systems of labor.

Social Studies Skills and Methods

- Grade 6-8, Benchmark B: Organize historical information in text or graphic format and analyze the information in order to draw conclusions.
- Grade 7, Grade-Level Indicator 1: Describe historical events and issues from the perspectives of people living at the time in order to avoid evaluating the past in terms of today's norms and values.

Essential Question:

How did early civilization in China contribute to the scientific and cultural advancement of human societies? What Chinese scientific and cultural advancements endure today?

Rationale:

Students will understand that some of the items we recognize as “everyday” items today were developed in ancient China. The advancements studied come from a wide ranging time period, allowing students to learn about different periods of Chinese history. As an engaging method of presentation, students will utilize modern advertising techniques to “sell” a scientific or cultural advancement to the Chinese people during the appropriate time period.

Post-Assessment:

Have students work in small groups to create an advertisement for one of the scientific or cultural advancements of ancient China. These may include:

block printing
odometer

moveable clock
moveable type

kite
compass

waterwheel
abacus

paper
wheelbarrow

seismograph
fireworks

porcelain
silk

chopsticks
gunpowder

Students should include the following information in their advertisement:

- Year developed
- Purpose or problem solved
- Impact on civilization

Advertisements may take the following forms, either selected by students or assigned by the teacher. Creation of an advertisement is for the purpose of sharing information in an engaging and fun format- remind students that these forms of advertising are modern and would not have been used in ancient China.

- Television commercial
- Radio commercial
- Magazine advertisement
- Poster or banner

Scoring Guidelines:

Outstanding, 4 points:

Presentation meets all of the following criteria:

- Advertisement includes accurate information about the topic including the year developed, purpose and lasting impact.
- Shows understanding of the significance of the scientific or cultural advancement.
- Has a clear focus and organization.
- Includes relevant and interesting details.
- Shows the input of all group members.

Very Good, 3 points:

Presentation meets most of the above criteria.

Fair, 2 points:

Presentation meets only 2 of the above criteria.

Needs Improvement, 1 point:

Presentation meets only 1 of the above criteria.

Activities and Procedures:

Day One:

1. As a pre-assessment, have students guess where and when the following items were invented:

- Paper (ca. 105 AD)
- Fireworks (often debated, 500 to 1000 AD)
- Kite (ca. 200 BC)
- Wheelbarrow (ca. 200 AD)

(Note: dates for many inventions vary by source.)

2. Discuss with students that all of these inventions were originally developed in China. Ask students if they have ever used any of these items. Discuss the reasons these inventions may have come about. What problems were they designed to solve? What purposes did they serve? Do they serve those same purposes today?
3. Provide students with background reading about the Shang Dynasty, Han Dynasty or other appropriate topics.
4. Divide students into small groups for their research and presentation assignment. Assign each group an invention to research; this can be done randomly, based on student interest or based on student skill levels as some topics may be more difficult.
5. Allow time for students to begin their research.

Day Two:

6. As a whole class, brainstorm types of advertising students are familiar with. Lead a class discussion about the purposes of advertising. What types of products are advertised? What information do advertisers want to share with consumers? Which advertisements do you think are most effective and why?
7. Explain to students that once they have completed their research, they will develop an advertisement to announce the development of their new product. They will utilize today's advertising techniques to "sell" a product developed in ancient China. Help students brainstorm how this might be done using the wheel (from ancient Mesopotamia) as an example. Remind students that these forms of advertising are modern and would not have been used in ancient China.
8. Allow the remaining class time for students to research their topic and begin to develop their advertisement.

Day Three:

9. Check-in with groups to assess their progress and check the accuracy of their information.
10. Allow groups to continue their work researching and planning their advertisement. Encourage groups to practice their commercials out loud, with any action or props they will need. Groups developing print advertisements should also plan how they will share their work with the class.

Day Four:

11. Allow time for all groups to present. Remind students of any audience guidelines they should follow.

Grade Adaptations and Extensions:

The group research activity can be made more complex by the inclusion of additional requirements. For instance:

- A time line of the continued development of an invention through modern times.
- Current uses of the invention.

Include the study of advertisement techniques in China and the United States today. Encourage students to think about techniques of persuasion and the inclusion of art and culture in advertising. Discuss how advertising in the US compares to China.