

Ancient Chinese Inventions and the Modern World

By: Heidi C. Blue

Saint Columbkille Parish School, Parma Ohio

Purpose:

The purpose of this lesson is to provide students an opportunity to learn about Chinese inventions and understand the importance of these ancient inventions to our lives today.

Target Grade Levels: 6th-8th grades

Instructional Note:

This lesson will be taught as part of a unit on ancient China. It will be implemented in the 7th grade and will take three class periods.

Essential Questions:

1. What are some important inventions of ancient China?
2. How do these ancient inventions impact our lives today?
3. How do these inventions expand our understanding of the importance of sharing ideas?
4. Why are inventions important? What do they contribute to a civilization?
5. How did inventions like gunpowder, noodles, acupuncture, paper, and paper money evolve over time to fit the needs of the civilization?
6. How were the above named inventions introduced into American culture and how are they used today in America and the rest of the world?

Rationale:

- Help students understand and analyze the scientific contributions of ancient Chinese civilization.
- Help students understand the importance of sharing ideas with other cultures.
- Help students see the importance of and evolution of Chinese inventions such as, acupuncture, gunpowder, paper, paper money, and noodles.

Ohio Academic Content Standards:

History

- Grade 6-8 Benchmark B: Describe the political and social characteristics of early civilizations and their enduring impact on later civilizations.

- Grade 7, Grade-Level Indicator 2: Describe the enduring impact of early civilization in India, China, Egypt, Greece, and Rome after 1,000BC including:
 - a. The development of concepts of government and citizenship;
 - b. Scientific and cultural advancements;
 - c. The spread of religion;
 - d. Slavery and systems of labor.

People in Societies

- Grade 6-8 Benchmark C: Explain how contact between different cultures impacts the diffusion of belief systems, art, science, technology, language, and forms of government.
- Grade 7, Grade-Level Indicator 4: Describe the cultural and scientific legacies of African, Greek, Roman, Chinese, Arab, and European civilizations.

Social Skills and Methods

- Grade 6-8 Benchmark D: Work effectively in groups.
- Grade 6, Grade-Level Indicator 7: Work effectively to achieve group goals.
 - a. Engage in active listening;
 - b. Provide feedback in a constructive manner;
 - c. Help establish group goals;
 - d. Take various roles within the group;
 - e. Recognize the contributions of others.

Materials:

Smart Board
 Art supplies including poster board
 Instruction Sheet
 Rubric
 Computers

Activities:

Prior to selecting groups for the project, give students a brief history of some Chinese inventions including: gunpowder, the abacus, noodles, acupuncture, and any others of interest. Explain to students that as part of their group project, they will choose an invention and do further research including a timeline of the invention.

Day One:

1. Groups are selected for the project.
2. Instructions and rubric are distributed and teacher goes over all instructions and requirements with the class.
3. Group members choose one member to go and select a slip of paper with the name of the invention to be researched.
4. Group members begin to divide up the work and then begin researching their invention using in- class resources, school library, and internet.
5. Homework: Students work on their part of the project.

Day Two:

1. Students continue research and begin to create poster. Groups may use in class computers or go to the computer lab to create power point presentation.
2. Teacher chats with each group to assess progress and offer suggestions if needed.
3. Groups complete presentations for the class.
4. Homework: Complete personal part of the presentation.

Day Three:

1. Students gather in groups to put finishing touches on poster, power point, or oral presentation. Prior to presenting, groups turn in rubrics for grading.
2. Groups present their poster and power point. Students take notes on the inventions presented by the groups.
3. While groups present, teacher takes notes on the presentations to assist in grading.
4. Post group discussion- students discuss the modern uses of the various inventions and the importance of their evolution to fit the modern world.

Post Assessment:

- Presentations will be graded using rubric.
- There will be a short essay question about ancient Chinese inventions and their impact on the modern world as part of the unit test on China.
- Teacher checks for notes when grading notebooks at the end of the unit.

Resources:

Ferroa, Peggy Grace. China. New York: M. Cavendish, 1991.
Steele, Philip. Discovering China. New York: Crestwood House, 1994.
Steffoff, Rebecca. China. Philadelphia: Chelsea House, 1999.
Waterlow, Julia. Places and People: China. New York: F. Watts Publishing, 1994.

[www.google.com/images/Chinese inventions](http://www.google.com/images/Chinese%20inventions)
www.easc.indiana.edu/pages/easc/curriculum/china
[www.hyperhistory.com/online n2/connections n2/chinese inventions.html](http://www.hyperhistory.com/online%20connections%20chinese%20inventions.html)
www.sln.fi.edu/tfi/info/current/inventions.html
www.library.thinkquest.org/15618/inventor.htm#P4

Chinese Invention Project

The Mission: Your group has been asked to help a museum plan a new exhibit highlighting ancient Chinese inventions and their impact on the modern world. Your group will create a poster and power point presentation outlining the history of a specific invention and its importance to the modern world.

Requirements:

1. Your group will present a poster and power point presentation describing the history of the invention and its importance in the modern world. Possible inventions include: stirrups, gunpowder, printing, silk, paper, compass, rope, and porcelain, acupuncture, noodles, and paper money.
2. Once the invention has been selected, group members divide up the work and begin gathering information. You may use in class resources, school library, and the internet.
3. The presentation rubrics are attached with these instructions. Your group will be graded on neatness, accuracy of information, grammar, and making the connections of the invention from its ancient origins to the modern world.
4. If you need assistance, please ask for help and do not wait until the last minute.
5. Please bring all needed supplies to class as the majority of the work will be completed in school, especially during class.
6. It may be necessary to gather some of the information outside of class. Make sure all information and pictures are brought to school.
7. On presentation day, the group will submit all rubrics prior to giving the presentation.
8. Have fun and remember, it is quality that counts.

Chinese Invention Project Rubric

Name: _____

| | 20 | 18 | 16 | 14 |
|--------------------------------------|---|---|---|--|
| Power Point Required Elements | All required elements were met including accurate information and grammar. | 90% of all required elements were met including accurate information and grammar. | 80% of all required elements were met including accurate information and grammar. | 70% of all required elements were met including accurate information and grammar. |
| Poster Required Elements | All required elements were included. Poster is exceptionally neat and there are no grammar errors. | All required elements were included. The poster is attractive and there was one grammar error. | Most of the required elements were included. The poster is somewhat messy and there were two grammar errors. | There were some missing elements. The poster was messy, and there were three or more grammar errors. |
| Presentation | Information is presented in a clear manner and is easy to understand. Appropriate speaking voice and body language is used. | Information is presented in a clear manner and is fairly easy to understand. Mostly appropriate speaking voice and body language. | Information presented is difficult to understand and not clearly presented. Some inappropriate speaking voices and body language. | Information presented is impossible to understand and speaking voices and body language are inappropriate. |

Ancient Chinese Inventions and the Modern World Information Sheet

The following items should be completed as part of the research on your group invention. Please answer all sections and submit with your rubric.

Group members:

Invention:

Year of invention:

Creator of the invention, if known:

Original use for the invention:

Evolution of the invention:

Modern uses of the invention:

Countries which use the invention:

Approximate point in history when invention becomes a part of the American culture: