

Amazing World Records of Language and Litterature

Printing Press:
China in 1040 A.D.
by Bi Sheng

Language and Literature, Worksheets and Activities

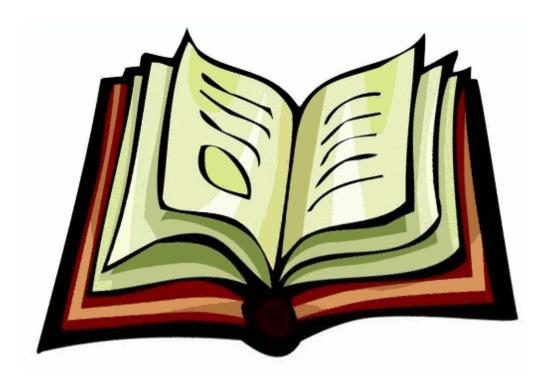
To the Teacher

Welcome to a superlative of language and literature!

This teaching packet is excerpted from the book, *Amazing World Records of Language and Literature;* the activity sheet numbers are for reference only.

Sharing World Records

However you integrate this packet into your teaching, always keep in mind that the student activity sheets provide countless opportunities to foster broader and deeper awareness of language and literature. Keep in mind, too, that children learn best when they're having fun. Foster surprise, delight, and awe about these superlatives of the human experience. Emphasize the drama that underlies every world record. Do your best to evoke wonderment of the grand human story. Good luck in this important work.



NCTE/IRA Standards

- 1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
- 2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.
- 3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).
- 4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- 5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
- 6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.
- 7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
- 8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
- 9. Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.
- 10. Students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum.
- 11. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
- 12. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).



14. The World's First Printing Press

China in 1040 A.D. by Bi Sheng

NCTE/IRA Standards

• 4, 5, 12

Time Required

About two class periods

Teaching Tips

• Students may work on the activity sheets individually, with a partner, or in small groups.

Activity Sheet 14A

- Emphasize that the printing press was first invented in Asia, but that Gutenberg later invented his independently.
- Explain how movable type was different and more effective than previous methods of printing.

Activity Sheet 14B

- Procure needed materials ahead of time. Note that you may want to spread coverings of some sort over the students' work areas to prevent stains from paint or ink. You may also wish to provide aprons for students or warn them ahead of time to wear old clothes.
- Encourage your students to try to replicate a selection of writing.

Activity Sheet 14C

- Help your students find historical resources to use in their essays.
- Review with your students how to research and write a paper using valid sources.

Answers

- *Activity Sheet 14A* 1. China; 1040 A.D.; 2. wooden ones; 3. 1440 CE; 4. Answers will vary. The printing press made the transmission of ideas and knowledge faster than ever before and, hence, facilitated many of the intellectual advances which have followed its invention.
- Activity Sheet 14B Results will vary. Reward genuine effort.
- Activity Sheet 14C Reward thoughtful and well-supported essays.

Extension and Enrichment

• To further reinforce the importance of printing, have students make a timeline of all the major revolutions of thought that happened before and after the invention of the printing press in Europe.

Visit WorldRecordsBooks.com for more images and activities!

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The World's First Printing Press

Activity Sheet 14A

Name	Class	Date

Directions: Read the article and complete the activities.

Many scholars agree that the single most important invention in the past millennium is the printing press. No other creation has sparked such a revolution in human thought and communication.

Though most Westerners believe that the first printing press was invented by Johannes Gutenberg around 1440 CE in Germany, the first printing press was actually invented in China around 1040 CE by the intellectual Bi Sheng. This press was the first to feature movable type and use wooden tiles with characters on them.

Over the next several hundred years, this design spread throughout Asia and was improved several times until metal movable type was invented in Korea around 1230 CE.

About 200 years later, Johannes Gutenberg independently invented his version of the movable type printing press. A goldsmith by trade, Gutenberg made substantial

technological innovations which improved existing attempts at the printing press. One such invention was an alloy for the type that is still used today, and another is the hand mould, a method of casting the type pieces.

Before the printing press was invented, it could take years to make a copy of a book. With Gutenberg's press, replicating a book took only days. Within less than a century, printed books were circulating around Europe and the rest of the world, bringing with them ideas and technology that would change the face of Western civilization forever.



A Gutenberg Bible

- 1. In which country and year was the printing press invented?
- 2. What kind of tiles did the first printing press use for the type?
- 3. In what year did Johannes Gutenberg invent his version of the printing press?
- 4. Why do you think the printing press is widely considered one of the greatest human inventions?



Before the Printing Press: Block Printing

Activity Sheet 14B

N	C1	D-4-
Name	Class	Date

One of the greatest advantages to the printing press was that it allowed books to be printed exponentially faster than previous methods. Before the printing press, people wishing to make a copy of a book could either copy it by hand, like scribes, or they could use the wood block printing technique. Wood block printing was first used in Asia around 200 CE and in Egypt around 400 CE to print patterns onto textiles. Later, it was adapted to reproduce books and other written materials. To produce the wood block, the printer would cut the mirror image of the desired pattern or page onto a wooden block, dip it in ink or paint, and then press the block onto paper or cloth. As you might imagine, such a process took a long time. Books printed in that fashion could take years to complete. Nevertheless, block printing was the main method of writing reproduction for more than 1000 years. In fact, it is still preferred today by many artists and textile companies for its superior aesthetic quality.

Be a Block Printer!

Many artists today still use block printing to produce beautiful books and works of art. The process is very simple, though time consuming, and the results are well worth the effort. Here are the steps to make your own wood block prints.

Supplies:

- styrofoam sheets
- pens, pencils, and/or styli for etching
- ink or paint
- thick, absorbent paper such as newspaper, manila paper, or construction paper

Directions:

- 1. Take appropriate precautions to protect your area from paint/ink stains. If needed, spread coverings over your work surface.
- 2. Using the writing tools, etch your picture into the styrofoam sheets, being careful not to poke all the way through. If you want to try your hand at printing something similar to a book, be sure to write all the letters backwards.
- 3. Dip the side of the styrofoam with your etchings on it into the paint or ink.
- 4. Carefully lift the styrofoam out of the paint or ink and press it wet-side down firmly and evenly onto a piece of paper.
- 5. Admire your artwork. You're a block printer!





The Power of Printing and the Spread of Ideas

Activity Sheet 14C

Name	Class	Date
of what it made possible. Or spread throughout the work off at least two revolutions of thought. The first revolution that ultimately paved the wa Reformation that swept Eur doors of the Catholic Church Theses was almost immedia a monumental split in Chris	a marvelous technological innovation in itse nce books could be rapidly reproduced, idea of at a faster pace than ever before. Gutenber within the first 100 years of its existence. Bot in was the Renaissance, a rebirth of art, sciently for the Enlightenment. The second revolution ope after Martin Luther posted his Ninety-Fish (Castle Church in Wittenberg, Germany). Itely reprinted and sent to all corners of the option of these events played vital role at Gutenberg's printing press, who knows we	s and thoughts could be g's printing press kicked the were revolutions of ce, and classical thinking tion was the Protestant live Theses upon the The Ninety-Five continent, resulting in the sin creating the world
<i>Directions:</i> Write an essay have been possible without	outlining another monumental event in h t printing technology.	istory that would not