Name: _____ Date: _____

# Gutenberg and the Printing Press

Circle group

Before about 1450, every book in Europe was a treasure. Most books were copied by hand, one letter at a time. Monks did this work. One Bible could take years to finish. Only churches, colleges, and the very rich could pay for one. Few people could read and write.

Around 1450, a goldsmith named Johannes Gutenberg began to change this. He lived in the German city of Mainz. Printing was not a new idea. Workers in China and Korea had printed with carved blocks long before. They had even used movable type, hundreds of years earlier. Gutenberg put several tools together into a system fast and cheap enough for Europe.

First, he made a mix of metals that could be poured into molds. It made small letters that were all the same size. The letters were strong and could be used again. Second, he changed a screw press, like the ones used to press wine and olives. It pushed the inked letters evenly onto paper. Third, he mixed an ink made with oil. It stuck to the metal letters and left a sharp, dark print.

Now a printer could set the letters for a page and print hundreds of copies. Then he could move the same letters around to make the next page. The famous Gutenberg Bible was done in the mid-1450s. It showed what printing could do. By 1500, printers across Europe had made millions of books.

Books got cheaper, so more people learned to read. Ideas spread farther and faster than ever. Scientists could share what they found with others far away. People who wanted to change the church could spread their ideas to thousands of readers at once. Historians call it one of the most important inventions ever. It changed who could learn, who could argue, and who could be heard.

## Questions

**1. Why did a book cost so much before the printing press?**

_____

_____

**2. Was Gutenberg the first person to print? How do you know?**

_____

_____

**3. What three things did Gutenberg make or change for his system?**

_____

_____

**4. Why could the same letters be used again and again? Why did that matter?**

_____

_____

**5. What does the last sentence mean by "who could be heard"?**

_____

_____

## Words to know

movable type: separate metal letters that can be arranged into words and used again

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

# Gutenberg and the Printing Press

Triangle group

Before the middle of the fifteenth century, every book in Europe was a precious object. Most were copied by hand, one letter at a time, by monks working in quiet rooms. A single Bible could take years to finish, and only churches, universities, and the very wealthy could afford one. Reading and writing were skills known to a small part of the population.

Around 1450, a goldsmith named Johannes Gutenberg began to change this in the German city of Mainz. Printing was not a new idea. Craftsmen in China and Korea had printed with carved blocks and even with movable type centuries earlier. Gutenberg's achievement was to combine several technologies into a system that was fast enough, and cheap enough, to be practical in Europe. He developed a metal alloy that could be cast into small, uniform letters that were durable and could be reused. He adapted a screw press, similar to those used for wine and olives, to press the inked letters evenly against paper. And he mixed an oil-based ink that stuck to metal type and left a crisp, dark impression.

With this system, a printer could arrange the letters for a page, print hundreds of copies, and then rearrange the same letters for the next page. The famous Gutenberg Bible, finished in the mid-1450s, showed what the technique could achieve. By the year 1500, printers across Europe had produced millions of books.

The effects were enormous. As books became cheaper, more people learned to read, and ideas traveled farther and faster than ever. Scientists could share discoveries with colleagues in distant countries. Reformers could spread arguments about religion to thousands of readers at once. Historians often count the printing press among the most influential inventions in history, because it changed who could learn, who could argue, and who could be heard.

## Questions

**1. Why was a book so expensive before the printing press?**

_____

_____

**2. Was Gutenberg the first person ever to print, and how do you know?**

_____

_____

**3. What are three parts of the system Gutenberg developed?**

_____

_____

**4. Why could the same letters be used again and again, and why does that matter?**

_____

_____

**5. What does the author mean in the last sentence: "who could be heard"?**

_____

_____

## Words to know

movable type: separate metal letters that can be arranged into words and used again
alloy: a metal made by mixing two or more metals
durable: strong and able to last a long time
influential: having a big effect on what people think or do
reformer: a person who works to change something they think is wrong

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

# Gutenberg and the Printing Press

Square group

Before the middle of the fifteenth century, every book in Europe was a precious and costly object. The vast majority were transcribed by hand, one painstaking letter at a time, by monks laboring in quiet rooms. Producing a single Bible could consume years, and only churches, universities, and the exceptionally wealthy could afford to acquire one. Literacy, consequently, remained a skill possessed by a comparatively small fraction of the population.

Around 1450, a goldsmith named Johannes Gutenberg began to transform this situation in the German city of Mainz. Printing itself was not an original concept: craftsmen in China and Korea had printed with carved blocks, and even with movable type, centuries earlier. Gutenberg's distinctive achievement was to integrate several technologies into a system efficient enough, and economical enough, to be practical in Europe. He developed a metal alloy that could be cast into small, uniform letters that were durable and reusable. He adapted a screw press, comparable to the presses employed for wine and olives, to apply the inked letters evenly against paper. And he formulated an oil-based ink that adhered to metal type and produced a crisp, dark impression.

With this system, a printer could assemble the letters for a page, generate hundreds of identical copies, and then rearrange those same letters to compose the following page. The celebrated Gutenberg Bible, completed in the mid-1450s, demonstrated what the technique could accomplish. By the year 1500, printers throughout Europe had produced millions of books.

The consequences were enormous. As books became increasingly affordable, more people learned to read, and ideas circulated farther and more rapidly than ever before. Scientists could communicate discoveries to colleagues in distant countries. Reformers could disseminate arguments about religion to thousands of readers simultaneously. Historians frequently rank the printing press among the most influential inventions in human history, because it fundamentally altered who could learn, who could argue, and who could be heard.

## Questions

**1. What made books so expensive before the advent of the printing press?**

_____

_____

**2. Was Gutenberg the inventor of printing? Cite evidence from the passage.**

_____

_____

**3. Identify the three components Gutenberg combined into his printing system.**

_____

_____

**4. Why was reusable type so significant to the success of printing?**

_____

_____

**5. Interpret the phrase "who could be heard" in the final sentence.**

_____

_____

## Words to know

movable type: separate metal letters that can be arranged into words and used again
alloy: a metal made by mixing two or more metals
durable: strong and able to last a long time
influential: having a big effect on what people think or do
reformer: a person who works to change something they think is wrong

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

# For the teacher: Gutenberg and the Printing Press

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

### Circle: Gutenberg and the Printing Press

Easier · 302 words · Flesch-Kincaid grade 4.1

1. Every book was copied by hand, one letter at a time, so one Bible could take years.
2. No. Workers in China and Korea printed with carved blocks and movable type long before. Gutenberg put several tools together into a system that worked in Europe.
3. Metal letters that could be used again, a screw press, and an ink made with oil.
4. They were strong metal and could be moved around for the next page, so printing lots of pages became fast and cheap.
5. Cheap books let many more people, like scientists and people who wanted change, share their ideas, not just the rich and powerful.

### Triangle: Gutenberg and the Printing Press

This passage · 304 words · Flesch-Kincaid grade 8.6

1. Each book was copied by hand, one letter at a time, so a single Bible could take years to finish.
2. No. Craftsmen in China and Korea had printed with carved blocks and movable type centuries earlier. Gutenberg combined technologies into a system practical for Europe.
3. A metal alloy for reusable cast letters, an adapted screw press, and an oil-based ink.
4. They were made of durable, reusable metal type that could be rearranged for the next page, so printing many pages and books became fast and cheap.
5. Cheap printing allowed ordinary people, scientists, and reformers to share their ideas with many readers, not only the powerful or wealthy.

### Square: Gutenberg and the Printing Press

Harder · 317 words · Flesch-Kincaid grade 12.6

1. Each one was transcribed by hand, letter by letter, so a single Bible could take years to produce.
2. No. Craftsmen in China and Korea had printed with carved blocks and movable type centuries earlier. Gutenberg's achievement was integrating technologies into a system practical for Europe.
3. A metal alloy cast into reusable letters, an adapted screw press, and an oil-based ink.
4. Durable metal letters could be rearranged for each new page, so printers could produce many pages and books quickly and cheaply.
5. Affordable printing gave ordinary people, scientists, and reformers a way to reach many readers, so influence was no longer limited to the wealthy and powerful.