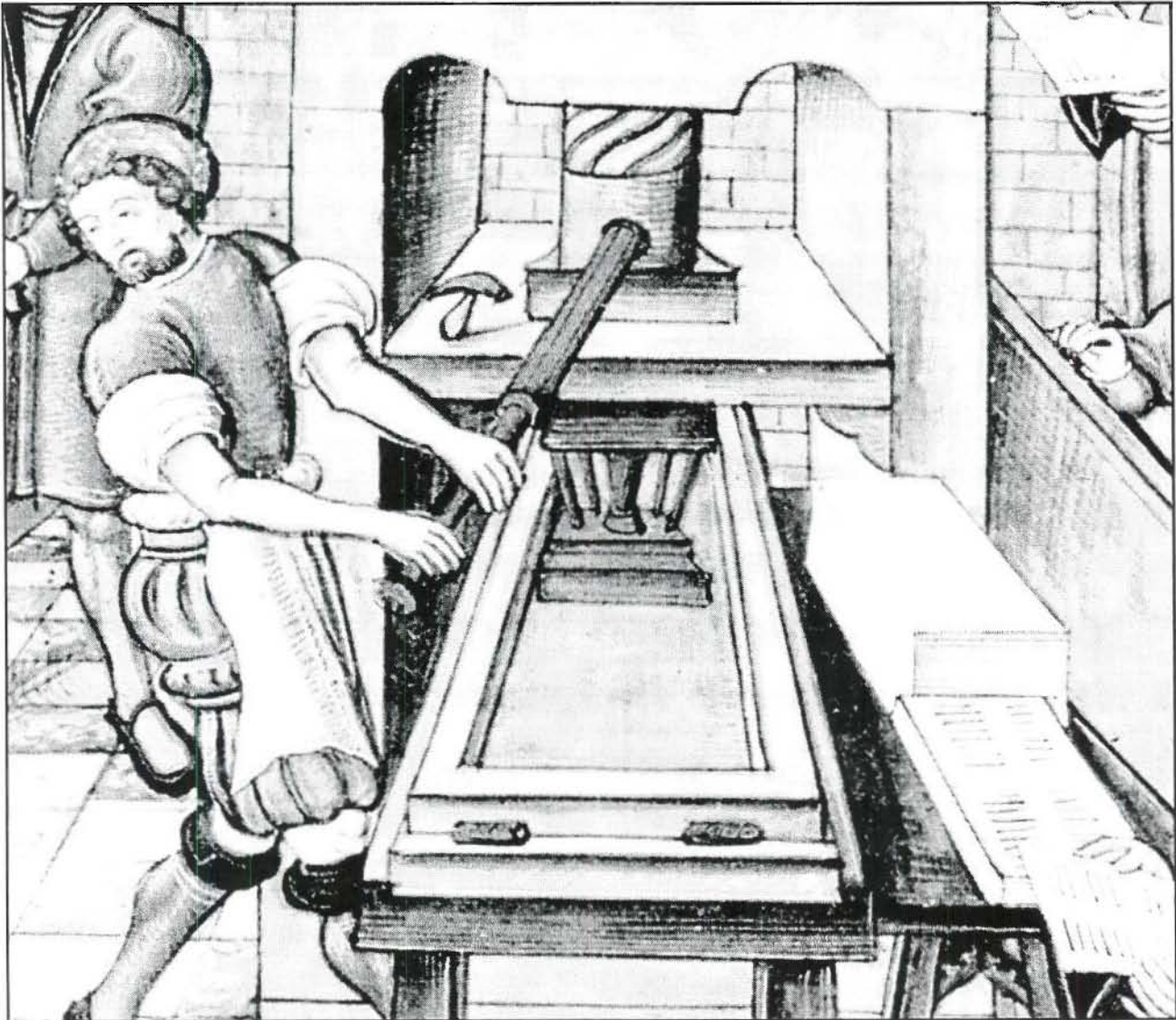# What Was the Most Important Consequence of the Printing Press?

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A Document Based Question (DBQ)
World History

TEACHER DOCUMENT LIST (SV)

There are 10 documents in the Shorter Version of this exercise. The documents are grouped into five analytical categories, one providing students with context, the others dealing with four areas where the printing press had a significant impact. An uncategorized list of documents appears at the beginning of the Student Materials. An important part of student analysis is to create analytical categories that may or may not be the same as those below.

The Transition from Script to Print Culture

Document 1: Scribe and Print Shop
Document 2: The Spread of Printing (map)

Religion

Document 3: The Protestant Reformation: Luther's 95 Theses
Document 4: Different Views on the Reformation
Document 5: The Spread of Protestantism (map)

Geography and Exploration

Document 6: Columbus' Letter
Document 7: Printing and Map Making (3 maps)

Literature and Humanist Ideas

Document 8: Classical and Medieval Books
Document 9: Early Modern Books

Early Modern Science and Medicine

Document 10: Newton's Bookshelf

STUDENT GUIDE SHEET

What Was the Most Important Consequence of the Printing Press?

Directions: There are historians who believe that the printing press ranks among the most revolutionary new technologies in the history of humankind. Like the invention of the alphabet two thousand years before, and like the creation of the computer and the internet more than 500 years after, the printing press changed the way we inform, and misinform, one another.

It is suggested that you follow these steps:

1. Read the Background Essay.
2. Skim through the 10 documents to get a sense of what they are about.
3. Read the documents slowly. In the margin or on a Document Analysis Sheet record the main idea of each document.
4. Organize the documents by analytical category. One or more may be a context document.
5. Within each category, decide what impact the printing press had on the 15th- and 16th-century world.
6. Develop a summary answer to the question.

The Documents:

Document 1: Scribe and Print Shop

Document 2 The Spread of Printing (map)

Document 3: The Protestant Reformation: Luther's 95 Theses

Document 4: Different Views on the Reformation

Document 5: The Spread of Protestantism (map)

Document 6: Columbus' Letter

Document 7: Printing and Map Making (3 maps)

Document 8: Classical and Medieval Books

Document 9: Early Modern Books

Document 10: Newton's Bookshelf

Teacher Notes

What Was the Most Important Consequence of the Printing Press?

Introduction

In the fall of 1999, Arts & Entertainment Television aired a three-hour series titled, "Biography of the Millennium." The show picked Johannes Gutenberg as the most influential person of the last thousand years. In the 1450s, Gutenberg revolutionized the world by inventing the printing press. Many experts were surprised and even outraged by A & E's choice. Yes, Gutenberg was a significant inventor, but was he as important as scientific geniuses like Isaac Newton, Charles Darwin, and Albert Einstein? And certainly he could not hold a candle to great artists and thinkers like Michelangelo, William Shakespeare, or Thomas Jefferson.

The A & E expert panel vigorously defended Gutenberg. They argued that without his invention all of the above thinkers would never have emerged. Newton (#2 on the list), for example, developed his scientific theories only after reading the works of other great thinkers. Yes, Newton was brilliant (after all, he did invent calculus), but he stood on the shoulders of other thinkers whom he had only met through written works.

This DBQ asks you to look closely at how printing affected different areas of life. To answer the DBQ question you will need to do two things: 1. Examine each document to discover how printing changed one aspect of the world; and 2. Determine what area of change was the most important and argue why. Before tackling these two tasks, a short look at the history of printing and Gutenberg's invention are in order.
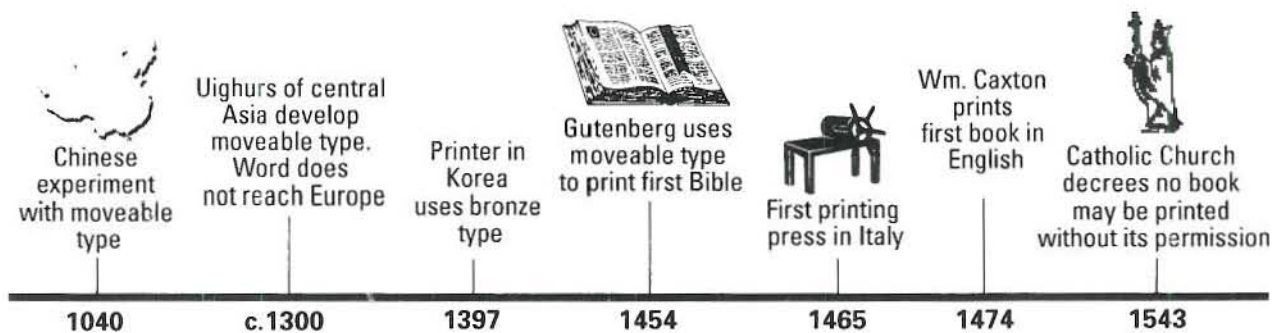
The Communications Revolution

Gutenberg's invention was really the end of a long evolution in human communication. At some point in human development, man developed a spoken language. Where language comes from is difficult to say. Some think that long before our ancestors began to speak, about 25,000 years ago, they used sign language. This ability may have developed as early as two million years ago.

Much later, about 20,000 years ago, our human ancestors drew pictures on cave walls in France, and about 8,000 years ago the Mesopo-tamians developed picture writing. The Egyptians wrote **hieroglyphics**, combining pictures, letters and syllables on **papyrus** (which is formed by layering reeds) as early as 3100 BCE.

Probably the greatest event in the evolution of human communication before the printing press was the invention of the alphabet. When and where the alphabet was first used remains a matter of debate. Best guesses attribute the beginning to the Phoenicians about 1500 BCE. The amazing thing about the alphabet is that every sound we can imagine can be shown by some combination of 26 letters. The alphabet is powerful because it is so simple. It is its simplicity that allows it to be used by inventions like the printing press in unique ways.

Origins of Paper and Books

The printing press would not have been possible without the invention of paper. For centuries people had written on animal skins. And as far back as 105 CE the Chinese had invented paper.

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Chinese experiment with moveable type	Uighurs of central Asia develop moveable type. Word does not reach Europe	Printer in Korea uses bronze type	Gutenberg uses moveable type to print first Bible	First printing press in Italy	Wm. Caxton prints first book in English	Catholic Church decrees no book may be printed without its permission
1040	c.1300	1397	1454	1465	1474	1543

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Teacher Notes

Slowly, papermaking technology spread to Europe where in the 1400s Italian merchants developed mass production techniques.

Gutenberg was a businessman and knew about the availability of cheap and durable paper. He also knew in the mid-1400s that something special was going on in Europe. This something was the beginning of what historians call the **Renaissance**, a time when ideas, old and new, were exploding across Europe like never before. Of course it was the book that was helping spread these ideas and Gutenberg wanted to make a less expensive book.

Before Gutenberg's press, monks handwrote books with pen and ink in a copying room known as a **scriptorium**. Even a small book could take months to complete, and a book the size of the Bible could take several years. By the 1400s mass production scriptoriums did exist with over 50 scribes writing away as a single reader dictated a text.

Origins of Printing

The Chinese, around 600 CE, were the first to use something called **woodblock printing**. With wood blocks a whole page of text could be printed at one time, but once carved, a woodblock could not be changed and often the woodblock carving would crumble after a short time. The Chinese are also credited with inventing **moveable type**. This process allowed a printer to place letters side by side and form sentences and pages. Once the page was printed, a printer could rearrange the letters to form a new page. The problem was that the Chinese language has over 50,000 characters, so moveable type technology was not practical. Somebody had to come along with a simpler language and an ability to carve out the letters in something more durable than wood. That someone was Gutenberg.

Gutenberg and His Invention

As a goldsmith in Mainz, Germany, Gutenberg developed the necessary skill to carve letters out of metal. Once enough letters were created, one could move the letters around arranging them to form all the words and sentences on a page. This process was called **typesetting**.

Once a page had been typeset a person called a **composer** would screw together all of the typeset letters into a solid form and place them on a lower level of the printing press. The type would be inked and paper placed on top. The flat upper plate of the press would be screwed down on top of the inked paper. A printer could make thousands of identical copies, then move on to the next page.

In 1455 Gutenberg printed 180 Bibles, each of them over 1800 pages long. There are only a few of these **Gutenberg Bibles** still in existence and each is worth over $30 million. Gutenberg knew that many people would look at these books as something strange or the work of the devil, so he made his type look identical to a scribe's handwriting. It worked, and the printing revolution erupted. By 1500, less than 50 years after the Gutenberg Bibles, over 20 million printed books were in existence.

The Question

This DBQ asks you to examine how the printing press changed different aspects of human existence. Analyze the documents and determine the immediate effects of the printing press. Then decide which consequence was the most significant. There is no doubt that Gutenberg's printing press reshaped the world; the question for you is: *What was the most important consequence of the printing press?*

Teacher Document Notes – Shorter Version (SV)

Document 1: Scribe and Print Shop

Content Notes:

- This document does not directly help answer the question, but it gives the student a visual context for understanding the technological shift that took place with Gutenberg's invention.

- Even after the invention of the printing press in 1445, handwritten manuscript copies of books continued to be made into the 16th century. Even though some medieval scriptoria employed several scribes copying the same book, many others, like the one portrayed in the document, employed only one or a few scribes laboriously copying a book either from dictation or from an earlier hand-copied text.

- Woodblock printing of images such as the one from which this image was imprinted were widely reproduced before the invention of moveable type. They could not be used for printing texts because of the impracticality of craftsmen carving multiple letters in wood, and because wooden type could not withstand repeated impressions.

- How did the press impact the numbers of books available? One 20th century scholar estimates that a man born in 1453, the year of the fall of Constantinople, could look back from his fiftieth year on a lifetime in which more than ten million books had been printed, more perhaps than all the scribes of Europe had produced since Constantine founded his city in AD 330.

Teaching Tips:

- Ask the students if they would rather have worked as the scribe or the printer? Have them write a bubble message above each picture representing the thoughts of each worker.

- Ask the students to note the date of the advertisement of the Badius firm (scribe). Why were manuscript books being produced in 1494, fifty years after the invention of the printing press? (Just as with the computer today, printed books were relatively scarce until presses had been established throughout Europe. Some owners of impressive libraries and other prized manuscript books considered a printed book inferior to one that was handwritten.)

- Ask students to consider differences in time and accuracy of a scribe copying a text from a prior manuscript, or for several scribes copying a book from dictation. What problems of accuracy might arise from copying a book taken from dictation or copying a book from a previous handwritten book?

- Ask the students to estimate the time it would take them to copy their favorite book as a gift to a friend. How much longer would it take to copy the same book to all of one's friends? How likely would it be for all of the copies to be identical?

- Ask if any of the students have actually seen a printing press in action, and if anyone can explain how it works.

- Ask for a clarification of why printing from moveable type was a major improvement over printing from woodblocks. (See Background Essay.)

Document 1

Source: *Top visual:* Advertisement for J. Badius' firm in William of Ockham, *Dialogus*, (Lyons: J. Trechsel, c. 1494)
Bottom visual: 16th century French manuscript, *Un atelier typographique*, Bibliothèque Nationale.

SV

Note: The two images portray the significantly different methods used to produce books before and after Gutenberg's invention of the printing press. The woodcut image above is a scribe writing a book by hand from the dictation of a scholar; the woodcut below shows a print shop in the mid-1500s.

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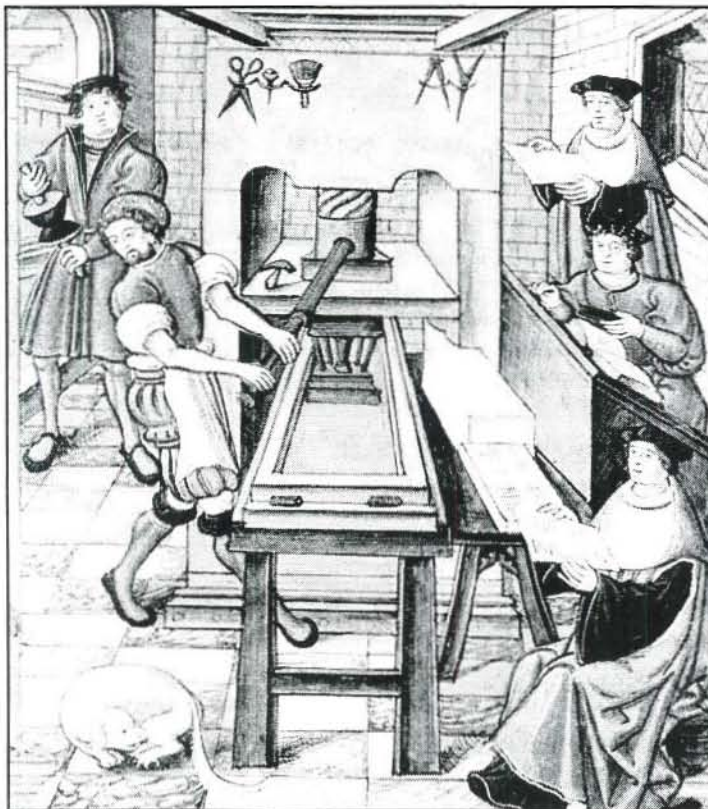
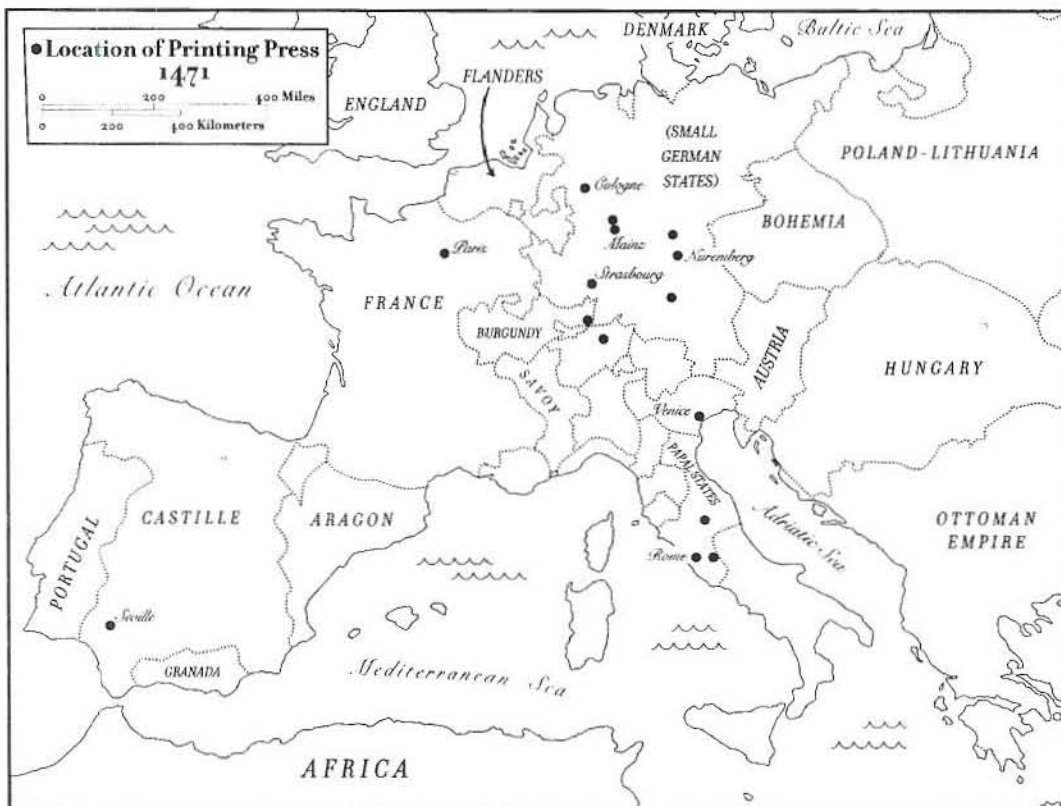## Document 2: The Spread of Printing (map)

Content Notes:

• Despite some initial resistance, printing spread throughout Europe in the following fifty years with incredible speed. The map shows the growth of the establishment of printing presses in all the major countries of Europe.

• By 1500 historians estimate that European presses had produced 20 million books and about 30,000 different titles.

• It is interesting to note that printing took over two decades to reach England. William Caxton was the first man to print books in the English language. Much of his early work was done in the Netherlands, but he moved back to England in 1476 and established the first English print shop right in Westminster Abbey. Here he printed nearly 100 publications—most of them in English. This is remarkable because the vast majority of printers on the continent were using Latin in nearly all of their editions. He also chose to go beyond religious and classical texts to print English poets and works like Chaucer's *Canterbury Tales*. Many of these works became known to later writers like William Shakespeare. Thus, Caxton was one of the most significant agents in establishing English as a respectable literary language.

• For nearly 400 years, the spread of the press in Europe stopped when it hit the Muslim world. Why did Muslims not embrace the press? The answer lies in a combination of factors. Foremost is the idea that for Muslims, the Qur'an is literally the word of God, even more so than the Bible is for Christians. It was written only as a way to aid memory and oral transmission. So a Muslim scribe (or school child) who copied the Koran from cover to cover was really memorizing the words of Allah. Printing threatened this entire tradition. Also, religious rulers and conservative societies distrusted the press because it countered the "official" knowledge and authority of those in power. Muslim rulers finally embraced the printing press in the 19th century as a way to combat the success of text-laden missionaries of the Christian and Hindu faiths.

• In their groundbreaking work, *The Coming of the Book*, Lucien Febvre and Henri-Jean Martin document the enormous impact the press had on other industries, including paper. The press was a huge consumer of paper, using 3 reams a day per press. In the 16th century there were conservatively between 500 and 1,000 presses at work in France. Paper mills had to supply between 1,500 to 3,000 reams a day, or 450,000 to 900,000 reams a year, to keep the presses working at full capacity. (A ream at this time was 480 sheets of paper.)
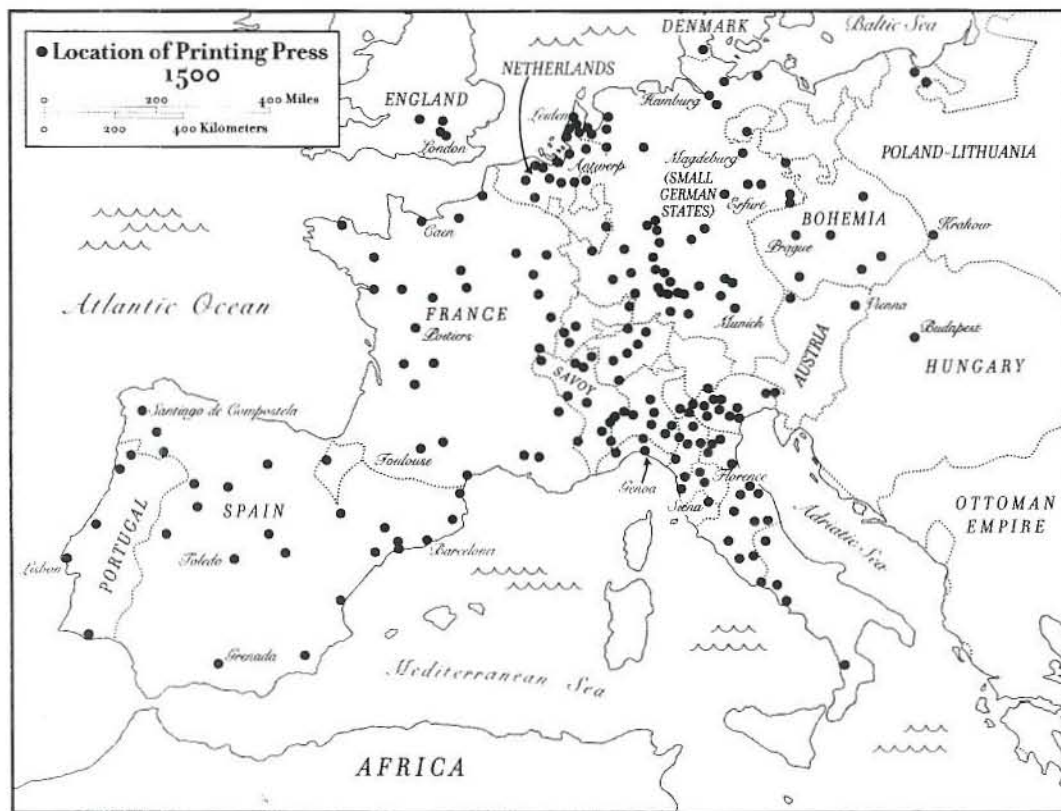
Teaching Tips:

• Ask students to quantify the number of cities in which printing presses were established before 1470 and after. (1471 = 16; 1500 = over 200)

• Ask the students to identify patterns of the establishment of printing houses in Europe, and speculate how the patterns evolved. (Printing presses are clustered around Venice, Italy, and only one, William Caxton's, is established in England.)

• Share with students the fact that England was the only nation that from the beginning printed a vast majority of books in the vernacular (English). This was in part because England had a long history of prose and poetry in its native tongue. Other areas of Europe prior to the spread of the printing press were, as one scholar suggested, submerged in Latin. In fact, by 1500 about three-quarters of all printed matter was in Latin. The other fourth was primarily in Italian and German. However, with the boost from Luther and the Reformation, vernacular editions became much more popular and even expected. As demand grew for vernacular editions, printers responded.

• Ask students to brainstorm other industries that may have been impacted by the invention of the printing press. (The printing press not only created a whole new industry of printers and publishers, but it also stimulated paper mills, foundries, designers and all the other arts and crafts that went into making a book.)

• Just like Documents 1, this document is meant to provide context about the magnitude of the shift to printing. After reviewing the map, this would be a good time to ask students to predict what areas of life the proliferation of the book might affect most. You might guide them by asking how millions of books might influence the politics of the day, or religion, or people's view of geography.

✎ Notes

Document 2

Source: The Spread of Printing. Maps created from various sources.

● **Location of Printing Press**
1471

0   200   400 Miles
0   200   400 Kilometers

● **Location of Printing Press**
1500

0   200   400 Miles
0   200   400 Kilometers

Document 3: The Protestant Reformation: Luther's 95 Theses

Content Notes:

- Several things are important to note about Luther as students examine the documents. Luther initially had no intentions of starting a revolution that would reshape all of Europe. His original aim was to challenge the growing practice of selling indulgences. Yet, when Luther's protest was rebuffed by the Catholic Church hierarchy, he soon began to challenge the entire foundation of Catholic teaching. By 1520, Luther had challenged and published letters arguing that priests should be able to marry (as he did), that the Bible should be translated from Latin so average people could read it, and ultimately that the Pope had no real authority over matters as important as salvation.

- By the 1520s attacks by Luther and his supporters on the Pope had become very severe. Consider this piece of writing published in the 1537, titled *Of the Power and Primacy of the Pope* written by a group of established theologians.

  The Roman Pontiff claims for himself [in the first place] that by divine right he is (supreme) above all bishops and pastors (in all Christendom).

  Secondly, he adds also that by divine right he has both swords, i.e., the authority also of bestowing kingdoms (enthroning and deposing kings, regulating secular dominions etc.).

  And thirdly, he says that to believe this is necessary for salvation. And for these reasons the Roman bishop calls himself (and boasts that he is) the vicar of Christ on earth.

  These three articles we hold to be false, godless, tyrannical, and (quite) pernicious to the Church.

- There is considerable debate among historians about whether the printing press was one of the primary causes of the Protestant Reformation. Some suggest that the ideas that fueled the break with Rome would have spread, just more slowly. But the bulk of Reformation historians would probably agree with John Man's words. Most would also agree with Margaret Aston who wrote that, "The advent of printing was an important precondition for the Protestant Reformation taken as a whole; for without it one could not implement a priesthood of all believers. At the same time, however, the new medium also acted as a precipitant. It provided the stroke of magic by which an obscure theologian in

Wittenberg managed to shake Saint Peter's throne."

- In 1520, Luther published his *Address to the Christian Nobility of the German Nation* where he called upon the ruling class in Germany, including the emperor, to reform the church externally by returning it to roots based in poverty and simplicity. The Reformation was now officially in motion and demanding continent-wide interest at the highest levels.

Teaching Tips:

- Remind students that for centuries before Martin Luther there were many movements considered heretical, and they were put down by the Catholic Church.

- Martin Luther posted his 95 Theses apparently to elicit debate and discussion among fellow theologians, not to start a revolution. Ask students if they can think of other modern revolutions or rebellions that started small, but led to great changes. (For example, did Martin Luther King, Jr. intend to start a national push for Civil Rights at the outset of the 1955 Montgomery Bus Boycott?)

- Ask students if they can make a cause and effect chain that links Gutenberg's printing press invention of the 1440s to the settlement of colonial New England by the Puritans from England. (One possible chain might be: The printing press is invented – Luther attacks the church with the help of printed material – King Henry VIII of England, originally a staunch supporter of the Pope against the Protestants, attacks Papal authority when the Pope denies his annulment request and does so using the press and propaganda – Henry officially breaks with Rome and declares himself leader of the new Anglican Church – many Puritans in England, who had read and adopted John Calvin's ideas, protest that the new Anglican Church was too Catholic and needed to be reformed – by the late 16th and early 17th centuries many Puritans left for the "new world" in order to find a place to practice their religion without outside interference.)

Document 3

Source: Excerpts from Luther's 95 Theses, 1517.

20. Thus those indulgence preachers are in error who say that a man is absolved from every penalty and saved by papal indulgences.

27. They preach only human doctrines who say that as soon as the money clinks into the money chest, the soul flies out of purgatory.

32. Those who believe that they can be certain of their salvation because they have indulgence letters will be eternally damned, together with their teachers.

45. Christians are to be taught that he who sees a needy man and passes him by, yet gives his money for indulgences, does not buy papal indulgences but God's wrath.

Note: Martin Luther allegedly posted his 95 Theses on the door of the Castle Church in Wittenberg, Germany, on October 31, 1517. His goal was to stir debate among theologians primarily around the issue of **indulgences**–payments to the Roman Catholic Church in return for official pardons for one's sins and grants of salvation in the afterlife. Because of the printing press, the 95 Theses were known throughout Germany in a fortnight and throughout Europe in a month.

Source: John Man, *Gutenberg: How One Man Remade the World with Words*, 2002.

As Rome prepared the heavy artillery, Luther fired off more salvos, with the help of the press. His sermons, tracts and polemics, all in German … streamed from presses by the hundreds of thousands…. According to one estimate, a third of all books printed in Germany between 1518 and 1525 were by him. Pause to consider that figure. Of course, printing was in its infancy, but Germany at the time was turning out about a million books a year, of which a third – 300,000 – were by Luther. No comparison with the modern world stands up, but it would be the equivalent of one author selling almost 300 million books in Britain (which prints some 800 million a year), or 700 million in the US, every year, for seven years running.

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Document 4: Different Views on the Reformation

Content Notes:

- The Reformation leaders defied the hierarchy of the Catholic Church and destroyed the unity of Medieval Christianity. Attempts at religious reconciliation had become hopeless, as the events of the late 16th and 17th centuries unfolded. The Church was shattered, and Protestantism itself fragmented into numerous sects.

- The ideas and emotions that fueled the Reformation were passed on by the press not only through strident and inflammatory words, but by early visual propaganda. Since most of Europe was illiterate, these woodcuts had a powerful appeal in spreading anti-papal views to the masses.

- Outside Germany and Scandinavia, John Calvin (1509-1564) guided the Reformation from his stronghold in Geneva, Switzerland. He preached a severe doctrine of moral righteousness and carefully regulated morality. Calvin also emphasized the importance of education and reading – if the Bible was Truth, then one must be able to read in order truly to understand. The fact that the printing press made available exact reproducible texts of the Bible encouraged the notion of a singular truth that all could follow.

- One of the most dramatic conflicts of the Reformation period was initiated by King Henry VIII of England. His initial support of the Pope against Luther's supporters earned him great praise from the Catholic Church and a title of "Defender of the Faith." But after his annulment to his first wife was denied, Henry broke from the Pope and established the Anglican Church of which he was the head. As you might suspect, the printing press was right in the middle of the fight.

- As part of the Counter Reformation movement, Papal authorities created *The Index of Forbidden Books:* In 1543, under Pope Paul III, the Holy Office issued for the first time a list of forbidden books. Forbidden books are chiefly writings judged to be heretical, superstitious editions of Holy Scripture by non-Catholics, any book on liturgy and dogma not approved by the Pope, or immoral and obscene books.

- Between 1562 and 1598, numerous civil wars and outbreaks of violence were motivated by religious differences. In 1588, the Spanish attempted an armed naval assault upon the English. The defeat of the Spanish Armada was a disaster for the Spanish government and spelled the ultimate decline of Spain as a dominant power on the Continent. The Thirty Years' War was fought first in Bohemia over the issue of religious differences but soon involved every European nation. And during the English Civil War of 1640-1660, the English beheaded their king in 1649. All of these conflicts were inspired by religious differences owing to the Reformation, and all of these conflicts had political, economic and social ramifications. The printing press was an integral element in propagating invective as well as doctrinal polemics to both sides in the almost continual religious wars of the 16th century.

Teaching Tips:

- Ask students which quote, the Pope's or Luther's, is the most striking and why. Then ask them to come up with a similarly striking quote the President of the United States might say that would inflame emotions both in this country and outside the country.

- Ask students which source would be a more powerful anti-papal attack, Luther's angry words or the woodcut, the German title for which is translated *Christ v Anti-Christ.* Why do cartoons and well done visuals have such a powerful impact on our imaginations? Remind students that there were woodcuts before the press, but they were not mass-produced as they were once the press was in use.

- Wars among Christians and between Christians and "infidels" had occurred intermittently since the early days of the Catholic Church. Ask students why the wars of the 16th century were out of the control of the papacy? (Some believe that it was because heretical ideas were spread so rapidly by the printing press.)

- Identify some of the places in the world where religious conflicts continue (e.g. Northern Ireland and the Middle East and even in the United States.) Discuss some of the reasons for these conflicts, and if and how printing affects them.

- Ask students to examine the tone of the Pope's and Luther's words. Are these words inflammatory? Could these religious leaders be partly responsible for the bloody wars that followed simply by stoking the anger in others?

- Explain to students what the *Index of Forbidden Books* was. (See content note above.) Ask them why this approach (censorship) might backfire. (They should be very familiar with the idea that forbidden fruit is often the most desirable in people's minds.)

Document 4

SV

Arise, O Lord, and judge Thy cause. A wild boar has invaded Thy vineyard…. Arise all ye saints, and the whole universal Church, whose interpretations of Scripture has been assailed.

Papal Bull of Pope Leo X, 1520

If we punish thieves with the gallows, robbers with the sword, and heretics with fire, why do we not all the more fling ourselves with all our weapons upon these masters of perdition, these cardinals, these popes, and all this stink of Roman sodomy that ceaselessly corrupts the church of God and wash our hands in their blood so that we may free ourselves and all who belong to us from this most dangerous fire?

Martin Luther, 1521

Source: Lucas Cranach the Elder. "Passional Christi und Antichristi." Woodcut, 1521.

The woodcut is from a Lutheran booklet. Jesus (on the left) is driving the money-changers out of the temple, in contrast to the Pope, who is writing and collecting on indulgences. Cranach was a close friend of Luther.

Source: Elizabeth Eisenstein, *The Printing Revolution in Early Modern Europe*, Cambridge: Cambridge University Press, 1983, p. 158.

There is considerable irony about the enthusiastic reception accorded to printing by the church. Heralded on all sides as a "peaceful art," Gutenberg's invention probably contributed more to destroying Christian concord and inflaming religious warfare than any of the so-called arts of war ever did.

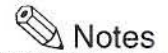## Document 5: The Spread of Protestantism (map)

Content Notes:

• Protestantism spread throughout Europe but mainly in the northern countries farthest from the influence of Rome.

• 20th century Europe bears the imprint of the Reformation. Italy, France, Ireland, Spain, Portugal, the south of Germany, Austria, and Hungary, Poland, and parts of the Balkans in Eastern Europe, have continued to be predominantly Catholic. The rest, Scandinavia, England, Scotland, Switzerland, the north and east of Germany, and parts of Eastern Europe have largely remained Protestant.

Teaching Tips:

• Ask the students to compare and contrast the map of the spread of printing (Document 2) with this map showing the spread of Protestantism.

• Ask students where Protestantism seemed to be the strongest.

• Ask the students to discuss how conflicts between Catholics and Protestants, among various Protestant denominations, and between Christians and other religions affect modern demographics in the US and the World.

• Discuss whether religious frictions have become more or less intense and dangerous since the 16th century. (It depends on where one is in the world.)

• Ask students, does the influence of printing and literacy have a positive, negative or neutral influence on religious understanding and tolerance?

• Ask students to discuss their own religious backgrounds and how their own faith may or may not be linked in some way to the Reformation.

• Finally, ask students to examine the map and answer the question, was the printing press very important when it came to religious life in the 15th and 16th centuries?

Document 5

✎ Notes

Source: Map created from various sources.

SV

Religions in Europe, 1560

☐ Mainly Catholic

▨ Mainly Protestant

▨ Mixed Catholic and Protestant

── Boundary of the Holy Roman Empire

0   250   500 Miles

0   250   500 Kilometers

Religions in Europe, 1500

☐ Mainly Catholic

NORWAY

S W E D E N

SCOTLAND

IRELAND

DENMARK   Baltic Sea

NETHERLANDS

ENGLAND

Leiden

Hamburg

PRUSSIA

BRANDENBURG

London

POLAND-LITHUANIA

ATLANTIC OCEAN

Antwerp

Cologne

(SMALL GERMAN STATES)

Erfurt   SAXONY

BOHEMIA

Prague

Krakow

Paris

Nuremberg

Strasbourg

FRANCE

BAVARIA

Munich

Vienna

AUSTRIA

HUNGARY

Budapest

SWISS CONFED.

SAVOY

MILAN

Venice

VENETIAN REP.

OTTOMAN EMPIRE

Toulouse

NAVARRE

GENOA

Siena

Florence

PAPAL STATES

Adriatic Sea

Rome

PORTUGAL

SPAIN

Barcelona

NAPLES

Lisbon

Toledo

Seville

SARDINIA

Grenada

Mediterranean Sea

SICILY

AFRICA

Document 6: Columbus' Letter

Content Notes:

- Christopher Columbus' letter announcing the success of his voyage to the "islands of the India Sea" is one of the most important documents ever published. It quickly became one of the earliest "best sellers" of European publishing.

- The map traces the extremely rapid dissemination of the Columbus letter through its first published editions. It is impossible to date all the editions precisely, but we can discern the basic pattern of the diffusion of this new knowledge to the major urban centers of Western Europe.

- No less than eleven editions were published in 1493. They were issued across Western Europe, in Spain, Italy, France, Switzerland, and the Netherlands. Six more editions were published in 1494-97. Today, the only known copy of the first printed letter is housed in the New York Public Library.

- Columbus described his arrival to the "Indian Sea" on the 33rd day. He had set out believing he would run into the island nation of Cipangu (Japan) based on his best estimates and reading of the maps available to him. His world-view was heavily influenced by the Hellenistic astronomer and cartographer, Claudius Ptolemy (approx 87-150 AD), who had of course no knowledge of North and South America and had underestimated the size of the earth's circumference. Columbus made three more trips to the "New World" and stubbornly refused to admit that the land he reached each time was anything but the southeastern tip of the islands of Asia.

Teaching Tips:

- Why would the wide distribution of Columbus' letters in the 1490s have given impetus to explorations by other sailors and navigators? Discuss how Columbus' discovery might have been known and received if his letter had not been published in print. (The Norsemen had arrived on the North American continent long before Columbus, but the rest of Europe was unaware of it.)

- Why and how might geographic exploration and the invention of printing in the century affect such fields as botany, zoology, geology, chemistry, and medicine?

- Compare and contrast Columbus' voyage to the New World with the Soviet Union's sending a man in orbit and the United States' landing a man on the moon in the 20th century. Was this adventure made more dramatic by television, which publicized immediately the results of many space missions?

- Ask students if the immediate and long-term consequences of European exploration are more or less significant than the religious implications of the printing press. Follow up by asking if the exploration and "discovery" were likely to have happened without the help of printing.

- From a Native American historical perspective, was the invention of the press a significant event? (Yes) Have students make the connection to European conquest.

Document 6

✎ Notes

Source: Christopher Columbus' Letter, *Concerning the Islands Recently Discovered in the Indian Sea*, 1493.

SV

Excerpt from Columbus' 15-page Letter to the King of Spain

Because my undertakings have attained success, I know that it will be pleasing to you: these I have determined to relate, so that you may be made acquainted with everything done and discovered in this our voyage. On the thirty-third day after I departed from Cadiz, I came to the Indian sea, where I found many islands inhabited by men without number, of all which I took possession for our most fortunate king, with proclaiming heralds and flying standards, no one objecting.

Note: Columbus is believed to have written much of the letter on his return voyage from the Americas.

Source: Map created from various sources.

Dissemination of Columbus' Letter
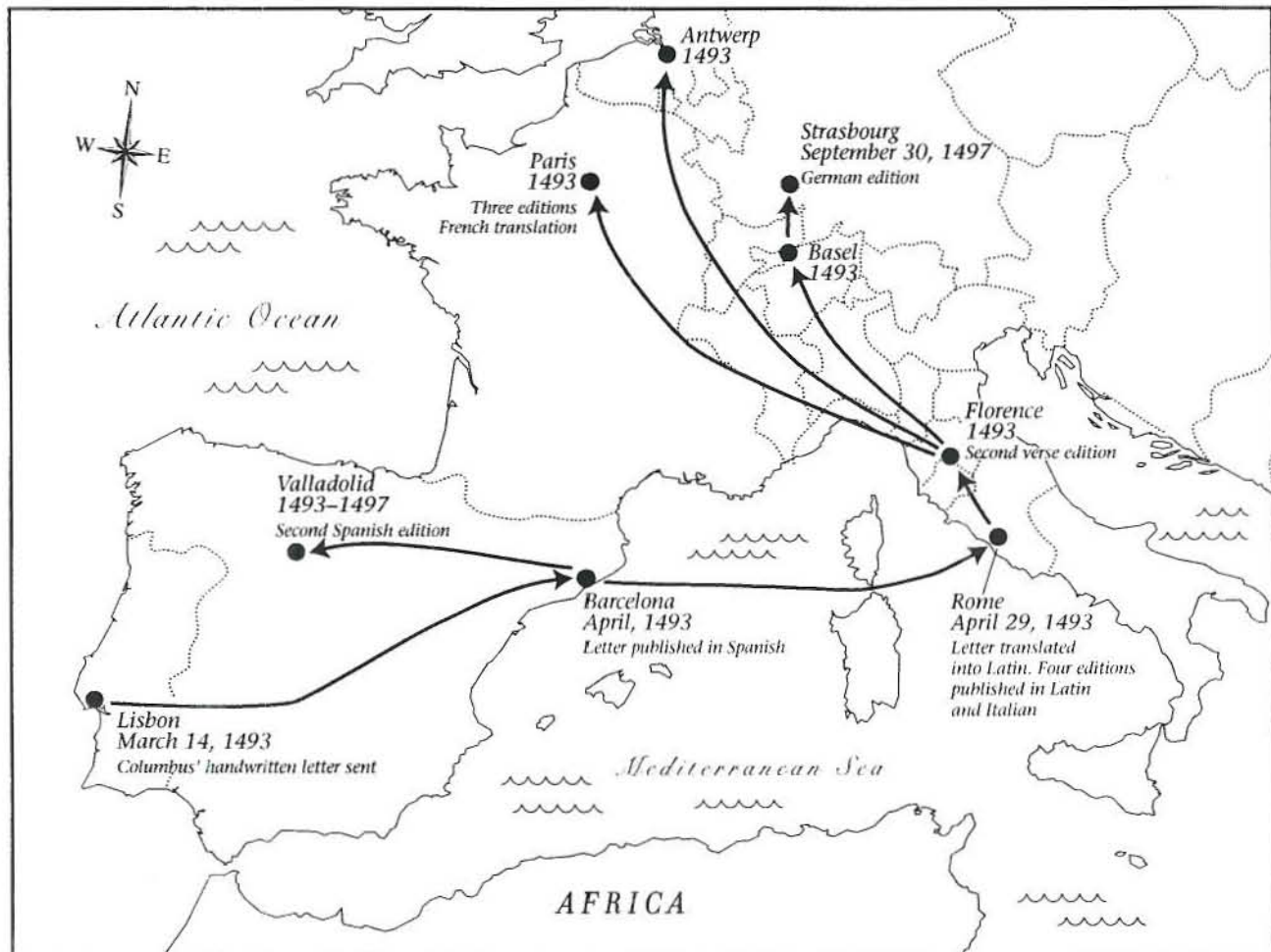
Document 7: Printing and Map Making (3 maps)

Content Notes:

• These maps demonstrate the European progression of geographical knowledge from the late 15th to the late 16th centuries. The printing press was instrumental in spreading the knowledge of the new explorations not only through explorers' letters and accounts, but also through geographic images and increasingly more accurate maps.

• Before printed maps, manuscript maps were only available to a handful of explorers and scholars. Before the press a process which historians call incremental fact checking, which is at the heart of cartography, could not occur. Because of the press, over time (sometimes centuries) voyagers were provided with uniform maps and encouraged to exchange information with map publishers.

• The first map in this set was printed just three years before Columbus set sail. It is a Renaissance recreation of Ptolemy's world. Students should note not only the absence of North and South America, but also the small size of the Atlantic Ocean. Moreover, it is important to note that although European cartographers had a good understanding of the Euro-Asian landmass, the outer edges of their maps were often mere conjecture.

• In 1487, the Portuguese explorer Bartolomeu Dias sailed around the Cape of Good Hope and returned with proof that there was a sea route to Asia. This 1489 map is the first to show that Africa had a southern border.

• The second map is the famous 1507 Waldseemuller World Map. It has the nickname "America's Birth Certificate" because it is the first known map to record the existence of the American continents (albeit in a strange, inaccurate shape).

• The 1507 map shows the progression of geographic knowledge. Note for example the advancement in knowledge about Africa's true shape and the more detailed understanding of the Indian Ocean.

• The story of the 1507 Waldseemuller's map is told in the next document, but it is interesting to note that out of the 1000 copies of this map printed, only one survives today. It was discovered in 1901 by a Jesuit historian in Wurttenberg, Germany. It had been bound between several other less significant maps and was in mint condition. In the fall of 2003 the Library of Congress purchased this map for 10 million dollars – its single most expensive acquisition ever!

• The third map is from Abraham Ortelius' atlas, *Theatrum Orbis Terrarum* (Theatre of the World) produced in 1570. Ortelius' work is considered the first true atlas in the modern sense. The original 1570 Latin edition of the *Theatrum* atlas consisted of seventy maps on fifty-three sheets with accompanying texts.

• In 1569 Gerardus Mercator first exhibited his famous map projection. In his world map the meridians remain parallel and a great circle on the globe is a straight line. Hence, using Mercator's projection, the mariner could draw his course with a ruler.

• Mercator's map was not only a breakthrough for the mariner but also showed just how far the cartographic world had come in understanding the true nature of the world's surface. It is now the dominant world image even though its emphasis on the Northern latitudes distorts the actual sizes of much of the world's landmass.

Teaching Tips:

• It is very important to note that Columbus studied many of the most recent maps of the world before he set off for his 1492 journey. Ptolemy's mistaken estimate of the extent of the Asiatic continent induced Columbus to travel westward.

• Ask students why even after the voyages of Columbus and Magellan, Ptolemy's influence persisted on many maps into 17th and 18th centuries and for the interior of Africa until the nineteenth. Ortelius's 1570 atlas included several old "Ptolemeic" views of the world as well as the more modern Mercator world map.

• Ask students to create a cause and effect chain starting with more accurate and available maps of the world in the 15th century and ending with economic, political, and social consequences. (Better maps may be partly responsible for settlement of North and South America, the destruction of native American societies, the wealth of Europe, the entire Columbian exchange, the founding of the United States, etc. Students need to push the limits of this cause and effect chain as far as they are comfortable.)

• Let students know that many printers resisted printing a new world map with the Americas included. Some best-selling printed books in the 40-year period between the invention of the press and the sailing of Columbus were atlases that emphasized the ancient view of the world proposed by Ptolemy. If his maps were wrong then all the printed books on the shelves were not very useful.
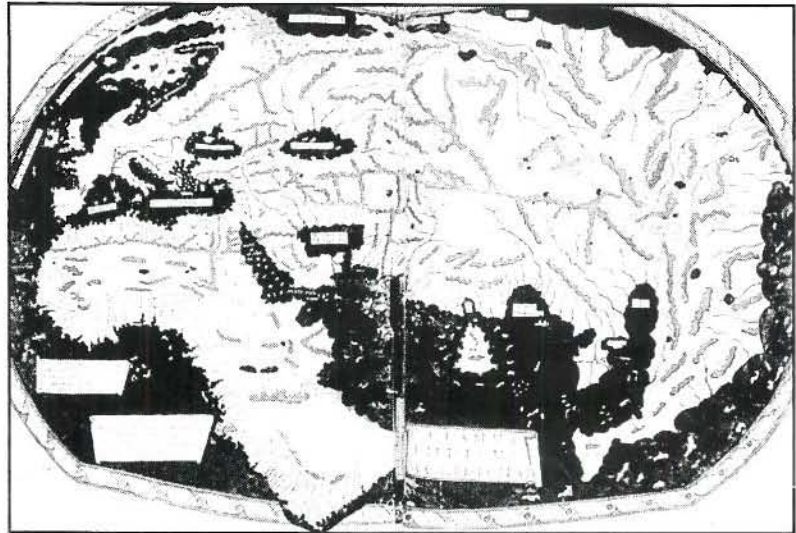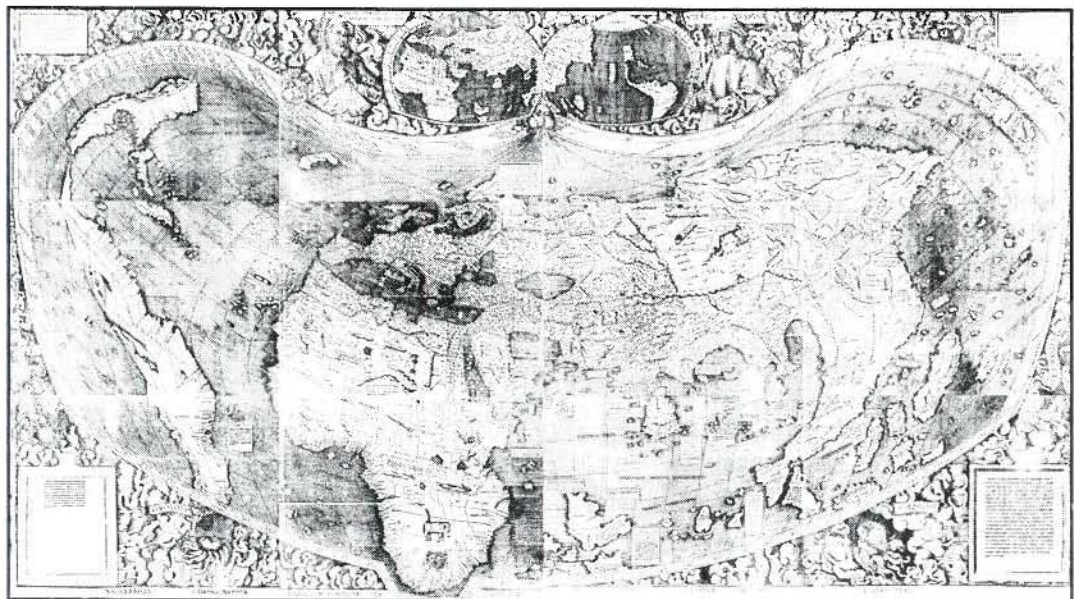
✎ Notes

Document 7
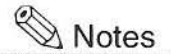
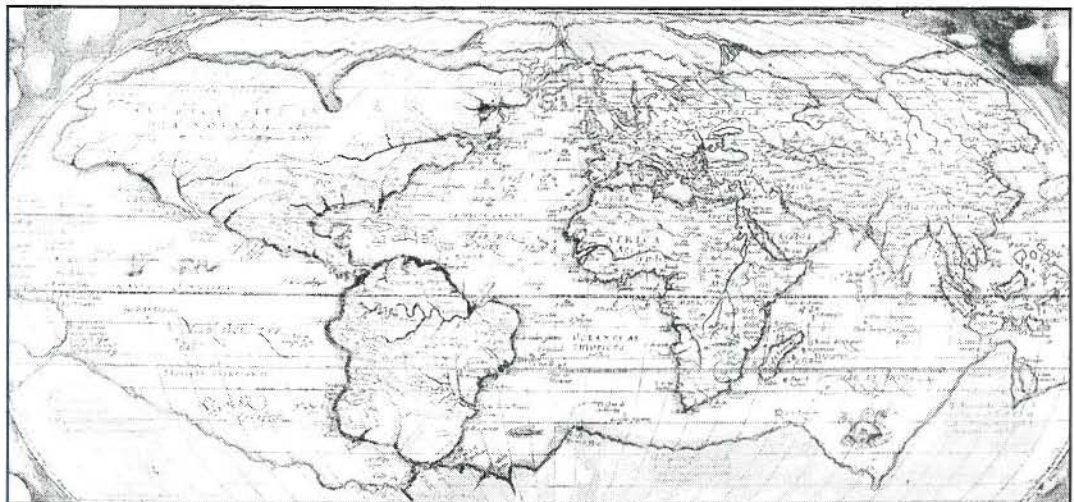### Expanding Knowledge of the Globe

(3 Printed World Maps)

SV

Source:
Henricus Martellus'
World Map, 1489,
courtesy British
Library.

Source:
Martin
Waldseemuller's
World Map, 1507,
Prints and
Photographs,
Library of
Congress, G3200
ct000725C.

Source:
Abraham Ortelius'
1570 World Map,
in *Theatrum
Orbis Terrarum*
Prints and
Photographs,
Library of
Congress, G7270
mf00002.

Document 8: Classical and Medieval Books

Content Notes:

- In 1967 John Carter and Percy H. Muir compiled a catalogue of 424 works which illustrated the historical evolution of printing for the purpose of reminding the general public what civilization owes to print. Most of the books cited in the catalogue were written after the invention of Gutenberg's printing press in 1445, but many of the great works of Classical and Medieval writers that had a wider dissemination with the impetus of the printing press are also represented.

- Many of the early printers, especially the Venetian Aldus Manutius, are viewed by historians as heroes. They were responsible for salvaging many ancient works that would have been lost without mass printings. Venice was at the crossroads of Renaissance Europe and the expanding Ottoman Empire and was uniquely situated to acquire and print manuscripts coming from East and West.

Teaching Tips:

- Make sure to begin by asking students why the spread of ancient and medieval works was so significant. (Many historians argue that the vast amount of new books dramatically increased the magnitude and impact of the Renaissance. Most importantly, the printing press not only spread Italian humanist ideas, it made the fledgling movement permanent. See note below.)

- Share with students that there had been many intellectual revivals during the Middle Ages, but none had the profound impact of the Renaissance – a movement that coincided with the explosion of printing.

- Ask students why most early printers focused their efforts on printing known books that had been around for ages.

- Much of the power in this document as well as in Document 9 comes from knowing the significance of each work. Your students probably have heard of some of authors on the list, but it is unlikely that they have read these works. Share a few of the descriptions below with your students

1. The *Iliad* and the *Odyssey* are poems that sprang fully grown from Homer's head, and their magic has persisted ever since. Translations into all modern languages abound; more than a million copies of a recent version of the *Odyssey* have been printed.

2. The *Dialogues* of Plato, were the first of all ancient philosophical works to be translated and printed. The modern philosopher, Alfred Whitehead, has said that all of western civilization is a footnote to Plato.

3. Aristotle's *Works*, first published by Aldus Manutius, was the first major prose text to be reintroduced in the original Greek to the Western world after the invention of the printing press. Aristotle is one of the great classical philosophers and the master of every branch of ancient knowledge. His method still underlies all modern thinking.

4. Ptolemy's *The Cosmographia* sets forth the conception of the universe which dominated the thinking of western Europe into the 16th century. It showed the earth to be a perfect sphere, placed it and man in the center of the world and arranged the planets in orderly orbits around it.

5. Herodotus' *Histories* is the first text to collect historical material systematically. Herodotus is known as the father of history and his most famous work detailed the great Persian invasion of Greece between 490 and 479 BCE.

6. Virgil's *Aeneid*, the tale of Aeneas, the legendary founder of Rome, was the most popular epic of the Middle Ages and the Renaissance. As the revival of learning brought greater knowledge of the influence of Rome, Virgil came to be recognized as the greatest of Latin poets.

7. Saint Augustine's two classic works pervaded the whole Middle Ages and have remained best sellers to the present day. *The City of God* shows theology in relationship to the history of mankind and God's action in the world. *The Confessions* is considered the first great autobiography.

8. Thomas Aquinas' *Summa Theologica* is a combination of theology and philosophy emphasizing the need for faith and reason for salvation. It was declared by Pope Leo XIII in the 19th century to be the indisputable basis of Catholic theology.

9. The *Divine Comedy* of Dante was the most popular work of literature in the Middle Ages and the early Renaissance. Dante's poem is an allegorical explanation and justification of the Christian cosmos as set forth in the teaching of Thomas Aquinas in his *Summa Theologica*.

10. *The Imitation of Christ*, by Thomas a Kempis is a book of mystical thought. It is the most widely-read devotional manual apart from the Bible. Since its first printing there have been thousands of editions and translations into fifty languages, a record rivaled only by the Bible.
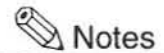
Document 8

Source: John Carter and Percy H. Muir, editors, *Printing and the Mind of Man: A Descriptive Catalogue Illustrating the Impact of Print on the Evolution of Western Civilization During Five Centuries*, London: Cassell and Company, 1967.

SV

Ten Important Works of Classical and Medieval Authors*

(Date represents first printing)

Homer, ***Iliad and Odyssey***, Florence, 1488/89.

Plato, ***Dialogues***, Florence, 1484.

Aristotle, ***Works***, Venice, 1495-8.

Ptolemy, ***The Cosmographia***, Bologna, Italy, 1477.

Herodotus, ***Histories***, Venice, 1502.

Virgil, ***Aeneid***, Venice, 1491.

Saint Augustine, ***The City of God***, Subiaco, Italy, 1467; and ***The Confessions***, Strasbourg, Germany, 1470.

Thomas Aquinas, ***Summa Theologica***, Basel, Switzerland, 1485.

Dante, ***Divine Comedy***, Foligno, Italy 1471.

Thomas à Kempis, ***The Imitation of Christ***, Augsburg, Germany 1473.

Note: In the 50 years following Gutenberg's invention, three-fourths of the 20 million newly printed books were classical or medieval works. These books had existed already in scribal manuscript form, but now for the first time were widely available to all who could read. Moreover, as Latin and Greek texts became more well known, publishers began to print the same works in the vernacular (native language), thus expanding the reach of these ancient ideas even further.

*Classical authors dated back to the time of Ancient Greece and Rome. *Medieval* authors wrote during the several centuries before the invention of the printing press but after the fall of Rome.

Document 9: Early Modern Books

Content Notes:

- Unlike the classical and medieval works in Document 8, which were almost always initially printed in Greek or Latin, many of these contemporary books were printed in the vernacular. This had a profound effect on the standardization of language in Europe. The impact of the printer on language standardization is well documented. If the original printer of Shakespeare had had a unique London dialect, spelling and all, then that style might have become the standard.

- Compare and contrast the great works written before the invention of the press with those written after the turn of the 16th century. (Greek and Latin gives way to the vernacular, Italian, French, Spanish, and English; philosophical and theological works are supplanted by less religious and more modern works.)

Teaching Tips:

- Ask the students how many of the books from the document they have read, read about or even heard of.

- This document's power is brought out when students know or are taught the significance of some of these works. Below is a summary of each work. If you have limited time, share (maybe photocopy this page) some of this information with students, who may not have read these works, but who will likely see their names again on a college syllabus.

1. *The Praise of Folly*, by Desiderius Erasmus, became an immediate best seller. Erasmus' biting satire on kings, popes and courtiers show them to be ruled by folly. The book earned Erasmus the label of the father of 18th century rationalism.

2. Like *The Praise of Folly*, Thomas More's *Utopia* is a scathing criticism of the kings, royalty, lawyers and clergy of Europe. It envisions an imaginary island in the New World that is a model of peace, justice, tolerance and prosperity, in contrast to the tyrannous, rapacious and war-like states of 16th-century Europe.

3. *The Courtier*, written by Baldassare Castiglione, depicts the ideal aristocratic gentleman. The book became one of the best sellers of the 16th-century and remains popular to this day.

4. While Castiglione was imagining the ideal gentleman, and Thomas More was fashioning an ideal state, Niccolo Machiavelli was writing *The Prince*. He prescribes how a head of state must ruthlessly wield power if he is to rule successfully. *The Prince* was a radical departure from any book on political theory before that time and gained its author the reputation as the father of modern political science.

5. Francois Rabelais' *Gargantua and Pantagruel* is gigantic in scope and, beneath its broad and often ribald humor, are serious discussions of education, politics, and philosophy. Rabelais used laughter to satirize the most important institutions of his time and invented many words that enriched the French language.

6. *The Lives of the Most Excellent Painters, Sculptors and Architects* by Georgio Vasari is the first modern history of art. Before Vasari's book, the great art of the Renaissance, especially the work of the Italian masters, could be known only by those affluent enough to visit the churches, palaces and civic buildings where they were displayed. From the 17th century, thanks to the invention of printing, most people were acquainted with the masterpieces of art scattered throughout Europe.

7. Michael de Montaigne's *Essays* was a new form of prose writing in which the author expressed personal convictions and private meditations. Most books written before the *Essays*, such as Castiglione's *The Courtier*, dealt with the behavior of ideal figures who could be identified by their membership in a group. By presenting himself unique, Montaigne brought his private life out of hiding and achieved intimate contact with unknown readers. His most famous essay, *Apology for Raymond Sebonde*, is an attack on fanaticism.

8. Miguel de Cervantes' *Don Quixote*, the Spanish masterpiece that many scholars consider to be the first modern novel, is one of those universal works which are read by all ages at all times. Even those who have not read this classic are familiar with its two main characters, Don Quixote and Sancho Panza. Their most famous adventures have become part of popular culture.

9. *The King James Bible* or the Authorized Version has been called the "noblest monument of the English language." It established rhythms of spoken English as the standard for English prose.

10. Publication of *The Complete Works of Shakespeare* was a significant moment in Western civilization. Before the publication of this First Folio edition, only 18 of Shakespeare's plays had appeared in print during his lifetime, and some of these were in corrupt or pirated editions. The Folio contained 36 plays, 18 of which were published for the first time, thus saving such works as *The Tempest* and *Macbeth* from probable extinction.
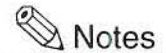
Document 9

Source: John Carter and Percy H. Muir, editors, *Printing and the Mind of Man: A Descriptive Catalogue Illustrating the Impact of Print on the Evolution of Western Civilization During Five Centuries*, London: Cassell and Company, 1967.

SV

Ten Important Works of Early Modern Authors

(Date represents first printing)

Desiderius Erasmus, ***The Praise of Folly***, Paris, 1511.

Thomas More, ***Utopia***, Louvain, Belgium, 1516.

Baldassare Castiglione, ***The Courtier***, Venice, 1528.

Niccolo Machiavelli, ***The Prince***, Rome, 1532.

Francois Rabelais, ***Gargantua and Pantagruel***, Lyons, five volumes between 1532 and 1552.

Georgio Vasari, ***The Lives of the Most Excellent Painters, Sculptors and Architects***, Florence, 1568.

Michael de Montaigne, ***Essays***, Bordeaux, France, 1580.

Miguel de Cervantes, ***Don Quixote***, Madrid, 1605.

The King James Bible, or the Authorized Version, London, 1611.

The Complete Works of Shakespeare, London, 1623.

Note: During the first half of the 16th century many works by contemporary writers began to reach a very wide public. For example, historians estimate that several hundred thousand of Erasmus' works, *Adages* and *Colloquis*, were available to the general public within decades of their first printing. Modern and current ideas could then spread more quickly and on a grand scale.

Document 10: Newton's Bookshelf

Content Notes:

- Isaac Newton is considered by many to be the greatest scientist of all time and is often given the title "Father of the Scientific Revolution." His ideas concerning the principles of all motion are the basis for modern physics and our understanding of much of the universe. His description of the rational, empirical method of hypothesis and generalization laid the foundation of modern scientific discourse. Although not the first to use observation and experimental procedure, Newton's findings were so profound that his ideas were quickly popularized among the educated.

- The founders of the modern scientific revolution carried on extensive correspondence outside the realm of their published works, notably between Galileo and Johannes Kepler (Kepler revised the notions of Copernicus to accurately describe planetary orbits as elliptical). However, since the full fruits of this remarkable era took a century and a half to ripen, it is clear that personal correspondence alone would have been insufficient. Below is a short description of the flow of scientific ideas in the 16th and 17th century that led to Newton's discoveries.

- Newton was born in 1642, the year Galileo Galilei died in Florence under house arrest. The Catholic Church had convicted Galileo of "suspicion of heresy" in 1633 for the publication and dissemination of his views that the earth moved and was not the center of the universe. He was censured, made to recant, and condemned to house arrest for the remainder of his life. Galileo was indeed one of the "giants" on whose shoulders Newton stood, and given that direct conversation between the two was impossible, Galileo's publications had to speak for him. Galileo's works include, *The Starry Messenger*, in which he speaks with pride of his discovery of four moons of Jupiter (the fact that these moons orbited something other than the earth suggested that perhaps the earth was not the center of the universe); *The Assayer*, in which he argues that the material world is simpler than it appears; and his controversial *Dialogue Concerning the two Chief World Systems*, in which he argues convincingly for the system favored by science and against the system favored by the Church. This last was written in Italian as opposed to Latin, intended for wide distribution, and submitted to the Church for approval, with fateful results.

- Galileo's *Dialogue* properly credited his predecessor, Nicholas Copernicus, who lived from 1473 until 1543. Copernicus was the first modern astronomer to claim that the earth revolved around the sun and rotated on its axis. Since Copernicus died before Galileo's birth in 1564, Copernicus' publications had to serve as Galileo's reference. Copernicus feared persecution by the Church, and refrained from publishing his views until the year of his death – his *On the Revolutions of the Heavenly Spheres* was only published in 1543 on the urging of his friends, lest his revolutionary ideas die with him. It is uncertain whether Copernicus would have met the same fate as Galileo, however, since he wrote in Latin and aimed his book at the intellectual elite. Galileo's intentions and methods of publication were more likely to raise the ire of the Church fathers. In addition, Galileo was writing at the height of the Thirty Years' War between Catholics and Protestants and during a particularly conservative period of the Counter-Reformation, the organized reaction of the Catholic Church to the Protestant Reformation begun by Martin Luther in the preceding century.

Teaching Tips:

- In the 17th century, Isaac Newton said, "If I have seen further than other men, it is because I have stood on the shoulders of giants." Ask students to explain this quote and to hypothesize whether he could have made this statement without the invention of the printing press. (Newton is arguing that his ideas are built upon the work of others – all of whom he had experienced through books. He is also suggesting that he can see farther than earlier thinkers because they have provided the base.)

- Ask students if they 1) agree that printing helped spread scientific ideas, and 2) if so, was this consequence of the printing press more or less significant than printing's impact on religion, geography, and culture. (Students' answers will vary, but forcing the debate will lead to clarity in their arguments and better papers.)

- Remind students that there is no right answer to the question, *What was the most important consequence of the printing press?* They simply need to take a position and back up their ideas. If they want to suggest that printing helped lead to the birth of modern science, which in turn changed the way humans interact with and see the world, then fine. If they want to argue that the change in religious understandings was more profound, this will also work. If they want to argue that all areas are equally significant, they need to prove this as well, which seems easy to do, but really may not be.

Document 10

✎ Notes

Source: Derek T. Whiteside, editor, *The Mathematical Papers of Isaac Newton I: 1664-1666*, cited by I.B. Cohen book review, *The Scientific American*, January, 1968.

SV

> ... at the beginning of Newton's final year as an undergraduate (1664) ... he gave up an exclusive diet of reading the ancients ... and plunged into the moderns.... He read and made notes on Galileo's *Dialoges* ... and Descartes' *Principles of Philosophy*.... As we turn the pages of his notebooks we can see his mind leap from summaries of his reading to his own new principles and results.... He began to think of gravity as a force extending as far as the moon.... In those two years a mathematician was born.

Isaac Newton's Bookshelf

Source: Charles Coulston Gillespie, editor, *Dictionary of Scientific Biography*, New York: Charles Scribner's Sons, 1974.

Isaac Newton, the father of the Scientific Revolution, was admitted at the age of 19 to Trinity College, Cambridge, England, on June 5th, 1661. Among the books that he read at Trinity were the following:

Dialogo by Galileo (1564-1642) Italian scientist and philosopher

In this work, Galileo challenges the idea that the earth is the center of the universe and argues that falling bodies fall toward the center of the earth, not the center of the universe.

Dioptrice by Johannes Kepler (1571-1630) German astronomer, physicist, mathematician

In this work Kepler describes how lenses work and applies his ideas to a new kind of astronomical telescope with two convex lenses.

Micrographia by Robert Hooke (1635-1702) English chemist, physicist

Hooke describes his observations through a microscope, and for the first time, accompanies them with illustrations. This was the first great work devoted to this subject.

Geometrie and Principles of Philosophy by Rene Descartes (1596-1650) French philosopher

Descartes spells out the foundations of analytical geometry. He is credited with the discovery of this branch of mathematics.

Organon by Aristotle (384-322 BCE) Greek philosopher and student of Plato

This book along with several other Greek classics including Aristotle's *Ethics* provides evidence that Newton was well-grounded in Greek rhetoric and logic.

Elements by Euclid (3rd century BCE) Greek mathematician

In this classical work Euclid creates the first systematic geometry based on clarification of such previously undefined concepts as point, line, and plane. Our young scholar Newton is said to have found Euclid "trifling" and put him back in the shelf in favor of a Latin edition of Descartes' *Geometrie*.

Printing Press Lesson Plan – Shorter Version (SV)

DAY 1

HOOK (Optional)
10 min.

BACKGROUND ESSAY
35 min.

Have students read the Background Essay. Be sure they are oriented in place and time. The essay presents a brief history of communication from the development of language, to writing with hieroglyphs, to the alphabet, to printing. It also provides background information on Gutenberg and the moveable type printing process. You may want to read it aloud. You can do the ten-minute Hook Exercise either before or after reading the essay.

Homework

For homework, ask students to read through the documents. Then, using the document list in their Student Guide Sheet, ask them to organize the documents into workable analytical categories. Review the analytical question. Around what analytical categories might they expect the documents to be organized? One reasonable bet is documents organized around compelling interests and pursuits of the times – religion, geography and exploration, Renaissance interest in literature and science. Outlines of document groupings are due before Day 2 lesson.

DAY 2

DISCUSSION
10 min.

Discuss outlines. Drawing from students' homework, create an outline that approaches the categories in the Teacher Document List or some viable alternative.

DOCUMENT ANALYSIS
35 min.

Using an overhead projector, examine one or more documents together as a class. Again, review with students what they are looking for – ways in which the printing press had an impact on the 15th, 16th, and early 17th century world. On a transparency of a Document Analysis Sheet, model the level of analytical notation you expect for each document. (See *Teachers' Toolkit* for samples.) Then, in pairs or small groups, have students work through the documents. You may want to divide up the documents, assigning an analytical cluster (e.g. Geography and Exploration or Religion, etc.) to each. More than one group can be assigned the same cluster.

Homework

Students complete their document analysis.

DAY 3

DISCUSSION
45 min.

When students have finished their analytical notes conduct a full class discussion. Have transparencies of each document available for reference. Different groups might be invited to come forward to describe a document or cluster of documents and explain how the printing press affected ideas and events in that particular life sector.

DAY 4 (optional)

ESSAY
45 min.

If the lesson is to culminate in an essay, unless the skill level of your class is high, one day for a writing workshop is suggested. Students can write their introductory paragraphs in class complete with title, "grabber," thesis, and "road map" for how their paper will be developed. See Writing Guidelines in the *Teachers' Toolkit* for detailed suggestions.

Homework

Write essay.

Pressed for Time?

If only two days available. *Day One*: Have students read the Background Essay the night before as homework. 1. In class, briefly review the content of the Essay. 2. Review the analytical question. 3. Divide the class into five Analytical Category Teams. (See Teacher Document List) Ask each team to spend the rest of the class period analyzing the documents in their category, filling out a Document Analysis Sheet for each document and writing a summary statement which assesses the impact of the printing press in their category area.

Day Two: Give teams five minutes to organize their thoughts and then ask each team to present its findings to the class. After all Category Teams have presented, hold a class discussion which summarizes the findings: What was the overall impact of the printing press on the 15th, 16th, and 17th century world? What area of life was transformed the most and had the greatest impact on human history?