

A frightening rumor was spreading across Europe in 1347. It was told in horrifying detail by travelers returning from the East.

According to the rumor, a mysterious force was killing people. It wasn't like any ordinary disease. A person hardly had time to become sick, and before you knew it, he was gone. And as if that wasn't bad enough, this mysterious killer disposed of its victims in a most grisly manner. There were reports of bodies exploding with the foul sickness. Victims, as soon as they began to feel sick, reportedly gave off such a stench that no one would go near them.



Were the reports true? What was this mysterious killer? And what made it spread?

People in medieval Europe soon found out the answer to the first question. The reports were true. An unknown but gruesome sickness was spreading across Europe, and it was taking the lives of its victims. The plague spread gradually, making its way across Europe at the rate of a few miles each day.

As the plague spread, peasants abandoned their villages and fled, just as they would if an invading army was approaching.

What about the second question? What was this horrible killer? Scholars at the University of Paris tried to find the answer. Their conclusions were based on the best knowledge available at the time. They blamed the pestilence on a combination of the earthquakes that had shaken the continent around that time and the forces of astrology. They hypothesized that storms created by an unusual alignment of the planets had spread the evil forces released by the earthquakes.

Before they could continue their investigations, many of the scholars were also struck down by the plague.

The plague was actually a contagious disease like the flu.

The answer to the third question? Germs. Medieval men and women didn't know what we know today - that diseases are spread by germs. The plague was spread from Asia to Europe, and then across Europe, by passing germs. It seems that the germs had lived on rats for many years. Fleas that lived on the rats could pass the germs from one creature to another. After some of the infected rats made their way to Europe in the cargo hold of a trading ship, the fleas began to bite, not just other rats, but people too.

The flea bite passed the plague germs into a person's bloodstream. It caused symptoms that we all recognize from milder illnesses that are common today: headaches, chills, fever, and nausea. But the Black Death didn't stop there.

The form called the bubonic plague, probably the most common one, caused large swellings to appear at the site of the flea bite, often in an enclosed area of the body such as an armpit. These swellings, filled with infection, turned black and became as large as an egg. Soon, they burst open. Soon after that, the person died.

The Black Death was a painful way to die. It was also disgusting; an infected person smelled so bad that no one would go near him. As a result, a sick person became an outcast, and often, no one would care for him.

People tried to control the epidemic. They burned down houses and even whole villages infected by the plague, but their efforts had little effect.

The plague had arrived in Europe in 1347, and by 1348, it had made its way across the whole continent to England. Within a few years, about 25 million people had died. Thirty percent or more of Europe's population had been wiped out. After all of the invasions and wars that had killed so many people in the Middle Ages, the Black Death turned out to be the biggest killer of all.

Name: \_\_\_\_\_

## What Was the Renaissance?

### EXAM Reading Text #2

For much of history, humans have had to spend their time surviving. Prehistoric people probably spent nearly all of their time hunting for food and keeping themselves safe from predators. As recently as the 1930s when the Great Depression struck, Americans went into survival mode, spending all of their efforts on getting the necessities of life. Today in many parts of the world, survival is still all that people can think about.



At certain times and places, however, people have been luckier. When the conditions were just right, people became free to spend their time and energy on something special. This is what happened in Europe during the Renaissance. Many factors combined to make Renaissance Europe a special, creative place.

The Medieval Era, which had defined Europe for so long, was beginning to come to an end in the 1300s. The Black Plague wiped out a large part of the population of Europe. It also weakened people's faith in the Christian church, which had exerted so much control over the lives of medieval people. Advances in military equipment, such as the invention of long-range cannons, brought an end to medieval warfare and, so, to the feudal system. Europe was ready for a change.

People began to look to education and science for answers. Greek and Roman writings that had been discarded years ago were dusted off and studied once again. People began to consider new answers, new ideas, and new ways of doing things. The ideas of individual people became valued. This renewed belief in the potential of individual human beings became known as Humanism. It became a hallmark of the Renaissance.

Creative people like writers and artists began to produce works that were new and different from medieval art work. Paintings were more lifelike and less formal than medieval paintings. Writers tried to understand human nature through their writings.

People of the Renaissance were able to do this, in large part, because of the sponsorship of rich and powerful patrons. Wealthy families of businessmen, who had made fortunes in international trade, took an interest in having art and learning in their cities. They were willing to spend lots of money to sponsor artists, scholars, and craftsmen who would produce works that would bring education and creativity to their city.

The Medici family in Florence, Italy, and the Sforza family in Milan, Italy, were two of the most wealthy and influential Renaissance families. The Medici family made their city of Florence a center of Renaissance culture. The Sforza family did the same for Milan. They sponsored creative people in many fields, including art, architecture, literature, and science.

**EXAM Reading Text #2**

## What Was the Renaissance?

Artists like Leonardo da Vinci, Giotto, Titian, Raphael, Michelangelo, and Botticelli painted some of the world's most famous works of art in the cities of Renaissance Europe. Architects like Brunelleschi designed beautiful buildings there. Inventors like Gutenberg came up with new creations, and scientists like Galileo and Copernicus announced discoveries that changed the way people understood the world. Explorers like Christopher Columbus set sail from Renaissance Europe.

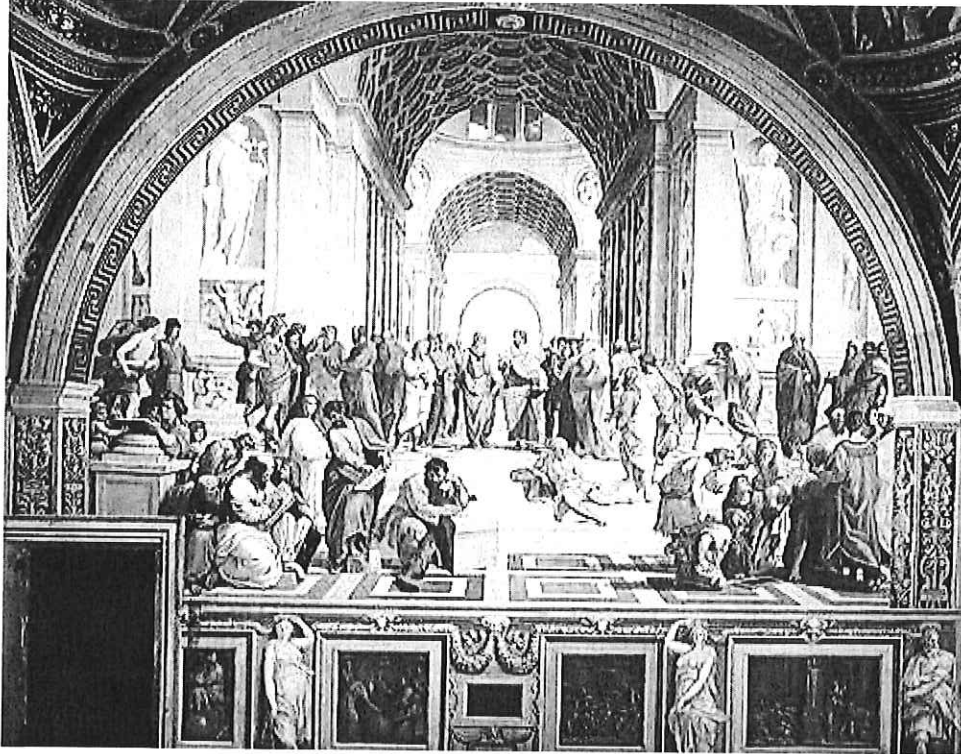
These giants of the Renaissance, and many others, left a legacy of beautiful and innovative work. They gave the word "Renaissance" the meaning that we know it by today - a time of extraordinary creativity and accomplishment.

This special period in our world's history continued for about 300 years.

# The Renaissance - Introduction to the Renaissance

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by ReadWorks



*In the early 1500s, Renaissance artist Raphael painting this painting, which shows important ancient Greek figures.*

By the 1300s, a lot of people in Europe knew or thought very little about art, literature, and philosophy from ancient Greece and Rome. But that started to change in the 1300s. People were rediscovering and appreciating more and more ancient Greek and Roman works. This began a time period known as the Renaissance, which lasted until the 1600s. "Renaissance" comes from the French word meaning "rebirth," but the ideas of the Renaissance started in Italy. The Renaissance was the rebirth in Europe of interest in the cultures of ancient Greece and Rome. The Renaissance came after a time period called the Middle Ages.

The Middle Ages is also known as the medieval period, and it began with the fall of the Roman Empire. Throughout the Middle Ages, the Roman Catholic Church and its values were considered to be very important in Europe. Many people focused their lives and thoughts on them. Philosophers thought about Christian theology, or the study of God and Christianity. Many artists made art based on characters or stories from the Bible. People traveled to different churches for religious festivals.

In the late Middle Ages, scholars and teachers began to rediscover the works of some ancient Greek philosophers. They used these works to help present ideas in Christian theology. From the late Middle Ages into the Renaissance, there was an increase of interest in ancient Greek and Roman cultures, which led to people applying ancient Greek and Roman values to their daily life. This led to a movement known as Renaissance humanism. Humanists believed that people were focusing too much on the rules and values taught by the Catholic Church. Many famous Renaissance humanists were religious, but they thought that people should focus more on human thoughts, actions, and achievements.



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*This is an illustration of the Gutenberg printing press.*

The ideas of the Renaissance got its start in Italy in the 1300s. Early in the Renaissance period, some important things were happening in Italy and other parts of Europe. More people went to the seas and explored new routes for trading. Some explorers discovered land that Europeans didn't know about before. An important invention was made in this time, too. In Germany, Johannes Gutenberg invented a printing press that was revolutionary. The Gutenberg printing press allowed for a lot of copies of a book to be printed much more quickly. This invention helped in spreading the ideas of the Renaissance from Italy to other parts of Europe. As people around Europe studied works from ancient Greece and Rome, Renaissance art, literature, and philosophy blossomed. In addition to Johannes Gutenberg, other famous people from the Renaissance include Leonardo da Vinci, Michelangelo, Ferdinand Magellan, Martin Luther, Galileo Galilei, and William Shakespeare.



## Leonardo da Vinci's Paintings

Leonardo didn't have the opportunities that some young men of his time had. He wasn't destined to become a prince, a lord, or a rich merchant. Yet, he found a way to make a good and prosperous life for himself. At a young age, Leonardo became an apprentice in the art studio of Verrocchio. There, Leonardo gained hands-on experience, not just with painting, but also with sculpting and engineering. Leonardo tried to learn as much as he could and do his best at each assignment that he was given.

A film about Leonardo shows him at practice painting something as simple as a piece of draped fabric. He practices it over and over, changing only the location of the candlelight that shines on the fabric for each painting. He is figuring out just how to paint areas of light and shadow.

Leonardo did become an expert at nearly everything he tried in Verrocchio's studio. Soon, he was achieving beyond what his master Verrocchio had ever achieved. There is a painting of Verrocchio's with a beautiful little angel in the corner. The angel's expressive face and bright, lively hair make her stand out from the rest of the figures in the painting. The little angel, it turns out, was painted by Leonardo. It was a sign of things to come.

By the time he finished his apprenticeship and joined the guild of artists on his own at the age of 20, Leonardo's own paintings were being recognized for their excellence. He began to receive commissions to paint portraits and religious paintings.

One of his earlier paintings, *Lady with an Ermine* painted around 1482, is another sign of even better things to come. It shows a young woman dressed in the fashion of the time and wearing a headband and long beads. She is holding a pet ermine. The picture seems to show her thoughts and feelings as well as her appearance.

One of Leonardo da Vinci's most famous paintings, *The Last Supper*, painted in the 1490s, shows Jesus and his apostles seated at a long table for their last supper together. It shows the moment when Jesus announces that one of the apostles will betray him. That apostle, Judas, is shown leaning away from Jesus as the other apostles react in small groups. The shape of the room and the three windows directly behind Jesus frame the picture. Jesus sits peacefully at the center while each small group of apostles expresses its surprise. The looks on their faces and the gestures they make with their hands tell the story without words.

Leonardo da Vinci painted *Mona Lisa* in the early 1500s. Like many of Leonardo's works, it is done in oil paints on wood. *Mona Lisa*'s smile is famous all over the world. People say that her expression changes depending on the angle from which you look at the painting. Others say that her mysterious expression comes from the way that Leonardo painted the corners of her mouth and her eyes - just a little bit blurry, so we can't be



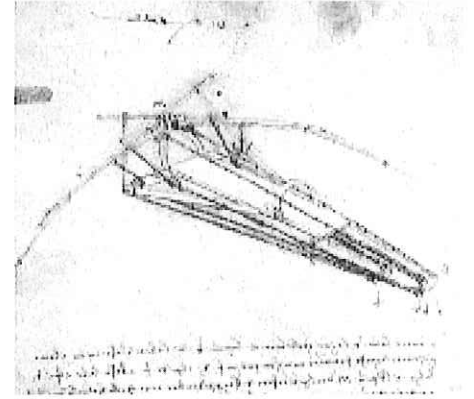
quite sure what her expression is. The background of the painting provides another source of mystery. It is a misty outdoors scene, and one side doesn't exactly match the other, maybe to make us look at *Mona Lisa* from two slightly different perspectives too.

*Mona Lisa* will always be a mystery, but one thing is certain, she is loved by people all over the world. The painting is so famous that it is now kept in its own room, behind triple-thick bullet-proof glass, in the Louvre Museum in Paris. Leonardo himself must have been very fond of *Mona Lisa* too, since he kept this painting with him for years and years. Maybe that mysterious expression on her face was just what he had been trying to paint all along.



Hundreds of years before the invention of the first working airplane, Leonardo da Vinci drew sketches of airplanes, gliders, helicopters, and even a parachute.

It's no wonder that flying machines were a favorite of Leonardo's. He had been interested in birds since an early age. As an adult, he would buy caged birds at the market and then let the birds fly free. He also watched birds closely, trying to figure out just how they flew. He drew sketches of ideas for machines that might one day allow people to fly. Drawing sketches of new ideas was something Leonardo must have enjoyed, too. He filled thick notebooks full of these ideas.



One of his ideas was for an ornithopter. An ornithopter was a machine that would allow a man to fly like a bird. It consisted of two large wings attached to a center board where the pilot would lie face-down to operate the machine. The wings were modeled after the wings of a large bird. A system of pulleys and rods operated by the pilot's feet would flap the wings. A tremendous amount of strength and work would have been needed to get the ornithopter off the ground. At that time, there were no gas or electric engines for power. The only power available to operate an aircraft was human power. And humans, it seemed, were just not strong enough to flap their wings like a bird.

Leonardo also drew sketches of gliders. He became interested in gliders after many experiments with his ornithopter. This time he focused on a different feature of bird flight - not the flapping wings, but rather the gliding action. He had been studying how air flows around a wing. He demonstrated what it would look like with drawings of flowing water. Looking even more closely at bird wings, Leonardo noticed that the inner parts of the wings remained more still, while the outer parts were more moveable.

He designed his glider with this knowledge in mind. Leonardo's glider would have wings fixed in place at the center but with moveable tips. He designed curved wings that were capable of tiny movements to adapt to the wind flow. In these new planes, the pilot would fly upright, like in a hang glider of today.

Another of Leonardo's ideas for a flying machine was the aerial screw. Many people think it was a preview of the modern helicopter. An aerial screw was an upright flying machine. It had one spiral-shaped wing with a platform below. Men standing on the platform would operate this flying machine.

Leonardo also designed a parachute. Leonardo's parachute could not be folded up in a backpack like modern parachutes. It was made in a pyramid shape. It had rigid edges with fabric stretched across each side. The jumper would hang by his arms beneath the pyramid.

Leonardo's flying machines, like many of his other ideas, were ahead of their time. In the 1400s, without engines and the lighter building materials that we have today, he could not have built them successfully. Maybe that was fine with Leonardo. He must have enjoyed working on his ideas, drawing his fantastic creations, and maybe even dreaming of one day in the future when people would be able to fly like the birds.

# The Printing Press and the Renaissance

This text is adapted from an original work of the Core Knowledge Foundation.

The Renaissance was a period of history when a rediscovery of classical learning led to great achievements. This important period began in Italy in the mid-1300s.

Once the Renaissance began, it was greatly advanced by an important German invention: the printing press. Around the year 1450, Johannes Gutenberg (/yoe\*hahn\*es/goot\*en\*burg) developed a new way of printing books and papers. Gutenberg devised a system of movable letter stamps. These stamps could be quickly arranged to form words and sentences. They were then inked and pressed onto paper. Before this invention, writings had to be copied by hand. This was a slow and expensive process. Scholars called humanists had been willing to copy manuscripts because they were so excited about their discoveries. But even the most energetic scholar could make only a handful of copies of any given manuscript. Gutenberg's invention made it possible to make many copies of books, newspapers, and pamphlets quickly and at low cost. The knowledge that the humanists had gathered could be easily spread and shared.



*During the Renaissance, knowledge spread because of print shops such as this one, which could produce many volumes in a short time.*

Use of movable type and the printing press spread quickly in Italy. By 1500, Italy boasted more printing presses than any other country in Europe. Printers helped spread the important texts of ancient Greece and Rome far and wide.

Many factors helped bring about the Italian Renaissance. Among them were the ruins of ancient Rome and the inspiration they provided. Increased interest in education and greater understanding of foreign cultures also played a part in the Italian Renaissance. But the presence of Byzantine scholars with Greek manuscripts and the printing press also played a large role in the Italian Renaissance. It, along with many other causes, helped shape an important time in history.