The Renaissance was a fervent period of European cultural, artistic, political and economic “rebirth” following the Middle Ages. Generally described as taking place from the 14th century to the 17th century, the Renaissance promoted the rediscovery of classical philosophy, literature and art. Some of the greatest thinkers, authors, statesmen, scientists and artists in human history thrived during this era, while global exploration opened up new lands and cultures to European commerce. The Renaissance is credited with bridging the gap between the Middle Ages and modern-day civilization.

From Darkness to Light: The Renaissance Begins

During the Middle Ages, a period that took place between the fall of ancient Rome in 476 A.D. and the beginning of the 14th century, Europeans made few advances in science and art. Also known as the “Dark Ages,” the era is often branded as a time of war, ignorance, famine and pandemics such as the Black Death. Some historians, however, believe that such grim depictions of the Middle Ages were greatly
exaggerated, though many agree that there was relatively little regard for ancient Greek and Roman philosophies and learning at the time.

**Humanism**

During the 14th century, a cultural movement called humanism began to gain momentum in Italy. Among its many principles, humanism promoted the idea that man was the center of his own universe, and people should embrace human achievements in education, classical arts, literature and science.

In 1450, the invention of the Gutenberg printing press allowed for improved communication throughout Europe and for ideas to spread more quickly. As a result of this advance in communication, little-known texts from early humanist authors such as those by Francesco Petrarch and Giovanni Boccaccio, which promoted the renewal of traditional Greek and Roman culture and values, were printed and distributed to the masses. Additionally, many scholars believe advances in international finance and trade impacted culture in Europe and set the stage for the Renaissance.
Characteristics of the Renaissance

The printing press

"The demand for perfect reproductions of texts and the renewed focus on studying them helped trigger one of the biggest discoveries in the whole of human history: printing with movable type. For me this is the easiest and single greatest developed of the Renaissance and allowed modern culture to develop," Wilde told Live Science. The printing press was developed in Europe by Johannes Gutenberg in 1440. It allowed Bibles, secular books, printed music and more to be made in larger amounts and reach more people. [Related: How Gutenberg Changed the World]

Intellectual movement

Wilde said one of the most significant changes that occurred during the Renaissance was the "evolution of Renaissance humanism as a method of thinking ... This new outlook underpinned so much of the world then and now."

Wilde described Renaissance humanism as "attempts by man to master nature rather than develop religious piety." Renaissance humanism looked to classical Greek and Roman texts to change contemporary thought, allowing for a new mindset after the Middle Ages. Renaissance readers understood these classical texts as focusing on human decisions, actions and creations, rather than unquestioningly following the rules set forth by the Catholic Church as "God's plan." Though many Renaissance humanists remained religious, they
believed God gave humans opportunities and it was humanity's duty to do the best and most moral thing. Renaissance humanism was an "ethical theory and practice that emphasized reason, scientific inquiry and human fulfillment in the natural world," said Abernethy.

Art

Renaissance art was heavily influenced by classical art, wrote Virginia Cox in "A Short History of the Italian Renaissance." Artists turned to Greek and Roman sculpture, painting and decorative arts for inspiration and also because their techniques meshed with Renaissance humanist philosophy. Both classical and Renaissance art focused on human beauty and nature. People, even when in religious works, were depicted living life and showing emotion. Perspective and light and shadow techniques improved and paintings looked more three-dimensional and realistic. Patrons made it possible for successful Renaissance artists to work and develop new techniques. The Catholic Church commissioned most artwork during the Middle Ages, and while it continued to do so during the Renaissance, wealthy individuals also became important patrons, according to Cox. The most famous patrons were the Medici family in Florence, who supported the arts for much of the 15th and 16th centuries. The Medici family supported artists such as Michelangelo, Botticelli, Leonardo da Vinci and Raphael.
Florence was the initial epicenter of Renaissance art but by the end of the 15th century, Rome had overtaken it. Pope Leo X (a Medici) ambitiously filled the city with religious buildings and art. This period, from the 1490s to the 1520s, is known as the High Renaissance.

**Music**

As with art, musical innovations in the Renaissance were partly made possible because patronage expanded beyond the Catholic Church. According to the Metropolitan Museum of Art, new technologies resulted in the invention of several new instruments, including the harpsichord and violin family. The printing press meant that sheet music could be more widely disseminated.

Renaissance music was characterized by its humanist traits. Composers read classical treatises on music and aimed to create music that would touch listeners emotionally. They began to incorporate lyrics more dramatically into compositions and considered music and poetry to be closely related, according to the Metropolitan Museum of Art.

**Literature**

Renaissance literature, too, was characterized by humanist themes and a return to classical ideals of tragedy and comedy, according to the Brooklyn College English Department. Shakespeare's works, especially "Hamlet," are good examples of this. Themes like human agency, life's non-religious meanings and the true
nature of man are embraced, and Hamlet is an educated Renaissance man.

Society and economics

The most prevalent societal change during the Renaissance was the fall of feudalism and the rise of a capitalist market economy, said Abernethy. Increased trade and the labor shortage caused by the Black Death gave rise to something of a middle class. Workers could demand wages and good living conditions, and so serfdom ended.

"Rulers began to realize they could maintain their power without the church. There were no more knights in service to the king and peasants in service to the lord of the manor," said Abernethy. Having money became more important than your allegiances.

Religion

Due to a number of factors — including the Black Death, the rise in trade, the development of a middle class and the papacy's temporary move from Rome to Avignon (1309-1377) — the Catholic Church's influence was waning as the 15th century began. The re-emergence of classical texts and the rise in Renaissance humanism changed society's approach to religion and the authority of the papacy, said Abernethy. "[Humanism] created an atmosphere that gave rise to different movements and sects ... Martin Luther stressed reform of the Catholic Church, wanting to eliminate practices such as nepotism and the selling of indulgences," Abernethy said.
"Perhaps most important, the invention of the printing press allowed for the dissemination of the Bible in languages other than Latin," Abernethy continued. "Ordinary people were now able to read and learn the lessons of Scripture, leading to the Evangelical movement." These early Evangelicals emphasized the importance of the Scriptures rather than the institutional power of the church and believed that salvation was personal conversion rather than indulgences or works.

**Geography**

Thirsty to learn more about the world and eager to improve trade routes, explorers sailed off to chart new lands. Columbus "discovered" the New World in 1492 and Ferdinand Magellan became the first person to successfully circumnavigate the globe in the early 1500s.

**Science**

As scholars studied classical texts, they "resurrected the Ancient Greek belief that creation was constructed around perfect laws and reasoning," Abernethy said. "There was an escalation in the study of astronomy, anatomy and medicine, geography, alchemy, mathematics and architecture as the ancients studied them."
Nicolaus Copernicus' heliocentric model of the solar system changed the way people saw the universe, and created conflict between scientists and the Catholic Church. (Image credit: Public domain)

One of the major scientific discoveries of the Renaissance came from Polish mathematician and astronomer Nicolaus Copernicus. In the 1530s, he published his theory of a heliocentric solar system. This places the sun at the center of the solar system rather than the Earth. It was a major breakthrough in the history of science, though Copernicus' book was banned by the Catholic Church.

Empiricism began to take hold of scientific thought. "Scientists were guided by experience and experiment and began to investigate the natural world through observation," said Abernethy. "This was the first indication of a divergence between science and religion. They were being recognized as two separate fields, creating conflict between the scientists and the church and causing scientists to be persecuted," continued Abernethy. "Scientists found their work was suppressed or they were demonized as charlatans and accused of
dabbling in witchcraft, and sometimes being imprisoned."

Galileo Galilei was a major Renaissance scientist persecuted for his scientific experiments. Galileo improved the telescope, discovered new celestial bodies and found support for a heliocentric solar system. He conducted motion experiments on pendulums and falling objects that paved the way for Newton's discoveries about gravity. The Catholic Church forced him to spend the last nine years of his life under house arrest.

**How the Renaissance changed the world**

"The Renaissance was a time of transition from the ancient world to the modern and provided the foundation for the birth of the Age of Enlightenment," said Abernethy. The developments in science, art, philosophy and trade, as well as technological advancements like the printing press, left lasting impressions on society and set the stage for many elements of our modern culture.