

Renaissance and Scientific Revolution



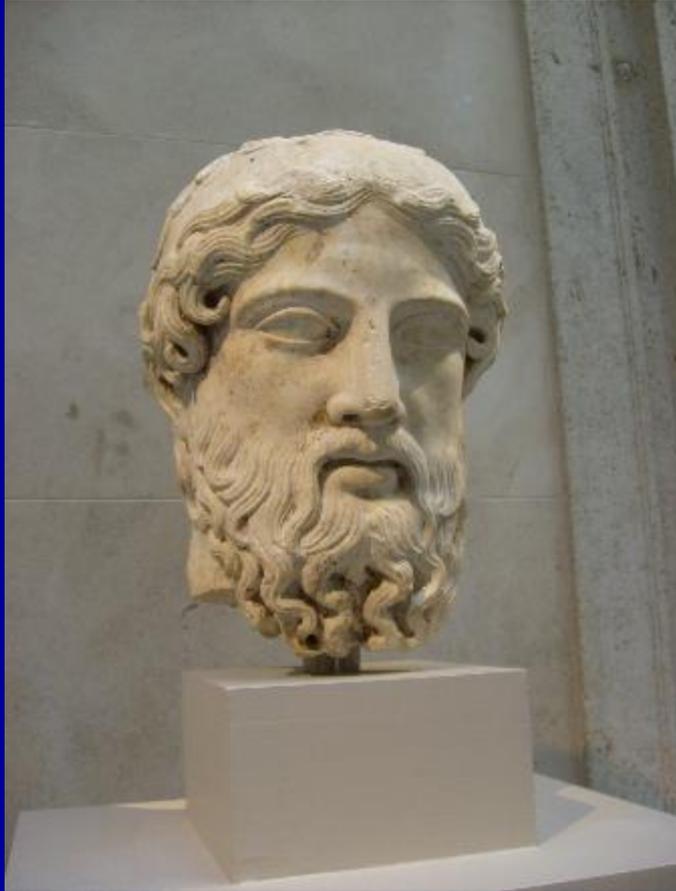
After the devastation
of the Bubonic
Plague,
Western
European
society
changed.



In Italy, people began to look to the past, to the glories of early civilizations.



Before the Middle Ages, before the Plague, there was the glory of the ancient Greeks and Romans.



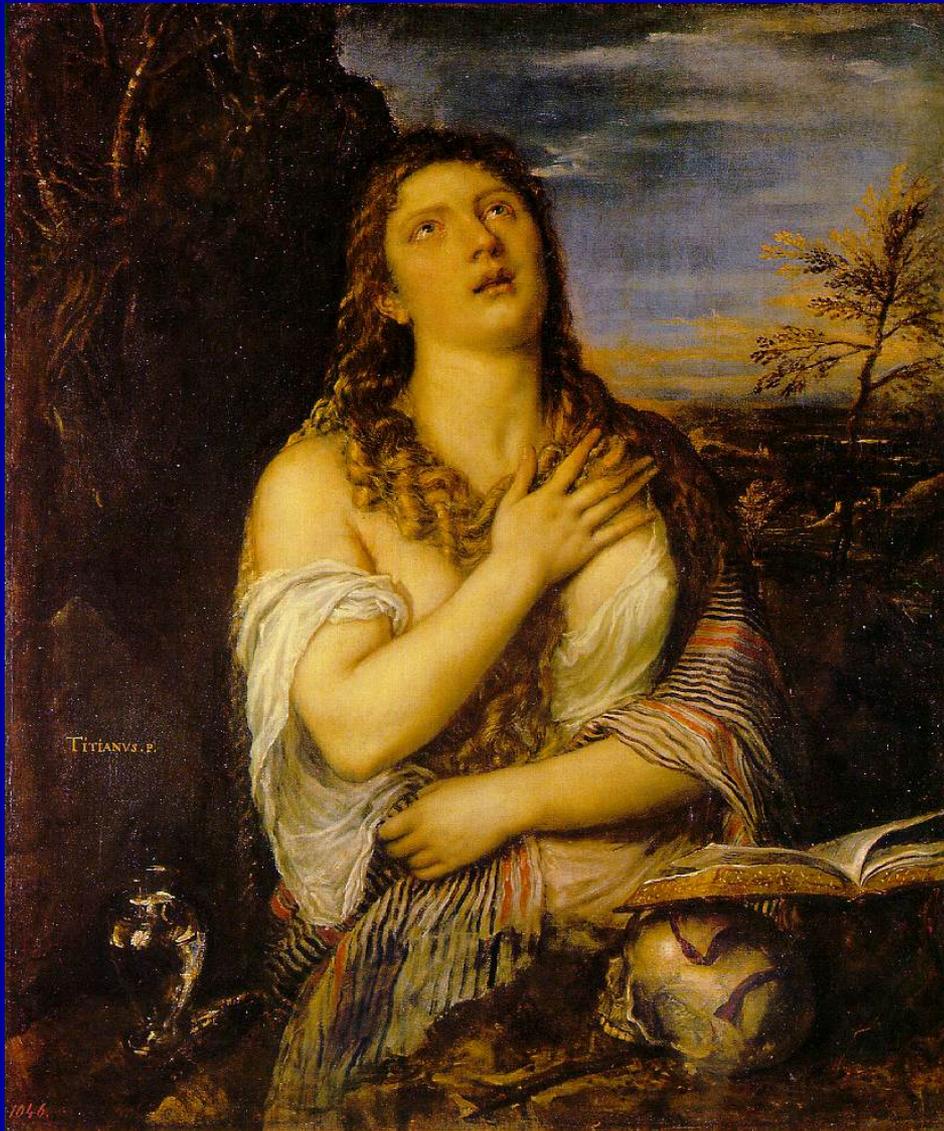
What a piece
of work
is man!



In Italy, a new period of artistic creativity and renewed interest in the contributions of the Greeks and Romans developed.



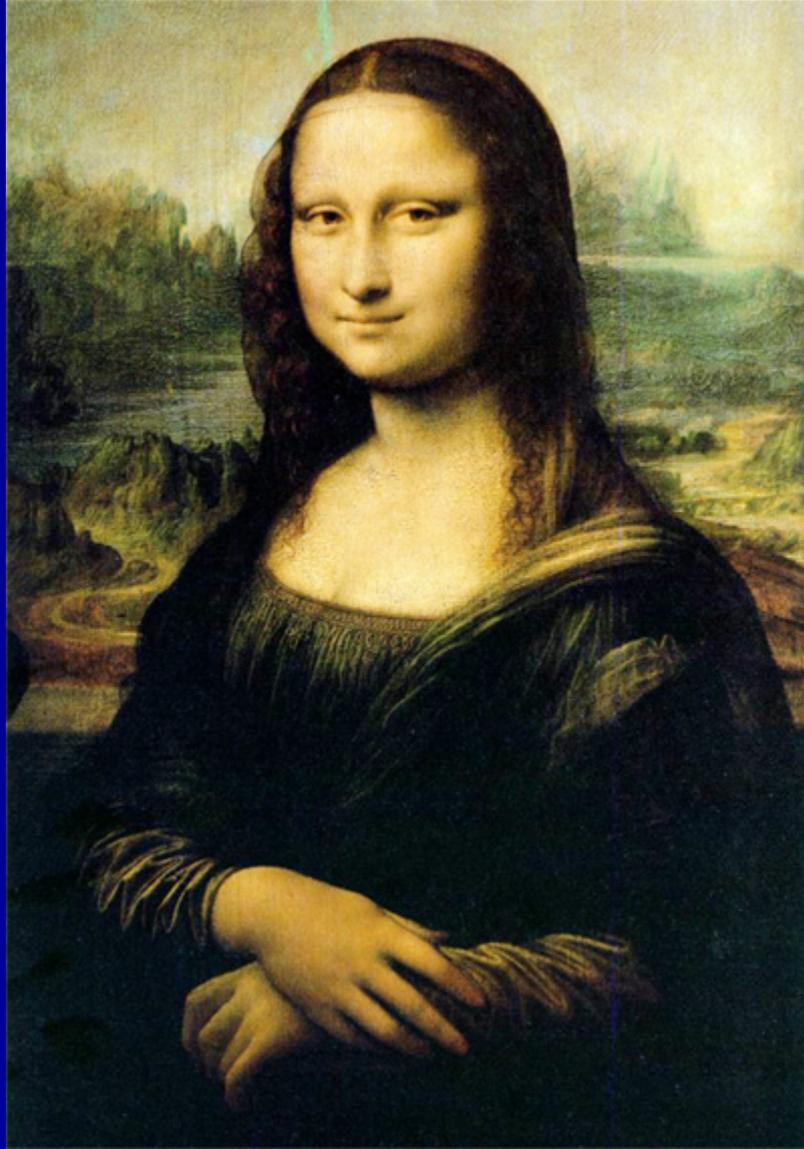
It was a
rebirth.
It was
the
Renaissance.



During the Renaissance, artists began rendering the world in three dimensions.



Painters sought realism in their art.



And why did the
Renaissance begin
in Italy?

Italy had
a great location
for trade.

It was king of
the Mediterranean
Sea.

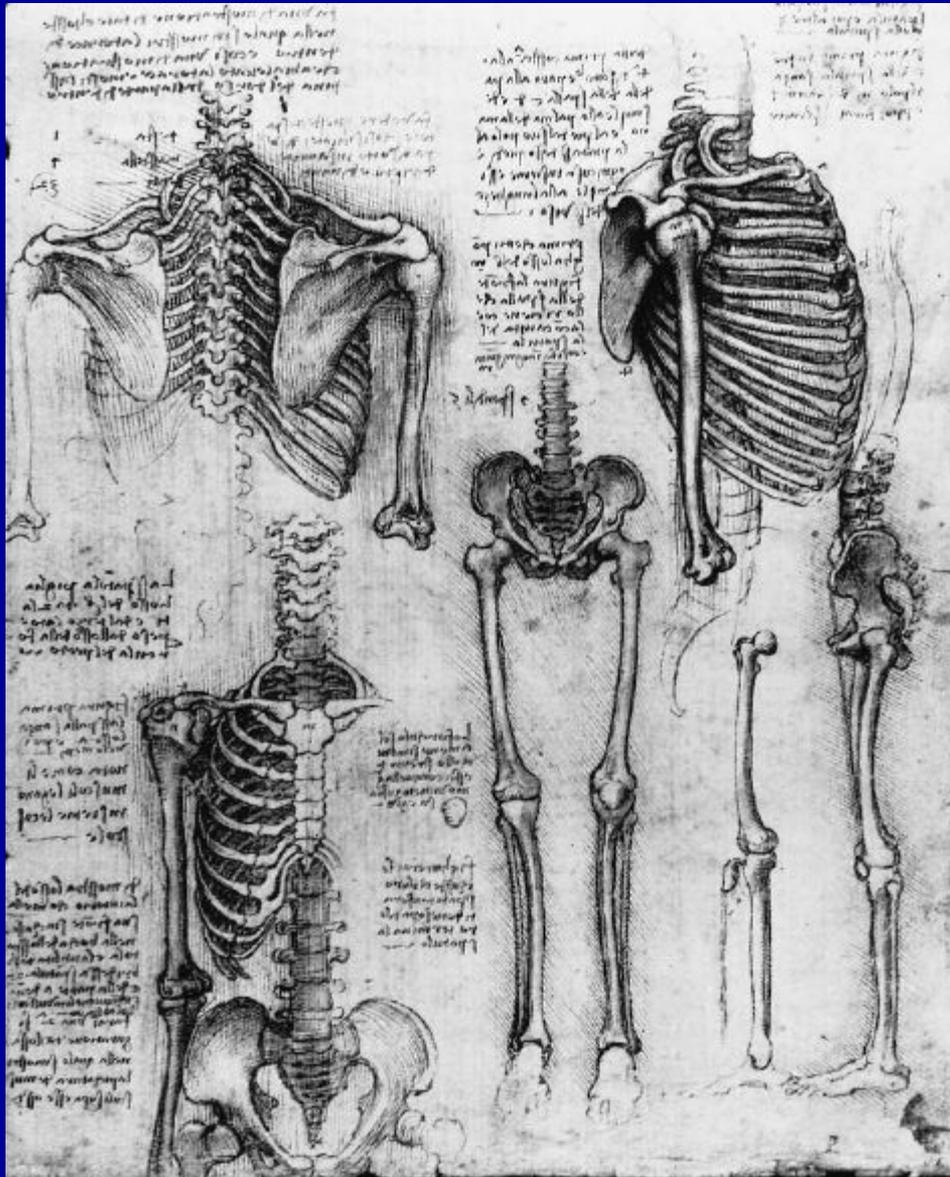
It controlled
European trade
with Asia.



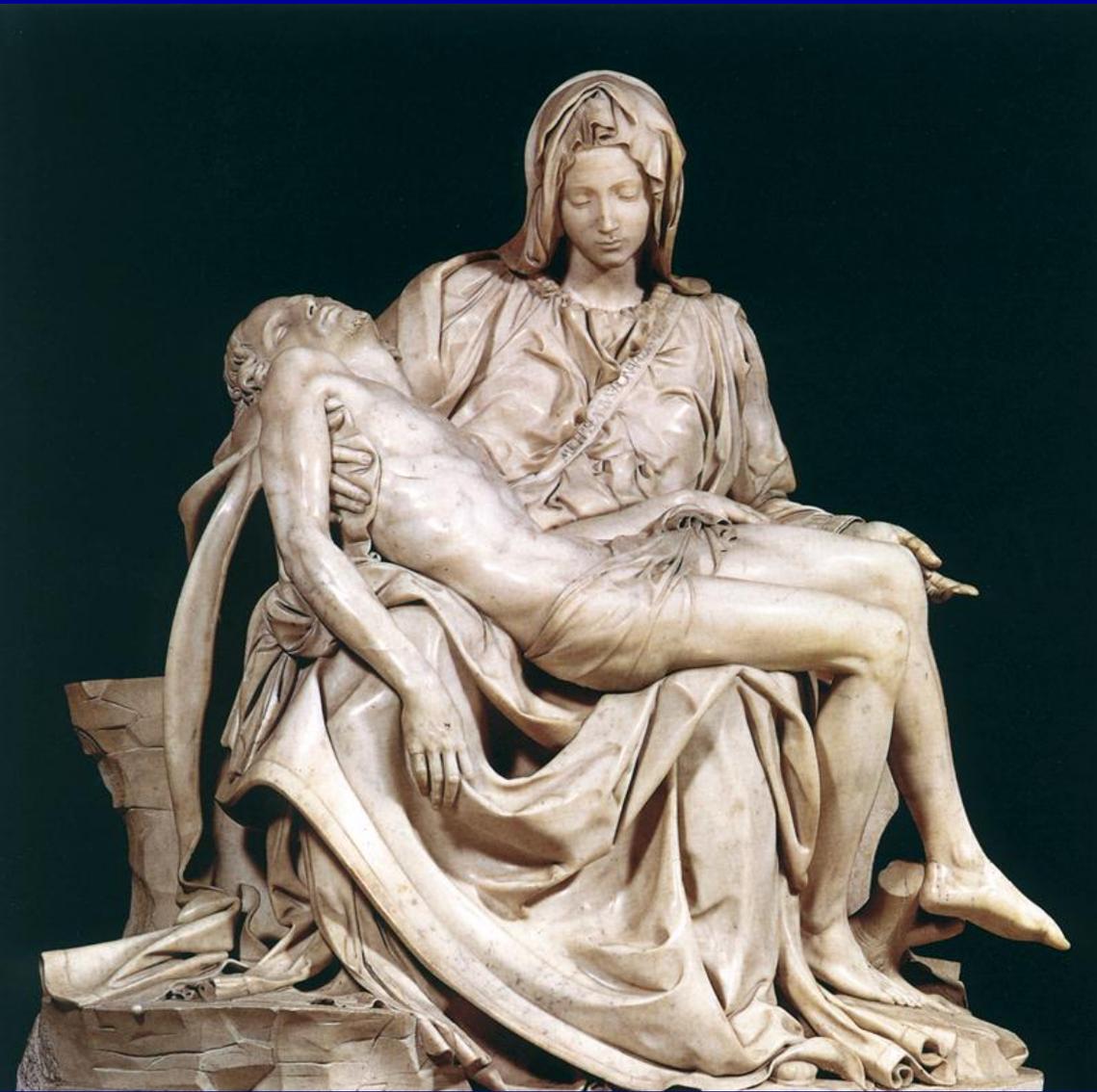
Wealth from trade allowed artists to find wealthy patrons to commission and sponsor their work.



And so, with wealth from trade, artists found sponsors and used perspective in art. Perspective is the ability to create a three dimensional appearance on a two dimensional surface.

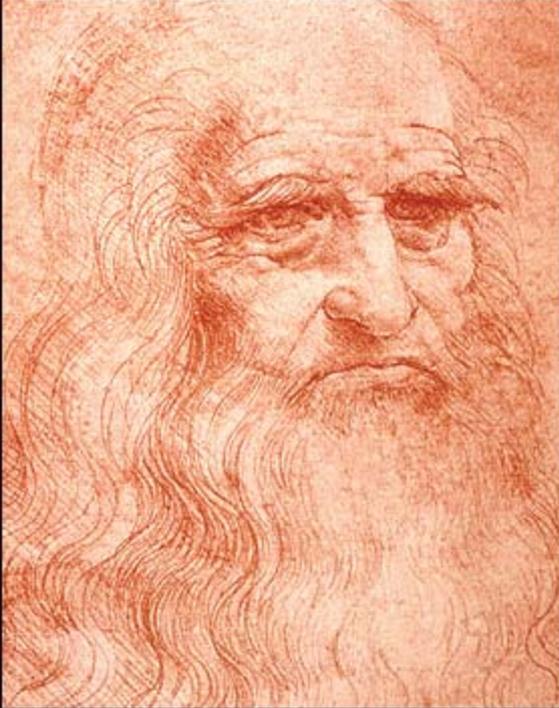


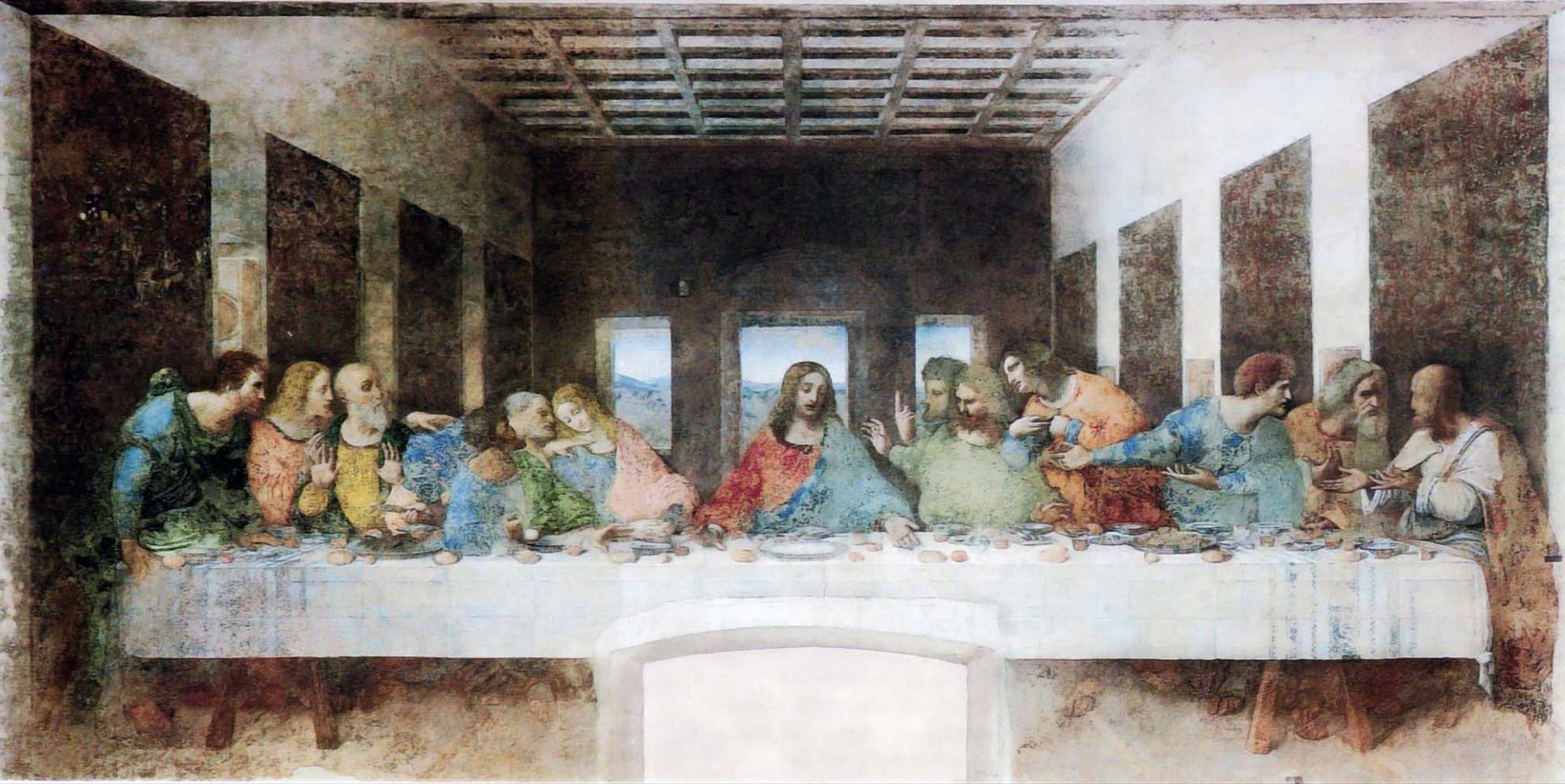
Renaissance thinkers wanted to learn new things, discover new information. They began to question the old authorities.



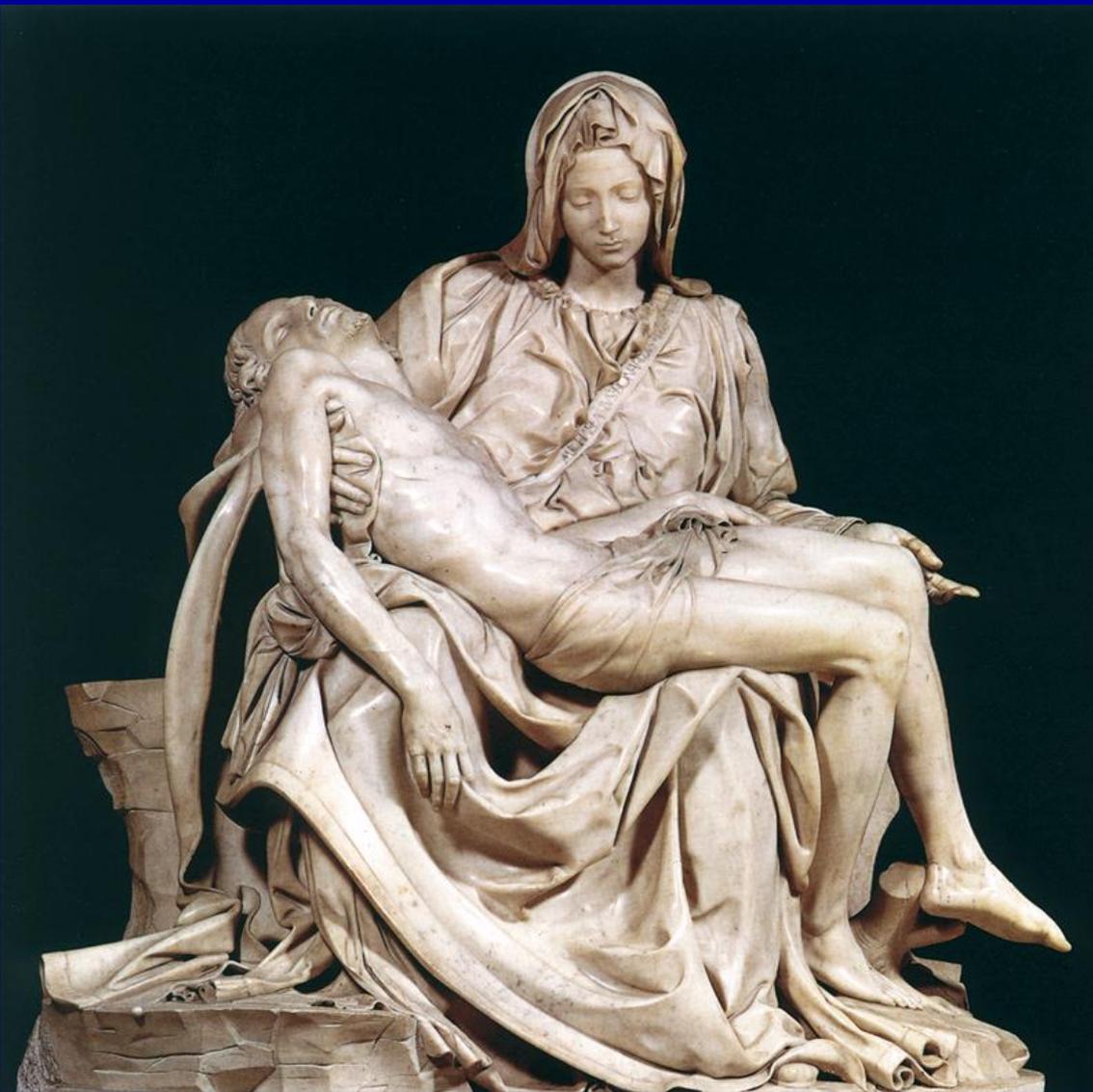
The rebirth
and rediscovery
of learning
of the
Renaissance
soon spread
to other
parts of Europe.

A Renaissance man
is:





The Renaissance was a period of great artistic creativity. Leonardo da Vinci was one of the most famous artists of the Renaissance.

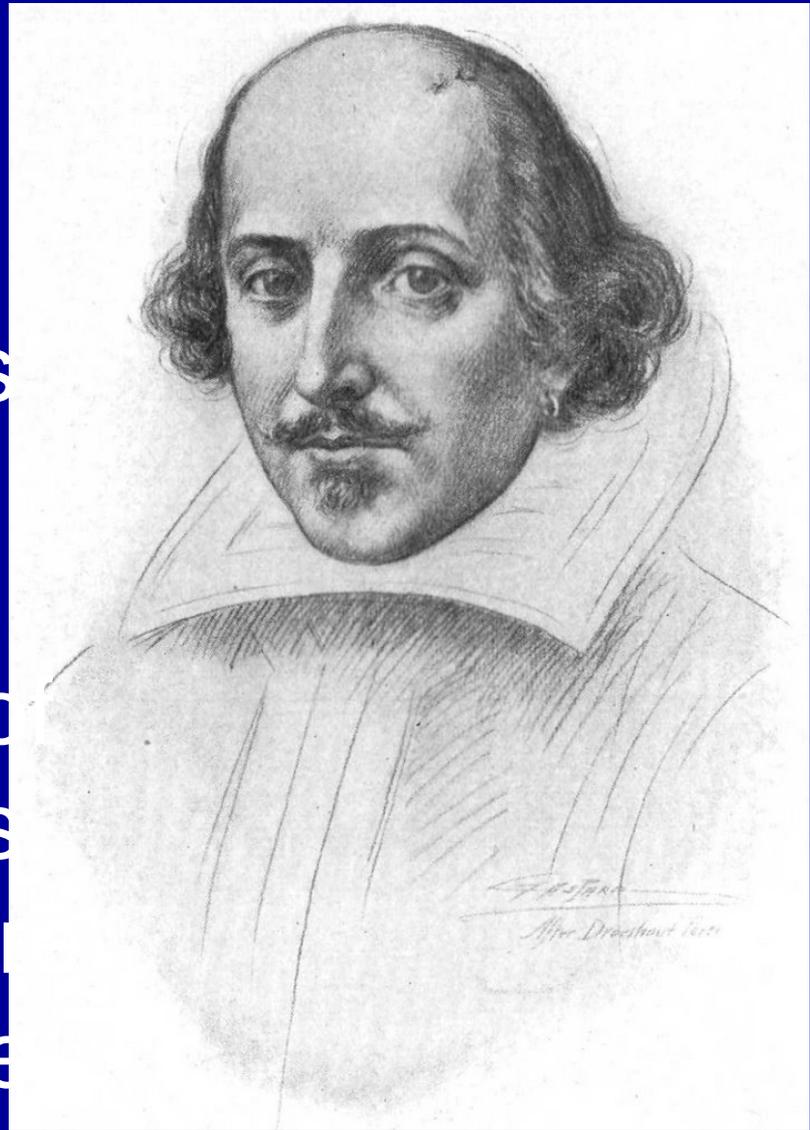


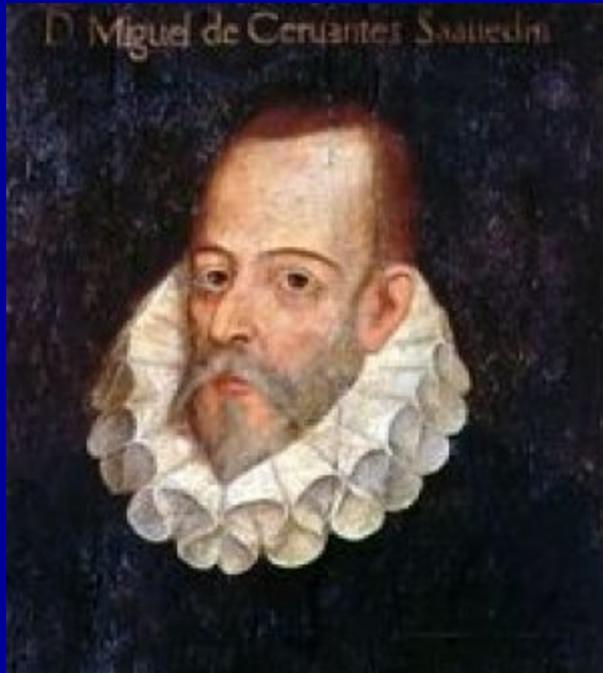
Michelangelo
was another
famous
sculptor
and artist
of the
Renaissance.



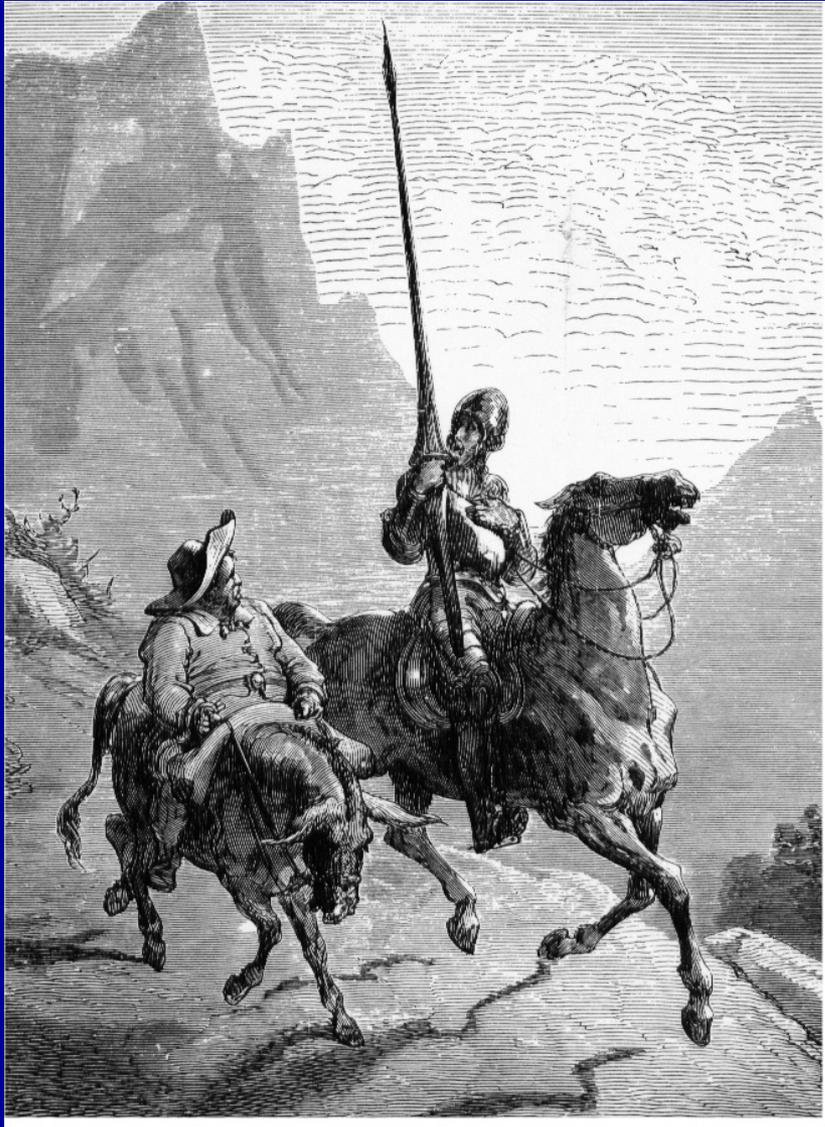
The artists of the Renaissance used perspective in their works to create realism in art.

But it was not only great painting and sculpture that was produced during the Renaissance. It was also a time of great literary works. William Shakespeare was a Renaissance writer.





Miguel de Cervantes
was another great
writer of the
Renaissance.



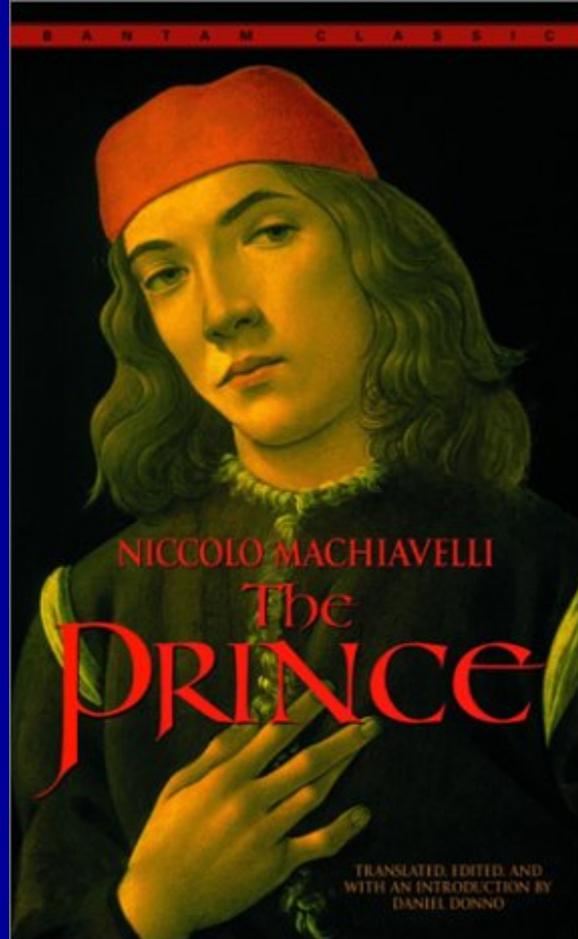
Don Quixote
was
a creation
of a
Renaissance
writer.
Part of the humor
of the story
is that the Middle
Ages have
ended.

But not
for
Don
Quixote.

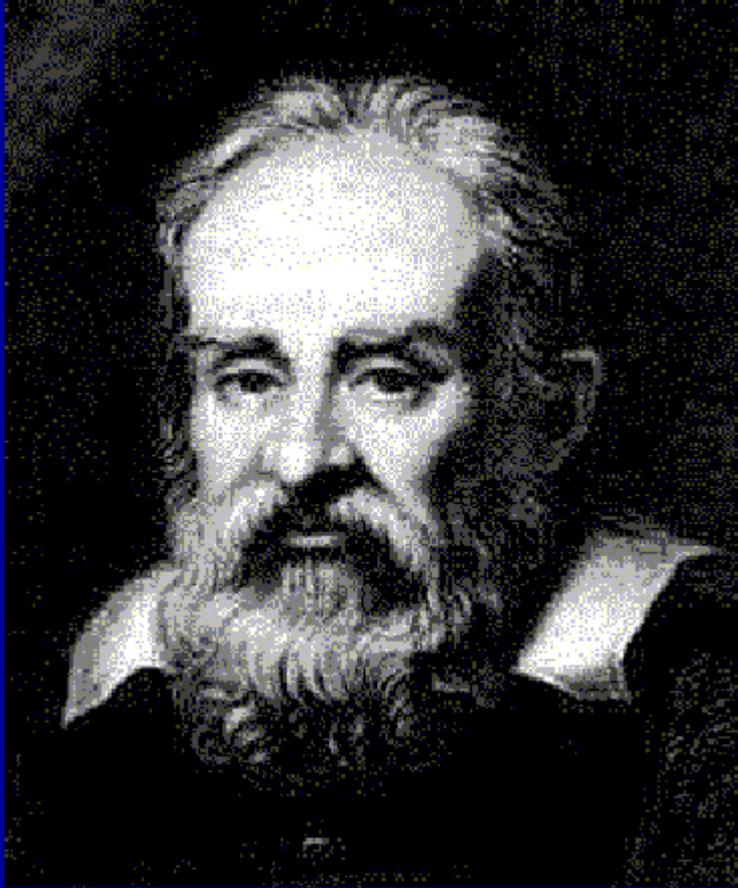




During the Renaissance,
great philosophers
produced thought-
provoking works.
Machiavelli was a
very famous philosopher
of the Renaissance.



Machiavelli wrote “The Prince.”
Machiavelli believed that kings must do whatever is necessary to maintain their power. The ends justify the means.



And of course,
there were
great scientists.
Men like Galileo
Galilei challenged
the authority of
the Catholic
Church by finding
answers in
science.



The Church even put Galileo on trial for supporting the belief that the planets revolved around the sun!



The Renaissance truly was a rebirth;
a rebirth of learning and questioning
and creativity.



Renaissance works
of art, philosophy,
and science still
astound and
inspire us today.
Perhaps the people
of the modern world
truly are
children of
the Renaissance.

The Renaissance

In this lesson, students will define the following terms:

Renaissance

Humanism

Secularism

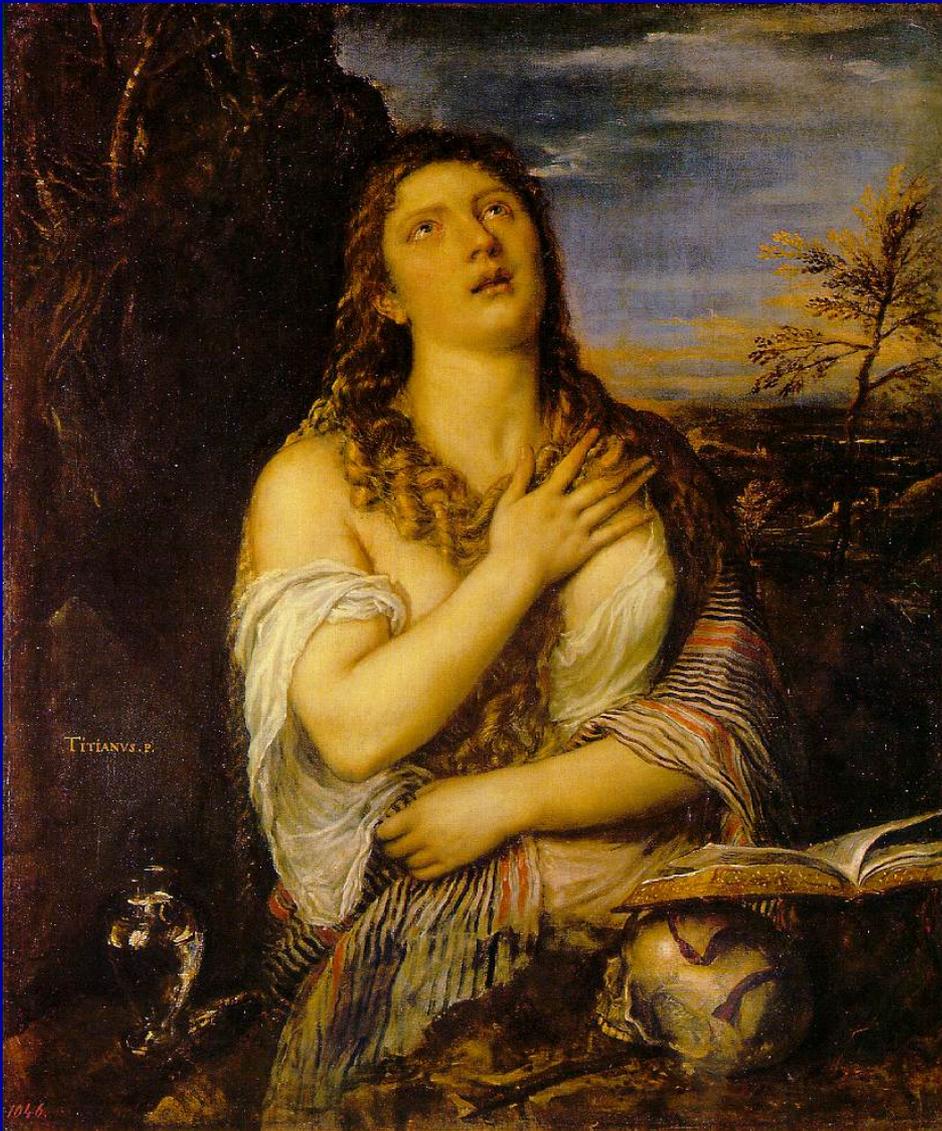
Students will also be able to explain two reasons why the Renaissance began in Italy.



The Renaissance began in the city-states of Italy in the 1400s.

The Renaissance

- The Renaissance was a period of artistic creativity.
- Artists rediscovered the ancient civilizations of the Greeks and Romans.
- The word “Renaissance” means rebirth.



During the Renaissance, artists began rendering the world in three dimensions.

Renaissance Art

- During the Middle Ages, painting largely focused on religious themes.
- During the Renaissance, artists showed more interest in ancient Greek and Roman classical art.
- Painters sought greater realism in their art.



Perspective is the ability to create a three dimensional appearance on a two dimensional surface.

Artistic Expression

- During the Renaissance, an individualist spirit emerged in art.
- Artists felt free to depict themes from the classical civilizations of the past to religious themes.
- Artists used new techniques in painting.



The Renaissance was a time of new ideas in art and philosophy. It was a time of new ways of looking at the world.

Italy's Location

- There were many reasons why the Renaissance began in Italy.
- The Italian city-states had grown wealthy due to their location and ability to benefit from the trade between Europe and Asia.
- Wealth from trade could be used to support artistic endeavors.

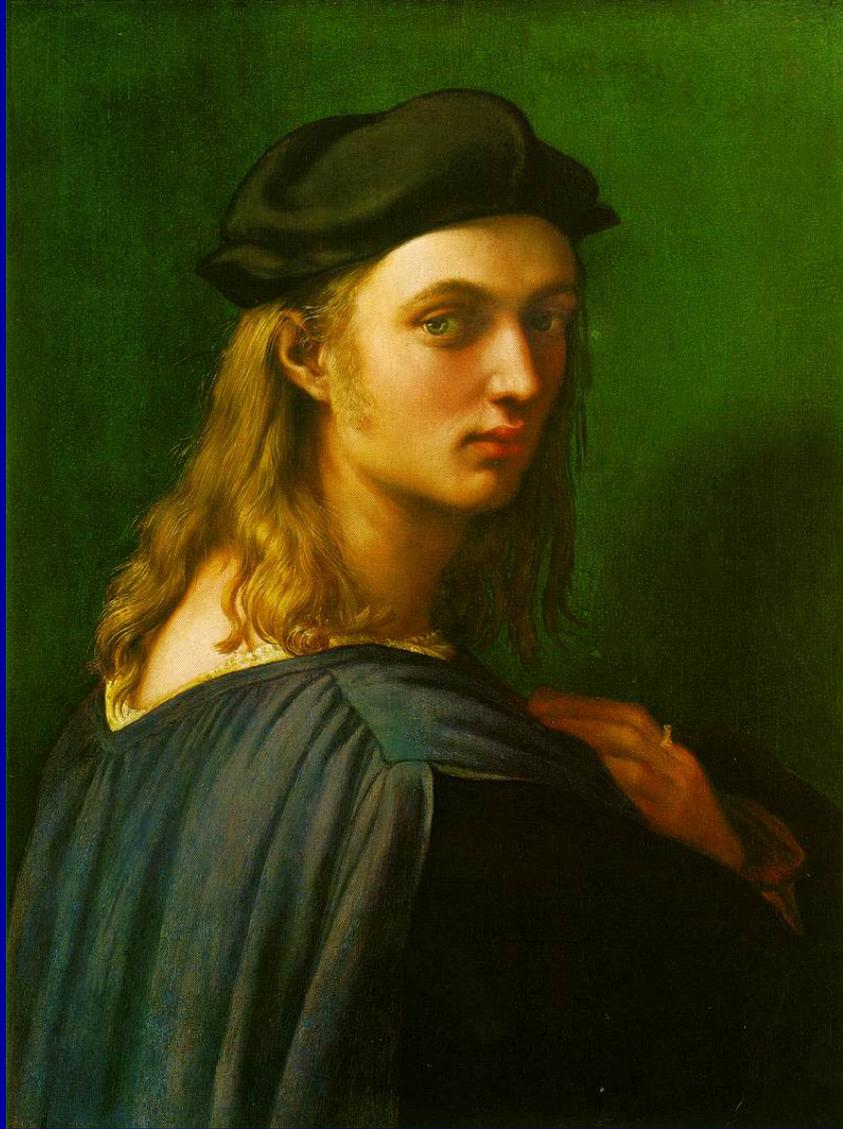


Italy is home
to many
ancient ruins.

Ruins
reminded
artists
of the
greatness
of the past.

Ancient Ruins

- Italy was also home to many ancient ruins.
- These ruins reminded the people of the city-states of a glorious time in the past.
- People began to look to the ancient Greeks and Romans for inspiration.



Humanism
and secularism
also became
popular during
the Renaissance.

Humanism and Secularism

- Humanism emphasizes the worth and uniqueness of each individual.
- Secularism is a non-religious viewpoint.
- While these ideas first became popular in Italy, they eventually spread to the rest of Europe.

Questions for Reflection:

- Why did the Renaissance begin in Italy?
- How did Renaissance art differ from Medieval art?
- How did humanism and secularism differ from previous Medieval beliefs?
- Why did the Renaissance eventually spread to the rest of Europe?
- Do Renaissance ideas still affect us today? Explain your answer.

The Spirit of Renaissance

In this lesson, students will be able to define the following terms:

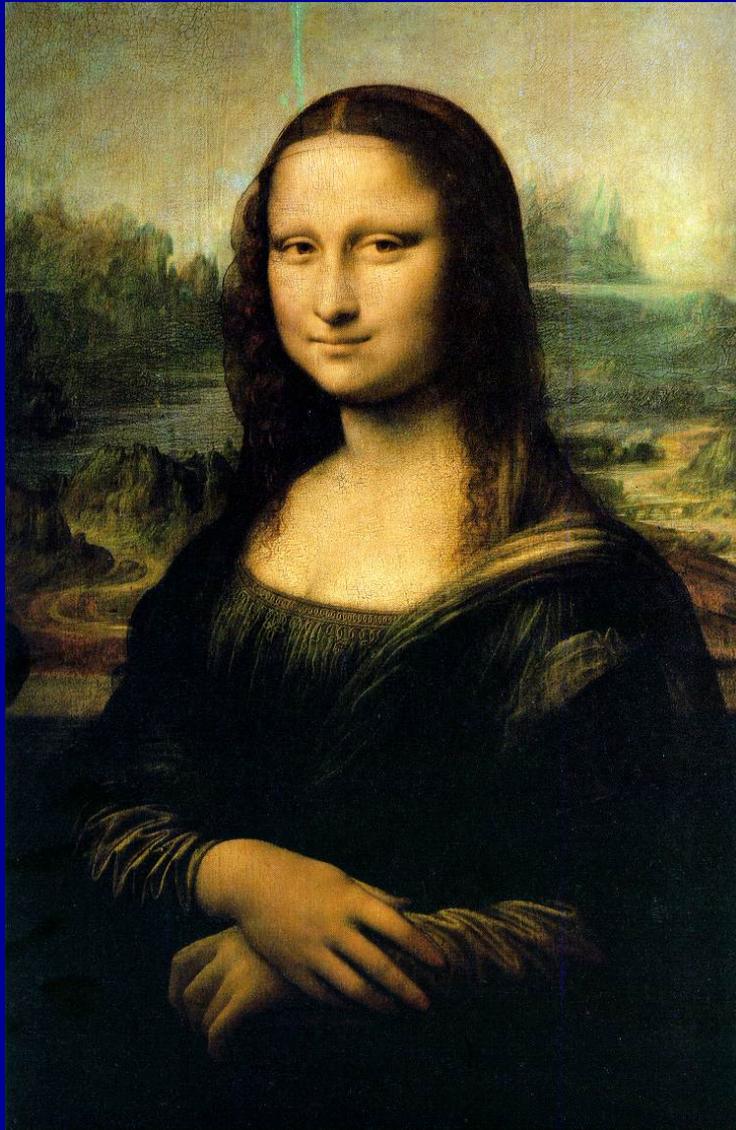
Renaissance

Humanism

Secularism

Students will also be able to answer the following question:

How did Renaissance thought differ from Medieval thought?



The Renaissance began in a few city-states in northern Italy around 1350 and spread to other countries.

The Renaissance

- The Renaissance was a time of great artistic creativity.
- A revolution in scientific thinking and art occurred during the Renaissance.
- The Renaissance began in the 14th century in Italy and eventually spread to northern Europe.



Renaissance thinkers believed that the people of the Middle Ages were ignorant.

The “Dark Ages”

- Renaissance thinkers referred to the Middle Ages as the “Dark Ages”.
- They believed that the “light of learning” had gone out in Europe at the fall of Rome.
- Renaissance thinkers wanted to rediscover the ancient Greeks and Romans.



The word “Renaissance” means
rebirth.

Rebirth

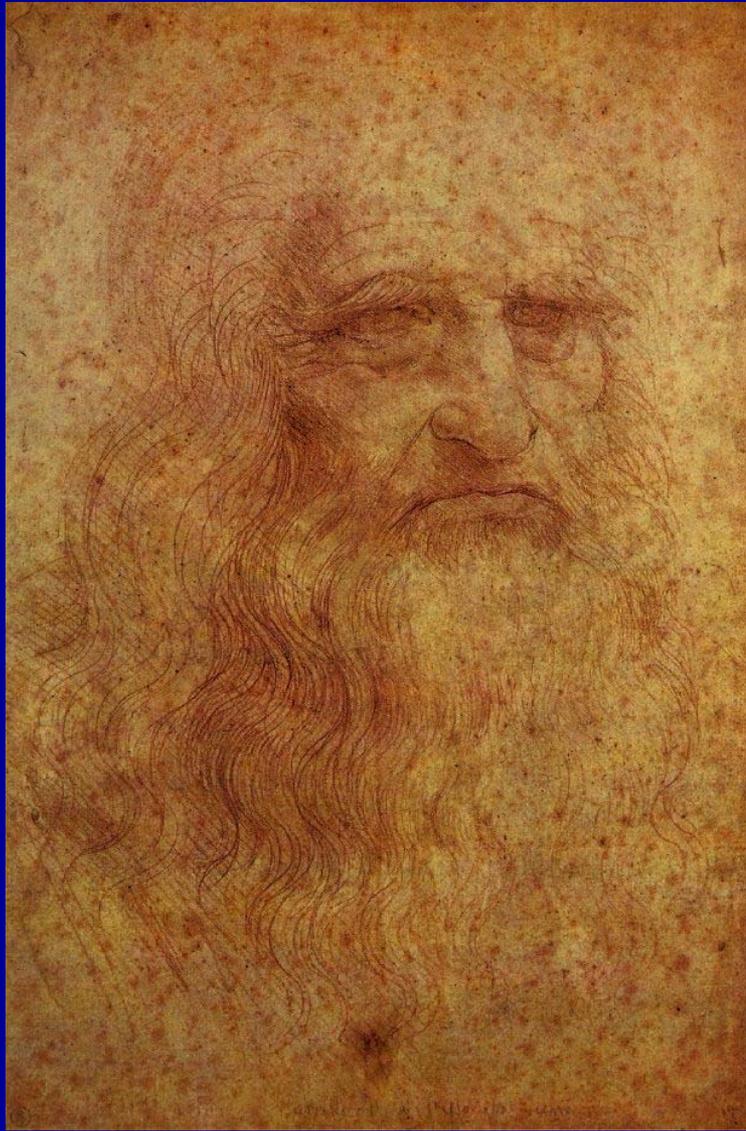
- The word “Renaissance” means rebirth.
- It was a time of rediscovery. Renaissance thinkers were increasingly interested in science and the arts. They were less interested in religious answers.
- They also looked to past civilizations like the Greeks and Romans for inspiration.



Renaissance thinkers were interested in discovering new ways of thinking and seeing.

Humanism

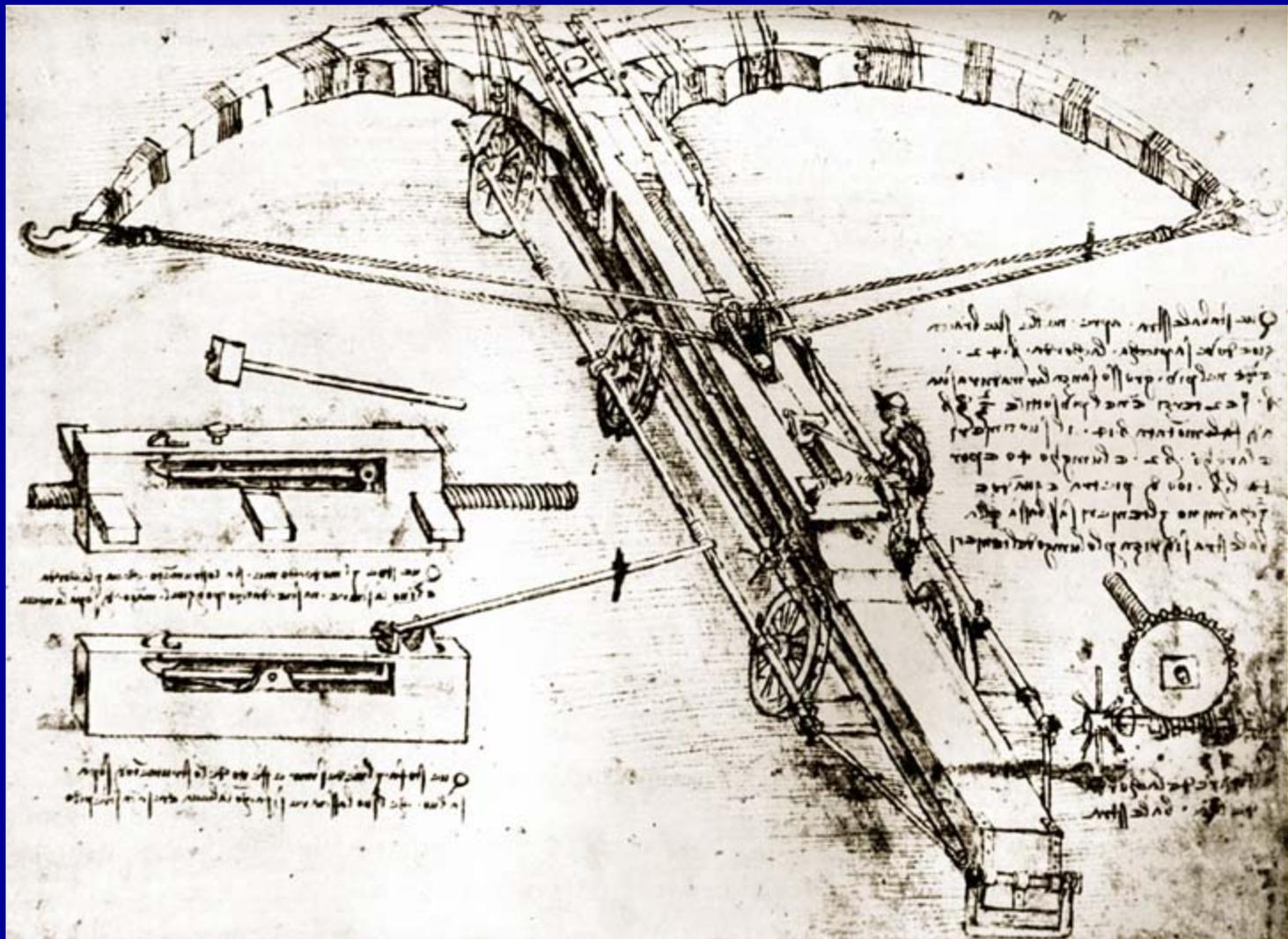
- During the Renaissance, humanism became popular.
- Humanism is the belief that human actions, ideas, and works are important.
- Humanists rediscovered the ancient Greeks and Romans.



During the Renaissance, humanism became popular. It was the belief in the importance and uniqueness of man.

Secularism

- During the Renaissance, secularism became popular.
- Secularism is a non-religious viewpoint.
- Secularists look to scientific thinking for answers as opposed to religion.



Secularists look to scientific thinking
for answers.



Renaissance artists painted and sculpted people as realistically as possible.

Questions for Reflection:

- Where did the Renaissance begin?
- What does the word “Renaissance” mean?
- Why did Renaissance thinkers rediscover the ancient Greeks and Romans?
- What were two significant beliefs during the Renaissance?
- How did Renaissance thinkers differ from Medieval thinkers?

The Scientific Revolution

In this lesson, students will be able to define the following terms:

Scientific Revolution

Scientific Method

Galileo Galilei

Sir Isaac Newton



The Scientific Revolution began during the Renaissance and continued through the 17th and 18th centuries.

The Scientific Revolution

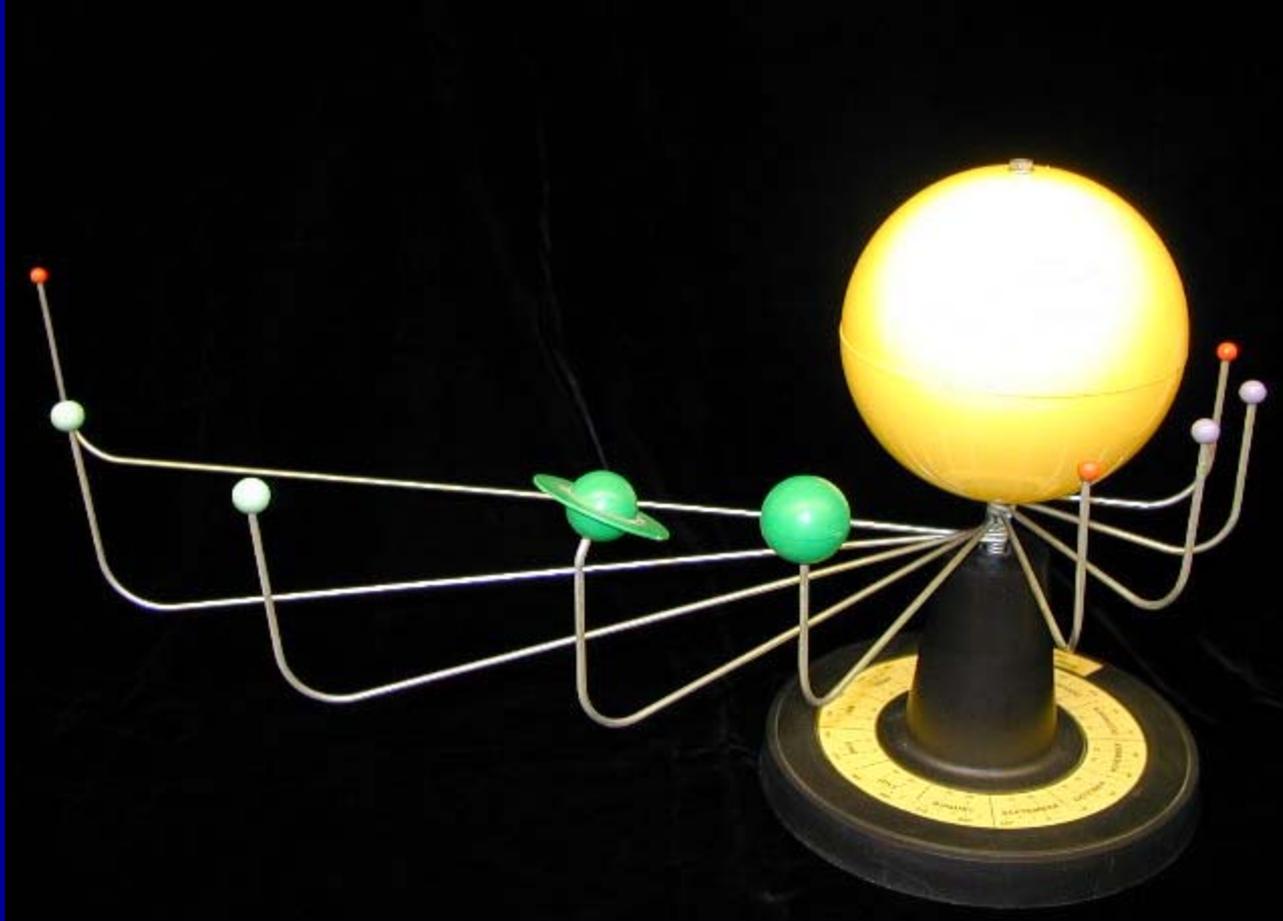
- The Scientific Revolution began during the Renaissance.
- It was a movement that rejected traditional authority and church teachings in favor of scientific reasoning.
- A new scientific method was developed.



Like
Galileo
and his
telescope,
scientists
began
to look
and to
prove truths.

The Scientific Method

- The scientific method is a process whereby scientists observe nature and make hypotheses (educated guesses).
- Scientists then test their hypotheses through experiments.
- A scientist must prove his hypothesis or he cannot claim it is true.



For the scientist, seeing is believing.
This is a heliocentric model. The sun
is the center of the solar system.

Galileo Galilei

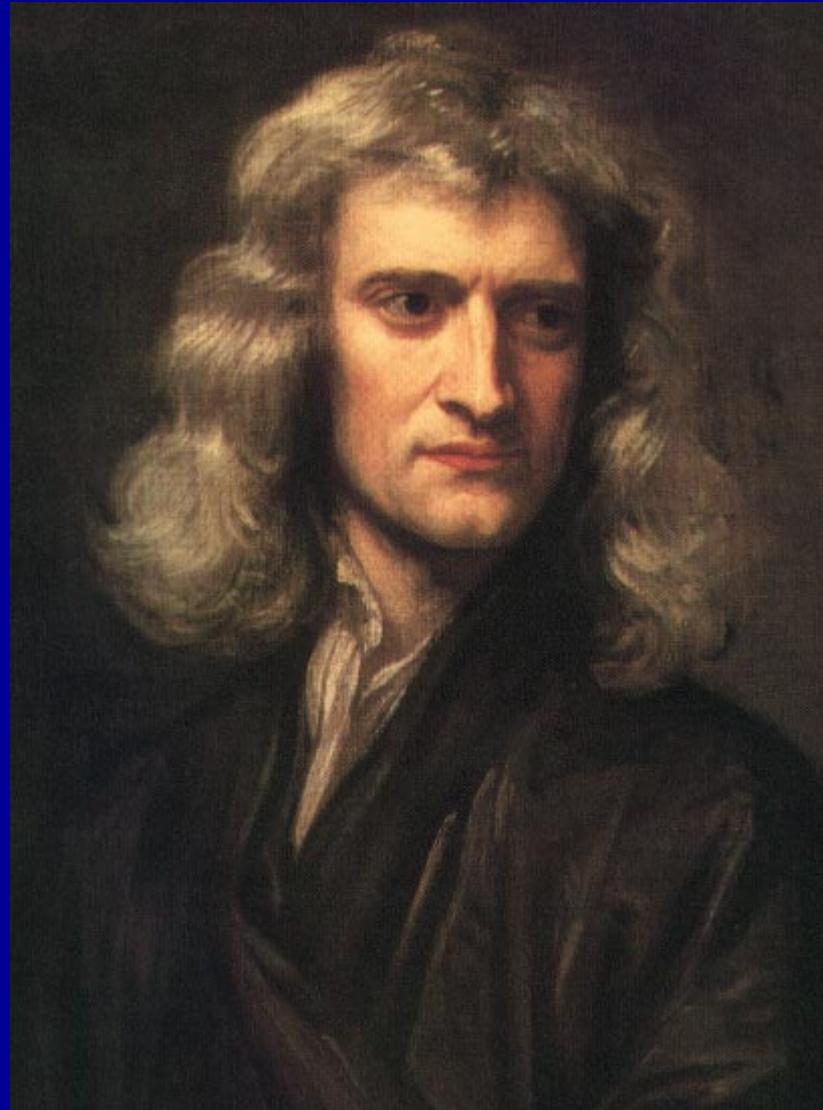
- Galileo was an Italian scientist.
- He supported Copernicus. Copernicus believed that the planets traveled around the sun.
- Galileo built a telescope to prove it.



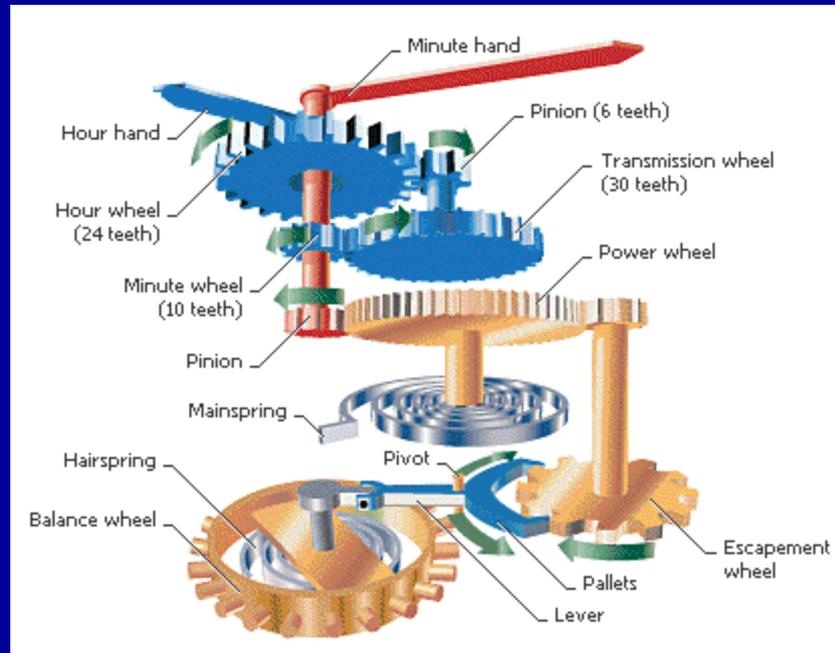
Officials of the Roman Catholic Church were furious with Galileo. They supported a geocentric view or the belief that the planets revolved around the Earth.

Sir Isaac Newton

- Sir Isaac Newton was the most influential scientist of the Scientific Revolution.
- Sir Isaac Newton discovered the law of gravity.
- Gravity explains the movement of the planets and how objects fall on the earth.



Sir Isaac
Newton's
discovery
raised
hopes that
the entire
universe acted
according to
certain fixed and
fundamental laws.



If the universe was like a mechanical clock, it could be studied and observed and its workings figured out.



Scientists wanted to know
why it rained not simply that
God willed it to rain.



**The First
Compound
Microscope
(circa 1595)**

Scientists began to look for answers.

Questions for Reflection:

- What was the Scientific Revolution?
- Why did scientists during the Scientific Revolution sometimes come into conflict with Church officials?
- Describe the scientific method.
- Who was Galileo Galilei and what did he believe?
- Why did Sir Isaac Newton's discovery of gravity raise scientists' hopes?