

GALILEO GALILEI

February 15, 1564 - January 8, 1642

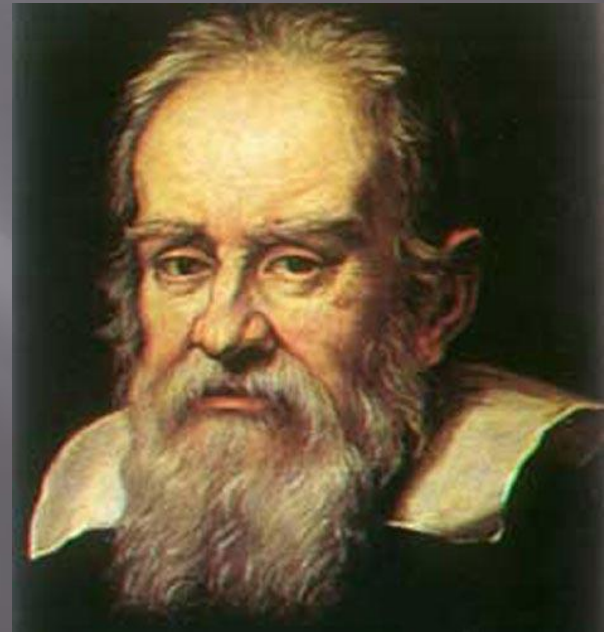
Galileo's Life

-Galileo Galilei was born in Pisa, Italy on February 15, 1564

-Oldest of seven children

-His father wanted his son to study medicine because there was more money in medicine.

-At age eleven, Galileo was sent off to study in a Jesuit monastery.



Education

- After four years, Galileo told his father that he wanted to be a monk.
- This was not exactly what father had in mind, so Galileo withdrew from the monastery.
- In 1581, at the age of 17, he gave into his father's wishes entered the University of Pisa to study medicine, as his father wished.
- By 1585 he gave up his courses in medicine and left without completing a degree to become a mathematics teacher.

His love for math

- Galileo began teaching math privately in Florence
- Public appointments
- Books and sharing his thoughts

Galileo's Observations

-Galileo was one among the first scientists who questioned the ancient ideas and disproved them.

-The discovery of isochronism

-Two objects with different weights fall down at the same speed



Galileo's Inventions



- Reasons for Inventing
- 1593: Thermometer
- 1597: Compass
- 1609: Telescope
- 1641: Pendulum Clock

Astronomy

- Galileo invented a telescope that had 3x the magnification then Hans Lippersney Invented in 1608.
- With this telescope he could see magnified, upright images of earth.
- First to report lunar mountains and craters, made the conclusion that the moon is rough and uneven just like Earth.
- Also observed Venus, Milky way, and Saturn.

Nothing New....?

Showing Planets were disks, not points of light

- The great “cloud” the Milky way was composed of enormous numbers of stars that had not been shown before.
- Planet Saturn had “ears” the rings of Saturn but his telescope wasn’t good enough to show them as more than extensions on either side of the planet.
- Showing moon was not smooth.

Church Controversy

-It is commonly believed that the Catholic Church persecuted Galileo for abandoning the geocentric (earth-at-the-center) view of the solar system for the heliocentric (sun-at-the-center) view. He was sentenced to imprisonment, but that was later condemned to house arrest.

During this period, personal interpretation was a sensitive subject. In the early 1600s, the Church had just been through the Reformation experience, and one of the chief quarrels with Protestants was over individual interpretation of the Bible.