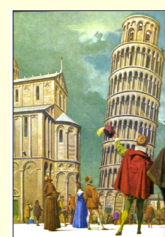


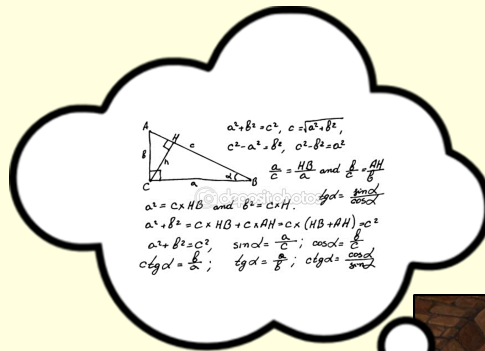
Galileo

Proved the Heliocentric Theory, 1633

Galileo lived in Italy. He was born in Pisa, home of the Leaning Tower of Pisa.



Then his family moved to Florence, the city where the Renaissance was born.



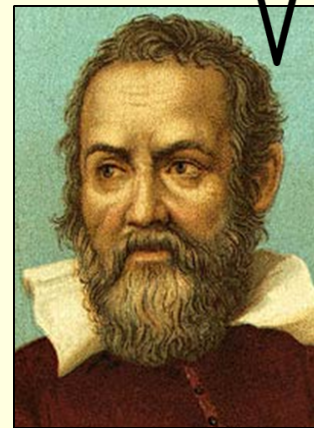
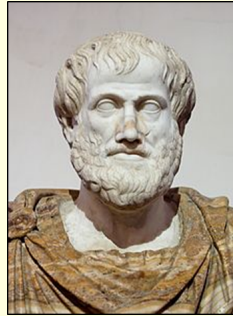
Galileo's father wanted him to become a doctor, but Galileo begged to study mathematics.



Galileo questioned everything! He even questioned Aristotle, who had become almost sacred.

Hey, Aristotle! I think you're wrong!

Aristotle had believed that heavier objects fall faster than lighter ones. Galileo disproved this by conducting experiments and analyzing the results ***mathematically***.



His result? -- Regardless of their weight, objects fall at the same rate.

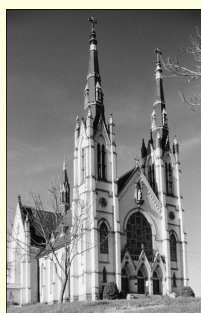
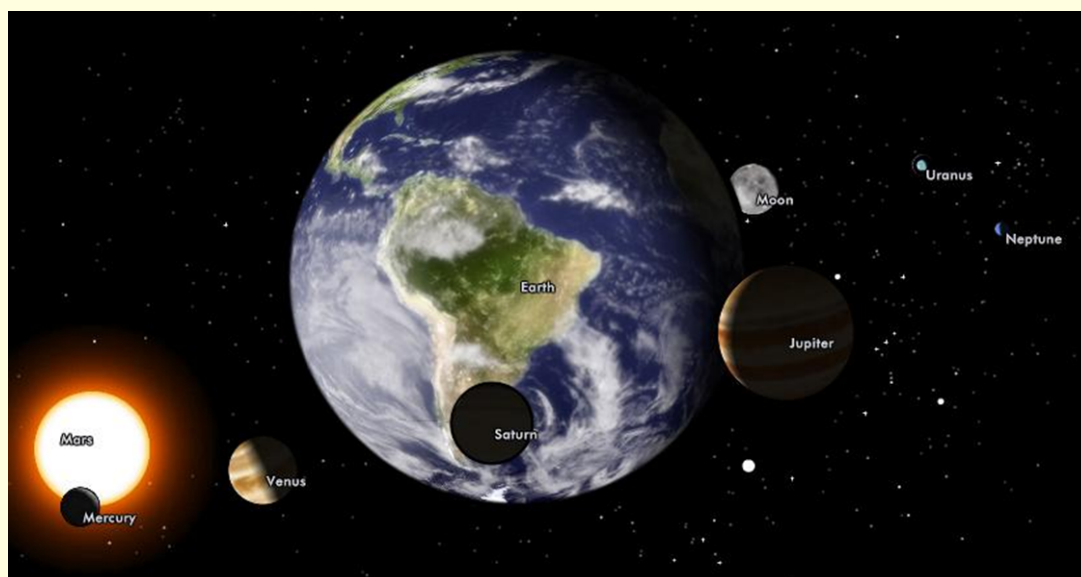
At age 25, Galileo became a math professor and taught courses in astronomy.



The university where Galileo taught



This was a tough job because:



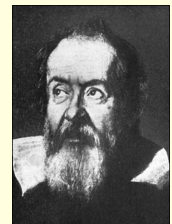
Geocentric Theory

The Catholic Church believed that the planets revolve around the Earth.



Heliocentric Theory

Galileo believed that the planets revolve around the sun.



Galileo used the newly-invented telescope to prove that the planets revolve around the sun.





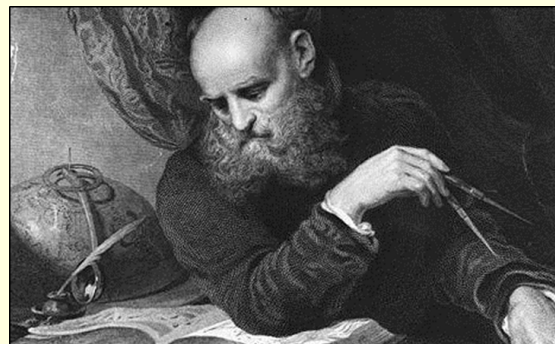
PREDICT: How did Italy react to Galileo and his scientific discoveries?

- A) Thumbs-up! Ecstatic!
- B) Thumbs-down! Preposterous!
- C) One Thumb-up and One Thumb-down . . . Mixed reactions.

B) Thumbs-down! Not only preposterous . . . Heresy!!

Persecuted by the Catholic Church!!

Galileo's scientific theory ran counter to religious truth. The Catholic Church believed that God created the universe with Earth at the center.



In 1633, Galileo was found guilty of heresy by the Catholic Church. He was threatened with torture and forced to recant -- forced to "take back" his theory.

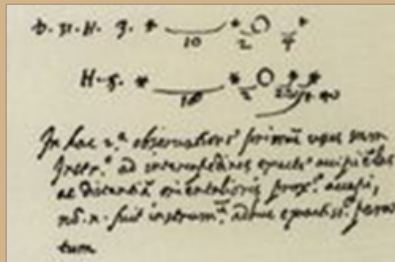
Galileo was sentenced to life in prison, but because he was nearly 70 years old, he was placed under house arrest.





2:11

Galileo's *Dialogo* is considered the leading inspiration for modern technical literature. The concept, the distinctiveness of the language and the drawings are seen as ideal, even by today's standards.



Galileo's observations of Jupiter and its moons led to the first scientific proof of the modern heliocentric principle.



Galileo's Surviving Telescopes

