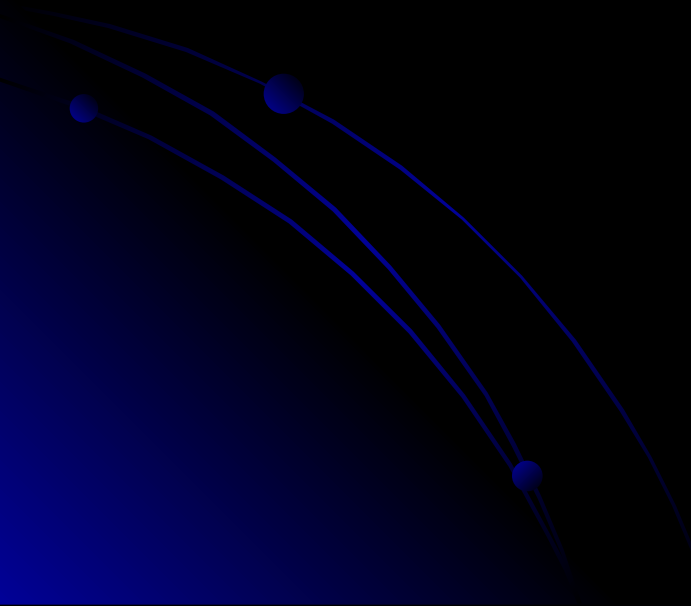
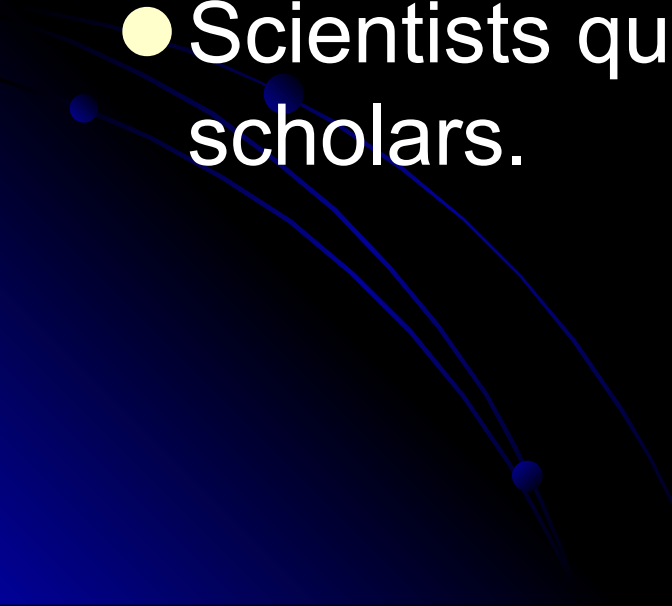


THE SCIENTIFIC
REVOLUTION
LATE 1500S-1700



BACKGROUND

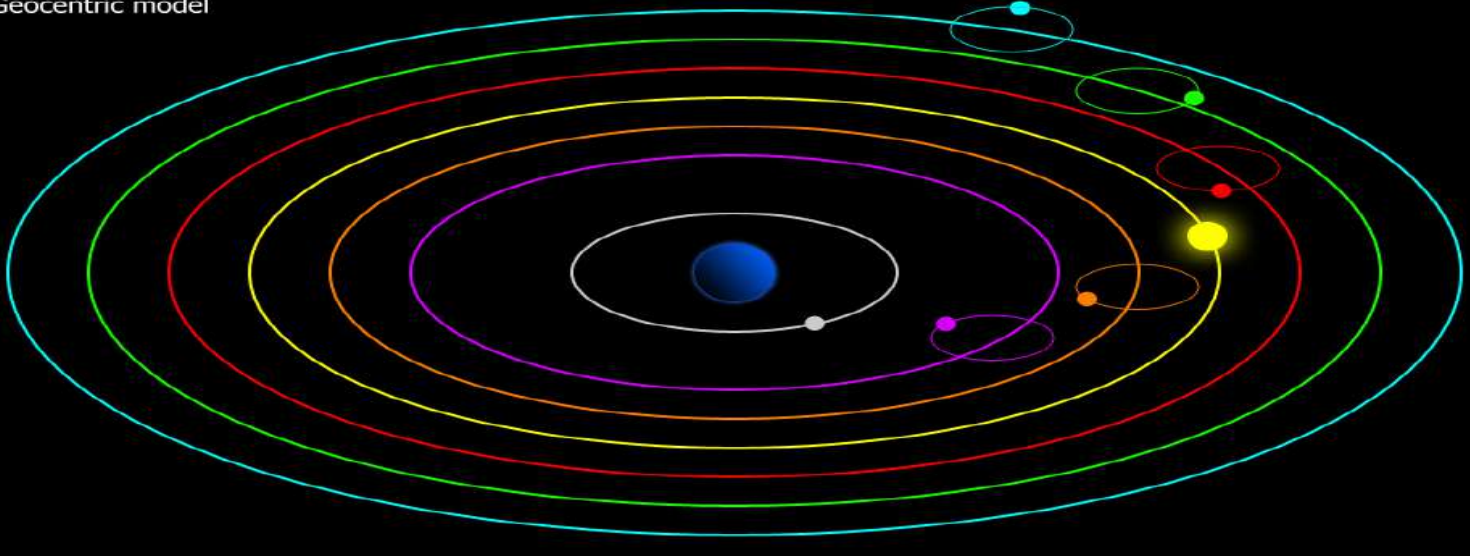
- Renaissance developed a thirst for knowledge.
 - Protestant Reformation challenged government and religion.
 - Scientists questioned the ideas of ancient scholars.
- 

THE RISE OF SCIENTISTS

- Copernicus- Heliocentric Theory
- Galileo- Makes the heliocentric theory popular
- Descartes- Mathematics and Logic
- Bacon- Experimental Method
- Newton- Law of Gravity and Laws of Motion
- Numerous contributions to medicine and scientific instruments

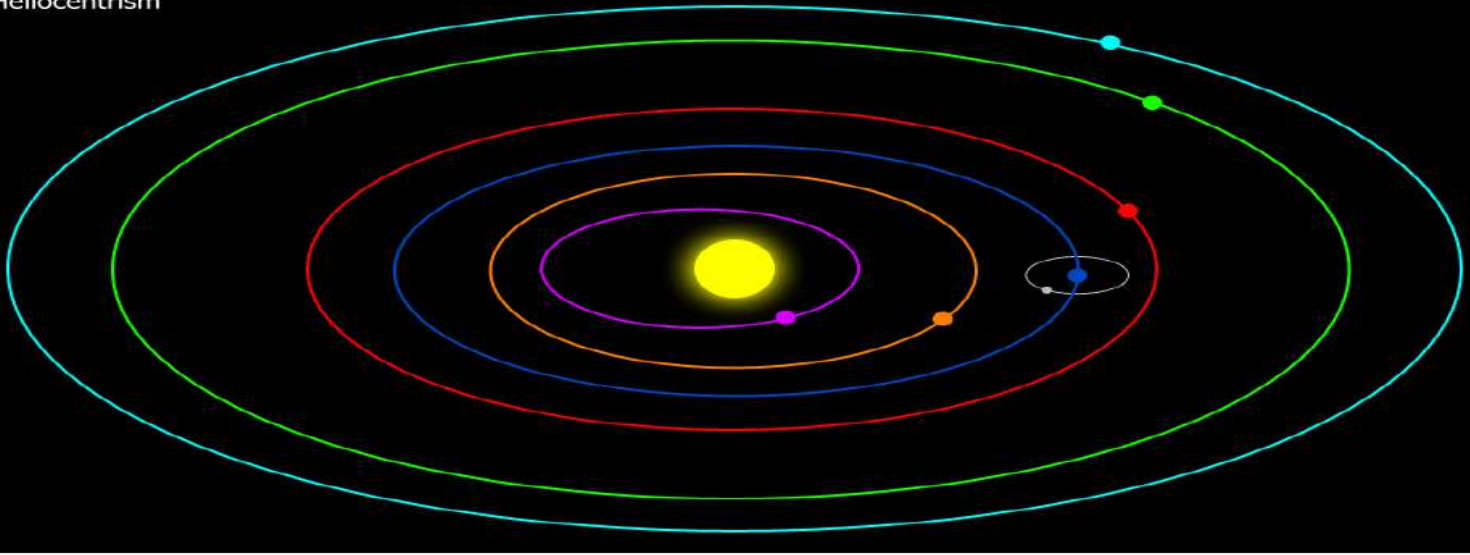
HELIOCENTRIC VS. GEOCENTRIC

Geocentric model



Earth
Moon
Mercury
Venus
Sun
Mars
Jupiter
Saturn

Heliocentrism



The Catholic Church puts Galileo on Trial



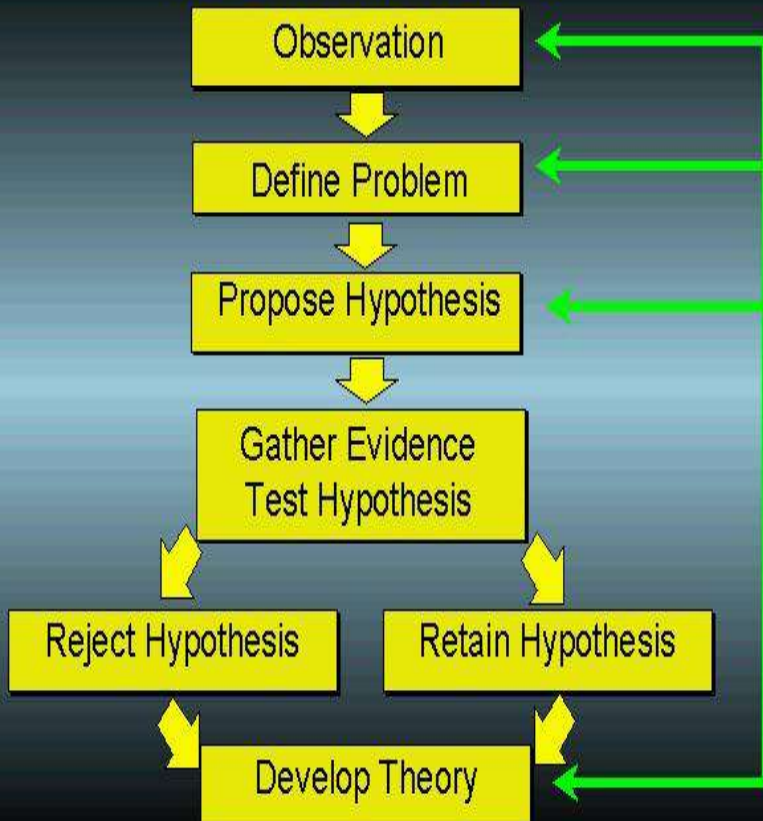
DESCARTES



- Encourages skepticism
- Cannot trust senses to seek truth
- Seeks truth through mathematics and logic
- Develops analytical geometry

BACON

The Scientific Method



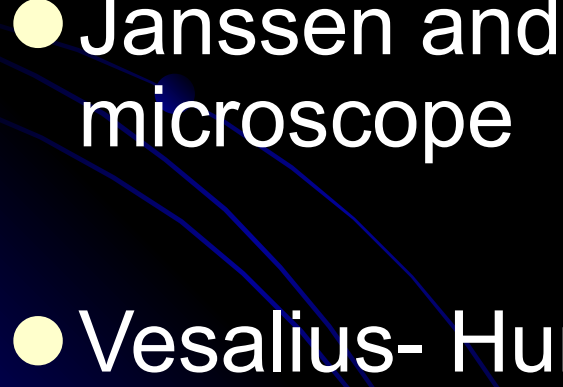
- Scientific Method
- Learning through experience.
- Used science experiments to prove and explain his theories.

NEWTON

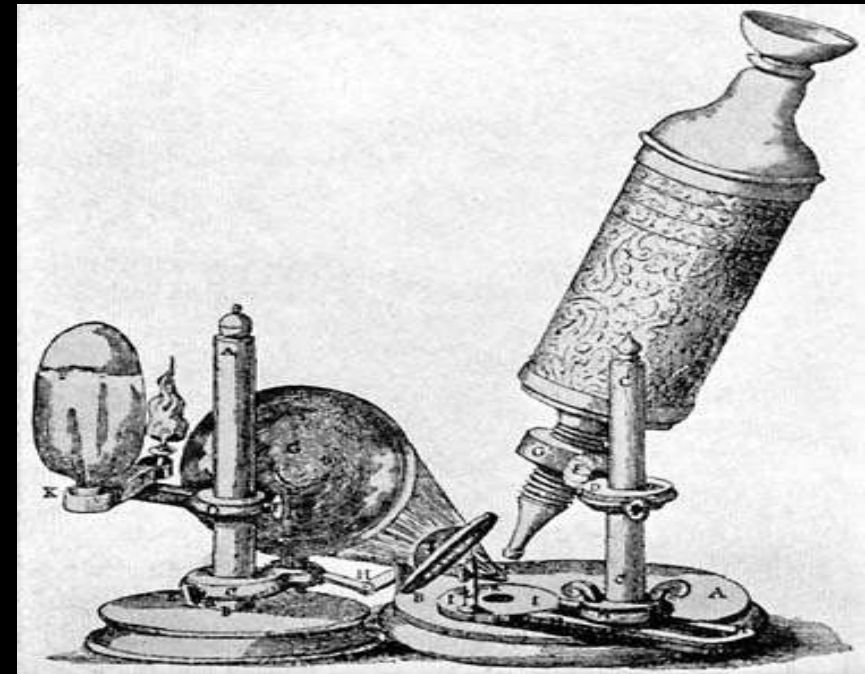
- Uses the work of Galileo and Copernicus
- Develops Law of Universal Gravitation and 3 Laws of Motion
- Compares the way the universe works to a clock



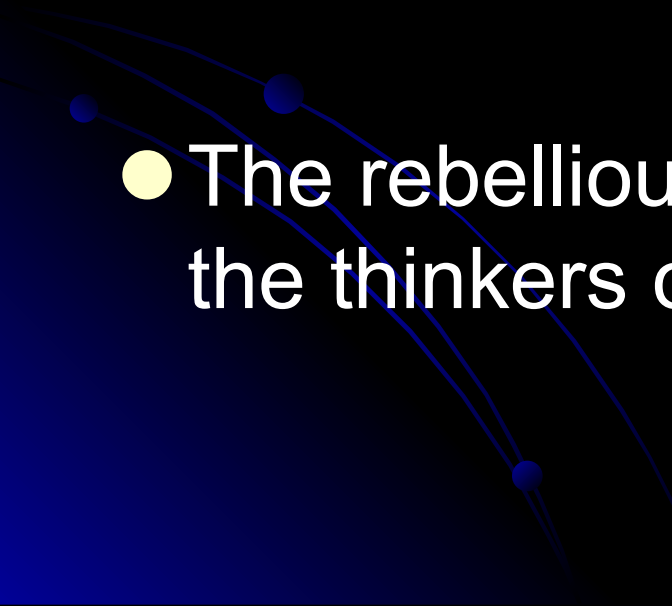
Medicine and Scientific Instruments

- Jenner- Small Pox vaccination
 - Fahrenheit- Mercury Thermometer
 - Janssen and Leewenhoek- first microscope
 - Vesalius- Human anatomy
- 

Contributions to Science



LEGACY OF THE TIME PERIOD

- Logical procedure for problem solving.
 - Scientific advancements spread throughout Europe
 - The rebellious spirit of the time influenced the thinkers of the Enlightenment
- 

LEGACY OF THE THINKERS

- Copernicus- established the heliocentric theory and influenced a long line of great astronomers
- Galileo- popularized heliocentric theory, challenges Church authority, and made contributions to telescope technology
- Descartes- made valuable contributions to mathematics, philosophy, and science
- Bacon- helped develop the experimental method and helped scholars break away from ancient methods
- Newton- made valuable contributions to the fields of calculus, physics, and optics.