**Chapter 22-1: The Scientific Revolution**

Isaac Newton

* + Newton was a great English scientist who studied mathematics & physics at \_\_\_\_\_\_\_\_\_\_\_\_\_ University.
  + His great discovery was that the same force ruled motion of the \_\_\_\_\_\_\_\_\_\_\_\_\_ and all \_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_ and in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + The law of universal gravitation stated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Illustration of that represents Newton:

1.) **geocentric theory:** 2.) **heliocentric theory:**

3.) **Scientific Revolution:** 4.) **scientific method:**

|  |  |
| --- | --- |
| Changing Idea: Scientific Method | |
| Old Science | **New Science** |
|  |  |

Rene Descartes

Pronounced Re-nay Day-cart

* + Descartes was from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + He created analytical \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ linking \_\_\_\_\_\_\_\_\_\_\_ & geometry.
  + Descartes relied on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_ instead of experimentation to gain knowledge.
  + He believed everything should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ until proven by \_\_\_\_\_\_\_\_\_\_\_\_.
  + His famous quote is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ meaning he knew for certain that he existed.

Illustration that represents Descartes:

Francis Bacon

* + He was an English \_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_ with a passionate interest in \_\_\_\_\_\_\_\_\_\_\_.
  + Bacon criticized medieval scholars for relying too heavily on the teachings of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & other ancient thinkers.
  + He urged scientists to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & then draw \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + Today we call this the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Illustration that represents Bacon:

Galileo Galilei

Pronounced Gal-i-LAY-o GAL-i-lee

* Galileo’s findings frightened (scared) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because they went against church \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Galileo supported \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_’s theories.
* The church had him arrested. In 1633, he agreed that the teachings of Copernicus were \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. He was never again a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ man.

Illustration that represents Galileo:

Nicolaus Copernicus

Pronounced NICK-o-las Ca-PER-ni-kiss

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ theory did not accurately explain the movement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Known for creating the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ theory which states: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* His theory contradicted (went against) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ views.

Illustration that represents Copernicus or his theory: