

THE SCIENTIFIC REVOLUTION: POWERPOINT NOTES

Fill in the blanks from the PowerPoint. In the space to the left, draw a quick sketch of the concept or, fill in the Scientist's speech bubble with his key

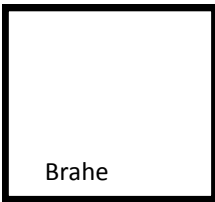


Questioning Leads to Doubt

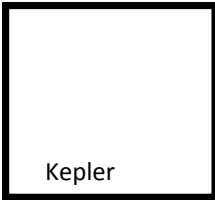
As explorers traveled around the world bringing new _____ and _____ people began to question the old ideas of the ancient _____ scholars.

Advances in Astronomy

- The Scientific Revolution begins with the publishing of the book, *On the Revolution of the Celestial Spheres*, by _____.
- Copernicus was the first to theorize the heliocentric theory; _____



Brahe



Kepler

Advances in Astronomy Continued

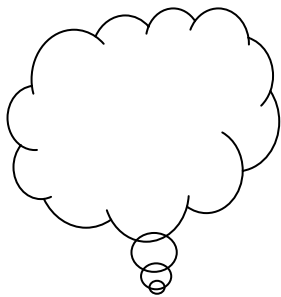
- _____ was one of the first scientists to record the position of the stars. He emphasized the idea of careful _____.
- _____ also made advances in astronomy by mapping the orbits of planets.
- Kepler stated that planets orbit in an _____ advancing on Copernicus' initial theory.

Advances in Astronomy Continued

Galileo Galilei was the first person to study the sky using the _____.

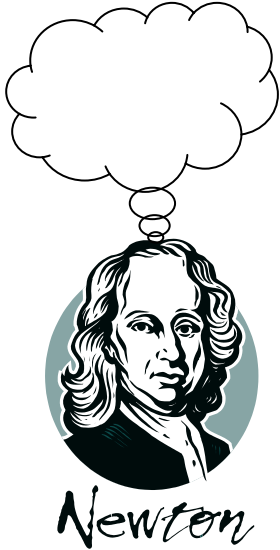
- He discovered the craters and mountains on the moon as well as the moons orbiting _____.
- He was one of the first scientists to routinely use experiments to test his theories.
- Galileo's teachings along with others conflicted with the _____.
- Galileo was put on trial for _____ and forced to take back his theories in fear of being tortured.
- This clash helped spark more questioning about science and society.

Question: If you found out information that contradicted what you had been told by people or institutions you trust, what would you do?



Galileo

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Advances in Astronomy Continued

Sir Isaac Newton was an English scientist who wrote the book, _____.

Newton invented _____.

Newton introduced the law of _____ which stated that _____.

Newton also created the laws of _____ which describe how objects move through space.

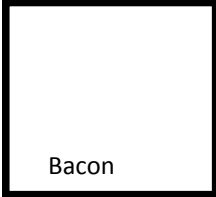
He stated, "For every _____ there is an _____ and _____ reaction."

New Inventions

During the Scientific Revolution new inventions led to new discoveries and theories.

Galileo invented the _____, an instrument that measures _____.

Torricelli invented the _____, an instrument that measures _____ (this helps predict the weather).



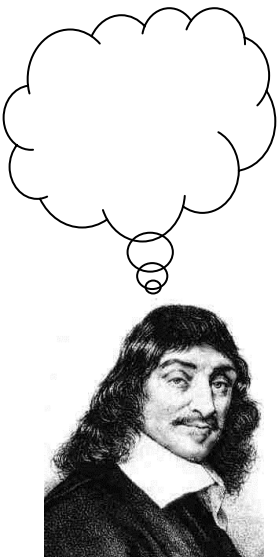
Science and Society

As the Scientific Revolution progressed, science became the center of _____.

_____ argued that science should be pursued systematically (step-by-step) to gain more knowledge.

_____ argued that nothing should be accepted as _____.

Descartes claimed that _____.



The Scientific Method

The scientific method is a step-by-step method for conducting research.

1. _____ . Asking *why*?
2. Collecting _____ .
3. Hypothesis: _____ .
4. _____ the hypothesis.
5. _____ and _____ data.
6. Creating _____ on the research and data.