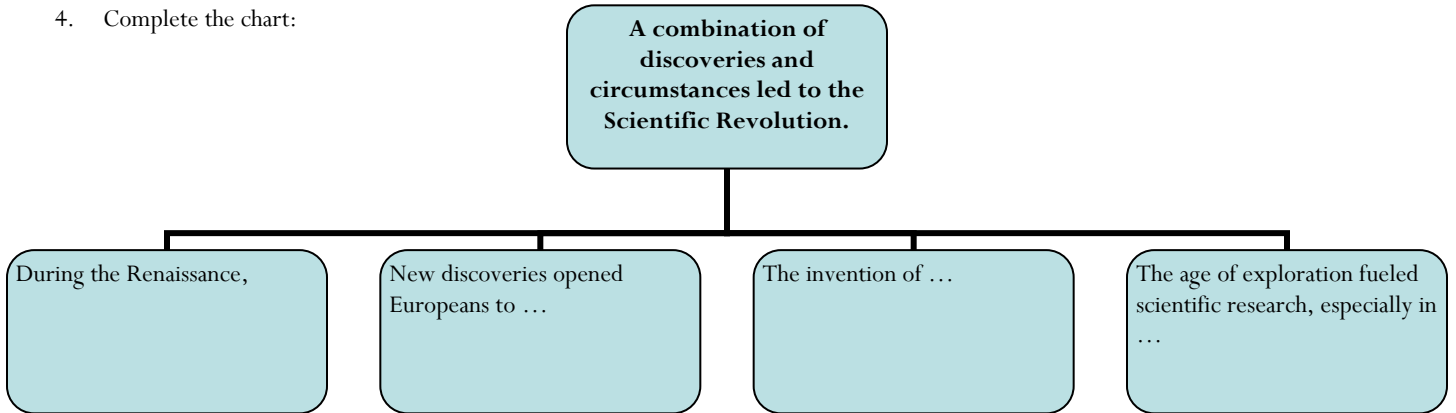


The Scientific Revolution Reading Guide

22.1: The Scientific Revolution

• **Objective A: List circumstances that led to the Scientific Revolution.**

1. Before 1500, scholars generally decided what was true or false by referring to ...
2. Define *geocentric theory*:
3. The Scientific Revolution was a new way of thinking about the _____ based upon careful _____ and willingness to ...
4. Complete the chart:



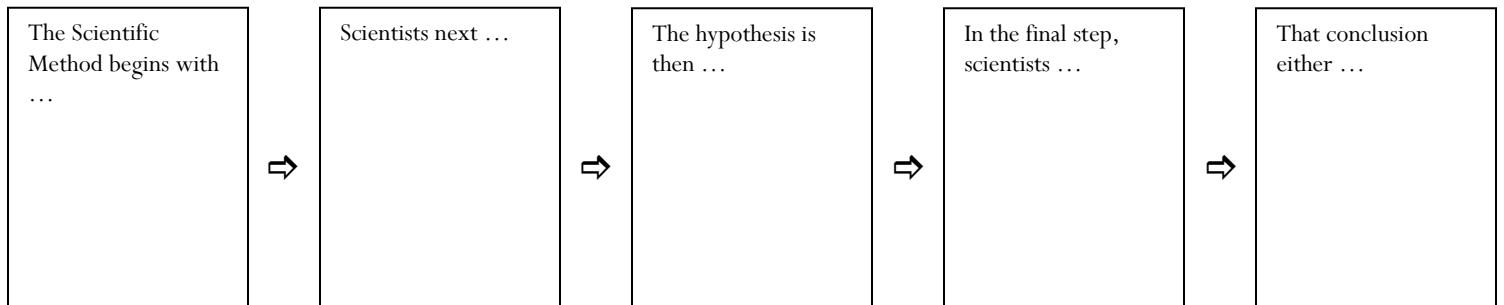
• **Objective B: Summarize the development of the heliocentric theory.**

Scientist	Discovery	Year	Title of Book
5.	6.	7.	<i>On the Revolutions of the Heavenly Bodies</i>
8.	Carefully recorded the movements of the planets for many years.	Died 1601	N/A
9.	Showed planets revolve around the sun in elliptical orbits.	N/A	N/A
10.	Built his own telescope and used it to study the heavens	1609	11.

12. Galileo’s findings frightened both Catholic and Protestant leaders because ...
13. In 1992, the Catholic Church officially ...

• **Objective C: Describe the scientific method and explain Newton’s law of gravity.**

14. Complete the flow chart:



Name: _____ Period: _____ Date: _____

15. Francis Bacon urged scientists to _____ and then _____. This approach is called _____, or the _____ method.
16. Rather than using experimentation, Rene Descartes relied on _____ and _____. He believed everything should be doubted until proved by _____. He began from with the statement “_____, therefore _____.”
17. _____ helped to bring together the breakthroughs of Copernicus, Kepler, and Galileo under a single theory of _____.
- His great discovery was the law of _____.
 - In 1687, he published a work called ...
 - The universe he described was like a _____.

• **Objective D: Describe the importance of the scientific method in different fields.**

Inventor	Achievement	Year
18.	Invented the first microscope	19.
20.	Used a microscope to observe bacteria swimming in tooth scrapings and examined red blood cells for the first time.	21.
Evangelista Torricelli	22.	23.
24.	Made the first thermometer to use mercury in glass; showed water freezing at 32°	25.
26.	Created another scale for the mercury thermometer; showed water freezing at 0°	27.

28. _____ proved Galen’s assumptions wrong. His book, *On the Structure of the...* _____ (_____) was filled with detailed drawing of ...
29. In the late 1700s, British physician _____ introduced a vaccine to prevent _____.
30. _____ is considered the founder of modern _____. His most famous contribution to this field is _____ which explains how the _____, _____, and _____ of gas affect each other.