## **Study Guide**

## **Chapter 16: The Scientific Revolution**

For each of the statements below, write a short paragraph. Each paragraph should be 3-5 sentences long.

- a. Rewrite the statement in your own words, borrowing only key words or phrases
- b. Give at least one example (e.g., person, event) that supports the statement, providing specific detail about the example
- c. Explain how your example supports your statement.

Concept: New ideas in science based on observation, experimentation, and mathematics challenged classical views of the cosmos, nature, and the human body, though folk traditions of knowledge and the universe persisted.

1. New ideas and methods in astronomy led individuals such as Copernicus, Galileo, and Newton to question the authority of the ancients and religion and to develop a heliocentric view of the cosmos.
2. Anatomical and medical discoveries by physicians, including William Harvey, presented the body as an integrated system, challenging the traditional humoral theory of the body and of disease espoused by Galen.

3. Francis Bacon and René Descartes defined inductive and deductive reasoning and promoted experimentation and the use of mathematics, which would ultimately shape the "scientific method."
4. Alchemy and astrology continued to appeal to elites and to some natural philosophers, in part because they shared with the new science the notion of a predictable and knowable universe. In oral culture of peasants, a belief that the cosmos was governed by divine and demonic forces persisted.