The Scientific Revolution (1500s–1700s)

Roots of the Scientific Revolution
Greek Rationalism
Ancient Greek thinkers used reason and logic to explain how the world worked. As a result, the Greeks made many discoveries. Euclid and Pythagoras developed geometry, and Galen discovered that veins were filled with blood, not air.

1. Why did ancient Greek thinkers use reason and logic? What was the result?
___________________________________________________________________________
________________________________________________________________________________

Jewish, Christian, and Muslim Science
During the Middle Ages, Islamic and Jewish scholars, kept the knowledge from earlier civilizations safe. They built upon that knowledge. Muslims developed algebra and a medical encyclopedia that was used for hundreds of years. Gersonides, a Jewish astronomer, proved that stars were far from Earth. Muslim and Jewish scholars translated works from Greek and Arabic into Latin, so Europeans could read them.

2. What role did the Muslim world play in the Scientific Revolution?
___________________________________________________________________________
________________________________________________________________________________

Renaissance Humanism
Works of Greek thinkers became more widely available during the Renaissance. As a result, Europeans learned how Greeks used reason and logic to solve problems. Soon Europeans also began to question old ideas. European scholars questioned which ideas were true and which were false. They became bolder in their search for knowledge.

3. As ancient Greek texts became more widely read, what did European thinkers discover?
___________________________________________________________________________
_____________________________________________________________________________

4. How did Renaissance values affect the Scientific Revolution?
___________________________________________________________________________
________________________________________________________________________________

Global Exploration
During the Renaissance, explorers reached lands unknown to Europeans. The new peoples, vegetation, and animals made Europeans realize how much they had yet to discover.

5. What did Europeans realize as a result of increased exploration?
___________________________________________________________________________
________________________________________________________________________________

The Scientific Revolution
These influences led to a new way of looking at the natural world. Scholars questioned old scientific ideas and Christian beliefs. The Scientific Revolution, a time of brilliant discoveries, resulted.

6. Critical Thinking: Why was the Scientific Revolution an important development in world history?
___________________________________________________________________________
________________________________________________________________________________