AIM: Why did scientists begin to question accepted beliefs in the 1500s?

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Beginning in the mid-1500s, a few scholars published works that challenged the ideas of the ancient thinkers and the church. As these scholars replaced old assumptions with new theories, they launched a change in European thought that historians call the **Scientific Revolution**. The Scientific Revolution was a new way of thinking about the natural world. That way was based on careful observation and a willingness to question accepted beliefs.

Causes of the Scientific Revolution

The Renaissance inspired a spirit of curiosity in many fields. Scholars began to question ideas that had been accepted for hundreds of years. During the Reformation, religious leaders challenged accepted ways of thinking about God and salvation. While the Reformation was taking place, the Scientific Revolution was also occurring. It challenged how people viewed their place in the universe.

A combination of discoveries and circumstances led to the Scientific Revolution and helped spread its impact. By the late Middle Ages, European scholars had translated many works by Muslim scholars. These scholars had compiled a storehouse of ancient and current scientific knowledge. Based on this knowledge, medieval universities added scientific courses in astronomy, physics, and mathematics.

During the Renaissance, scholars uncovered many classical manuscripts. They found that the ancient authorities often did not agree with each other. Moreover, European explorers traveled to Africa, Asia, and the Americas. Such lands were inhabited by peoples and animals previously unknown in Europe. These discoveries opened Europeans to the possibility that there were new truths to be found. The invention of the printing press during this period helped spread challenging ideas—both old and new—more widely among Europe's thinkers.

The age of European exploration also fueled a great deal of scientific research, especially in astronomy and mathematics. Navigators needed better instruments and geographic measurements, for example, to determine their location in the open sea. As scientists began to look more closely at the world around them, they made observations that did not match the ancient beliefs. They found they had reached the limit of the classical world's knowledge. Yet, they still needed to know more.