History of the Islamic World

Section 4

MAIN IDEAS
1. Muslim scholars made lasting contributions to the fields of science and philosophy.
2. In literature and the arts, Muslim achievements included beautiful poetry, memorable short stories, and splendid architecture.

Key Terms
Sufism  a movement of Islam, based on the belief that one must have a personal relationship with God
minarets  tall towers on mosques from which Muslims are called to prayer
calligraphy  decorative writing

Section Summary

SCIENCE AND PHILOSOPHY
Islamic scholars made great advances in many fields. These included astronomy, geography, math, and science. At Baghdad and Córdoba, Greek and other writings were translated into Arabic. A common language helped scholars share research.

Muslim scientists built observatories to study the stars. They also improved the astrolabe. The Greeks had invented this tool to chart the position of the stars. The astrolabe would later be used in sea exploration.

It was a Muslim mathematician who invented algebra. Muslims found better ways to calculate distance and make precise maps. They also used the stars to navigate. Muslim merchants and explorers traveled far and wide. One great explorer was Ibn Battutah. He traveled to Africa, India, China, and Spain.

Muslims were also known in medicine. They added greatly to Greek and Indian medicine. Muslims also started the first school of pharmacy.

Which two cities came to be recognized as the cultural capitals of Islam during the Middle Ages?

Why do you think the astrolabe would be useful in sea exploration?
Section 4, continued

A doctor in Baghdad found out how to detect and treat the disease smallpox. Another doctor, known in the West as Avicenna (av-uh-SEN-uh), wrote a medical encyclopedia. It was used widely in Europe for centuries.

A new philosophy developed. It was called **Sufism** (SOO-fi-zuhm). People who practice Sufism are Sufis (SOO-feez). Sufis seek a personal relationship with God. Sufism has brought many followers to Islam.

**LITERATURE AND THE ARTS**

Poetry and short stories were popular among Muslims. The collection of stories called *The Thousand and One Nights* is still one of the best-loved books in the world. Sufi poets were popular, including the famous Omar Khayyám (OH-mahr ky-uh-M). There were many achievements in architecture. Rulers liked to be patrons. Patrons helped fund the design and construction of beautiful mosques. The main part of a mosque is a huge hall where thousands of people gather to pray. Often mosques have large domes and **minarets**.

Islam does not allow artists to show animals or humans in religious art. Muslims believe only Allah can create humans and animals or their images. In part for this reason, Muslim artists turned to **calligraphy**. This decorative writing became an art form.

**CHALLENGE ACTIVITY**

**Critical Thinking: Drawing Inferences**  Islamic culture made many advances in science, medicine, and art that still affect us today. Pick the advance that you think is the most important to our modern society, and write a one-page paper explaining your position.