Objectives

- Describe the role of trade in Muslim civilization.
- Identify the traditions that influenced Muslim art, architecture, and literature.
- Explain the advances Muslims made in centers of learning.
Terms and People

- **social mobility** – the ability to move up in social class

- **Firdawsi** – poet known for his history of Persia, the *Shah of Namah (Book of Kings)*

- **Omar Khayyám** – scholar, astronomer, and philosopher, best known for the *Rubáiyát*

- **calligraphy** – art of beautiful handwriting

- **Ibn Rushd** – a scholar who put all knowledge, except the Quran, to the test of reason
Terms and People (continued)

- **Ibn Khaldun** – devised a set of standards for the scientific study of history; emphasized economics, social structure, and avoiding bias

- **Al-Khwarizmi** – a mathematician who pioneered the study of algebra

- **Muhammad al-Razi** – studied measles and smallpox; taught to treat the mind as well as the body

- **Ibn Sina** – wrote the *Canon on Medicine*, an encyclopedia of medicinal cures
What did Muslims achieve in economics, art, literature, and science?

Under the Abbasids, Muslim civilization absorbed traditions from all of the people who lived under Muslim rule, including Jews and Christians. The great works produced by scholars of the Abbasid period shaped Muslim culture and civilization.

European scholars began to study Muslim philosophy, art, and science.
Muslim rulers united diverse cultures and incorporated learning from many regions.

- Camel caravans crossed the Sahara to West Africa.
- The Silk Road brought trade from East Asia and provided a link to Europe.
- Monsoon winds brought ships to Asia and East Africa.

Merchants were valued in the Muslim world. They spread products, cultures, and ideas widely.
As more people converted to Islam, Arabic became widely understood, facilitating trade and new learning.

- Indian numbers were introduced and became today’s Arabic numerals.
- Sugar arrived from India.
- Papermaking came from China.

New business practices, such as partnerships, checks, and credit, grew from the use of a money economy.
Handicraft industries were valued. Heads of each guild regulated quality, price, and production.

Muslim rulers extended agriculture.

Some valued products included:
- Steel swords—Damascus
- Leather goods—Córdoba
- Cotton textiles—Egypt
- Carpets—Persia

In addition to food, farmers grew cotton, sugar cane, flowers, and herbs.
There was social mobility, with options to improve one’s standing through religious, military, or scholastic achievements.

<table>
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<th>Slavery did exist, however.</th>
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<td>Many slaves were house servants, skilled artisans, or soldiers, who could earn their freedom.</td>
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<td>Slaves could often buy their freedom. If a slave’s father was a freeman, he could be freed as well.</td>
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Islamic art and literature reflected the diverse cultures within the Muslim world.

- It was forbidden to portray God or human figures in religious art.
- The Quran itself was the greatest literature.
The rich tradition of Arab storytelling continued in this period.

**Firdawsi’s** *the Shah Namah, or Book of Kings*, told of the history of Persia.

**The Rubáiyát, by Omar Khayyám**, is a philosophical work in four-line stanzas.

Poets wrote tales of romantic and dangerous desert journeys. Some are remembered today—“Ali Baba and the Forty Thieves” and “Aladdin and His Magic Lamp,” from *The Thousand and One Nights.*
Domes and arches adapted from the Byzantines became symbolic of Muslim architecture.

The Dome of the Rock in Jerusalem is the oldest surviving example of Muslim architecture. It was built in 688.

Domed mosques and high minarets still dominate Muslim cities such as Medina.
Muslim artists perfected skills in **calligraphy**.

Works in elaborate flowing script, especially illustrating verses of the Quran, are found as decorations on buildings, ceramics, and books.
Muhammad’s great respect for learning inspired advances in philosophy, history, mathematics, and the sciences.

Learning from earlier civilizations was translated into Arabic from Persian, Sanskrit, and Greek.

Great centers of learning were founded in cities such as Cairo, Baghdad, Córdoba, and Timbuktu.
Arab scholars translated works from Greek, Hindu, and Buddhist philosophers.

- **Ibn Rushd** put knowledge to the test of reason.
- **Ibn Khaldun** set standards to avoid bias and error in the study of history.

Scholars sought to harmonize Greek ideas, based on reason, with Muslim ideas based on divine revelation.
Arab scholars made many mathematical advances.

Arab mathematicians developed what became our modern number system.

The study of algebra was pioneered by al-Khwarizmi in the 800s.
Building on the work of the Greeks, Muslims greatly advanced medicine and public health.

- Physicians and pharmacists had to pass tests.
- There were hospitals and physicians who traveled to rural areas.
- Pharmacists mixed bitter-tasting medicines with sweet-tasting syrups and gums for the first time.
Muslim physicians made great advances in medicine.

Muhammad al-Razi studied measles and smallpox. He also stressed the need to treat the mind as well as the body.

Ibn Sina compiled a huge encyclopedia of all known medical knowledge called the *Canon on Medicine*.

Arabic physicians could even perform cataract surgery using hollow needles.
Section Review

QuickTake Quiz

Know It, Show It Quiz

ExamView QuickTake Presenter

Mac

Windows