

# Islamic Civilizations

*Islamic Civilization  
Achievements*



## Introduction to Islamic Civilizations

## Islamic Civilization Achievements

### Thematic Icons



Economics



Geography



Historical concepts



Government

### Icons



Flash activity (these activities are not editable)



Teacher notes included in the Notes page

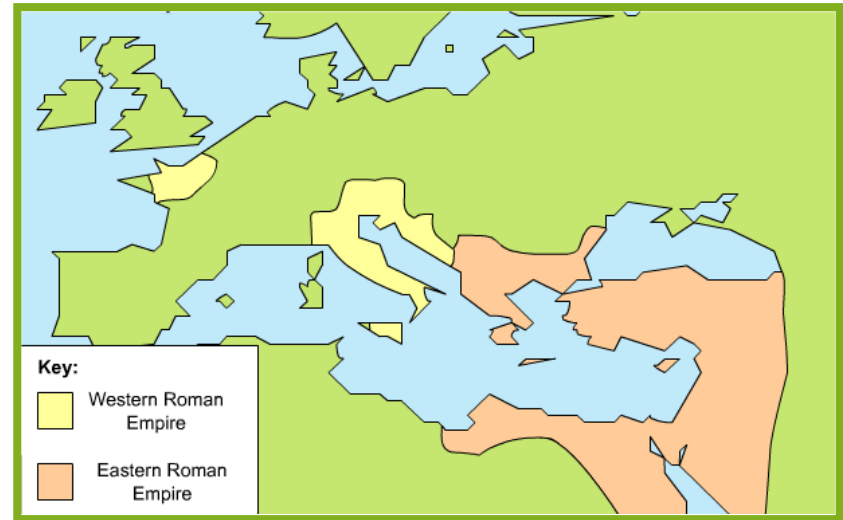
For more instructions, see the *User Guide*.





By the fourth century AD, the **Roman Empire** was starting to decline. The Romans faced invasions from tribes across Europe and were losing control of parts of their empire.

In 476, the last Roman Emperor, Romulus Augustus, was defeated by **Odoacer**, a German Goth, ending the Western Roman Empire. The Eastern Roman Empire did survive but would later become part of the Muslim Ottoman Empire.



How would this affect Roman influence on the West and the Mediterranean world?



Roman influence on the West declined as the empire fell.

In the Islamic world, the period from the eighth to the thirteenth centuries is considered a “**Golden Age**” of science and culture.

Advances were made in many areas, including mathematics and medicine, and the arts flourished.



The ideas and inventions of the Islamic Golden Age later spread to the Western world and influenced the European **Renaissance** (a philosophical and artistic movement that started in Italy during the fourteenth century).



# Spread of ideas



From the time **Muhammad** started preaching, Islam began to reach new people. The faith first spread throughout Arabia and then beyond.



At first, the message of Allah as revealed to Muhammad spread along trade routes by merchants. As Islamic empires developed and grew, Islam also spread as a result of conquest, although the empires did practice some religious tolerance.

Today, there are over one billion followers of Islam and it is the world's second-largest religion.

**Why do you think people chose to convert?**

Astronomy was influenced by the need to know the direction of Mecca and the need to be able to tell the time.

## Why was this important?

These objectives were fulfilled using the **astrolabe**, which was greatly improved by Arab astronomers. This was a device used to determine the position of the stars and planets and had been invented by the Ancient Greeks in around 150 BC.



Other contributions by Arab astronomers included correcting mistakes made by the Ancient Greeks, naming stars and building observatories.



Advances were also made in geography, partly due to the ability to tell time and position accurately.

Travel was encouraged, and reasons for making journeys included:

- exploration – **Ibn Battuta**, for example, traveled around both the Muslim and non-Muslim worlds
- trade – the Islamic world sat along major trading routes
- religion – such as making the **hajj** (pilgrimage) to Mecca.



As a result, advances were made in the accuracy of maps and the methods of calculating distance.



Muslim mathematicians built upon Indian and Greek ideas and developed their own in order to advance the study and understanding of mathematics.

One major scholar in the field of mathematics was Muhammad **Al-Khwarizmi**. Translations of his works introduced many ideas to the Western world including:

- the Indian number system – today numbers are typically referred to as Arabic numerals
- the word algebra, which comes from the Arabic “al-jabr”, although the basic ideas of algebra are much older.

Math also began to appear in artwork in the form of **geometric patterns**, particularly in religious institutions, such as mosques.



Islamic medicine built upon Greek and Indian knowledge, as well as developing new theories and practices.

- Pharmacy developed as a profession.
- Several medical encyclopedias were written. *The Canon of Medicine* by **Avicenna** was used as a textbook in Western universities until around 1650.
- Ibn al-Nafis described pulmonary circulation (the movement of blood between the heart and lungs).
- al-Razi, a Persian **polymath** (someone whose expertise covers several areas) discovered the difference between smallpox and measles.



Early Islamic philosophy took many forms. Scholars might take a religious perspective, a spiritual perspective (as in **Sufism**) or the Classical perspective of the Ancient Greeks.

Some developments of early Islamic philosophy included:

- stating that philosophy and religion are not contradictory – this is largely associated with **Averroes** (1126–1198)
- establishing a willingness to both accept and challenge authority
- the translation of Ancient Greek writings into Arabic, preserving the works of Greek philosophers, such as **Aristotle**.



Why was the translation of Classical texts important?

Sufism, a spiritual movement whose followers seek a personal relationship with Allah, developed during the seventh and eight centuries in reaction to the worldliness of early Islam as it grew.

Followers of sufism are called **sufis** and are members of orders called **Tariqas**. These orders have a master who teaches the other members.

Many orders trace their original rules back to Ali, the fourth caliph after Muhammad's death.

Practices can differ between sufi orders. **Dhikr** refers to the remembrance of Allah and is one sufi practice.

A circular icon with a left-pointing arrow.

**How might sufis remember Allah?**

A circular icon with a right-pointing arrow.

Early Islamic literature was written in Arabic, and was often based on the teachings of the Qur'an.

Poetry was a particularly popular form of early Islamic literature.

Both new literature and retellings of older stories were produced.

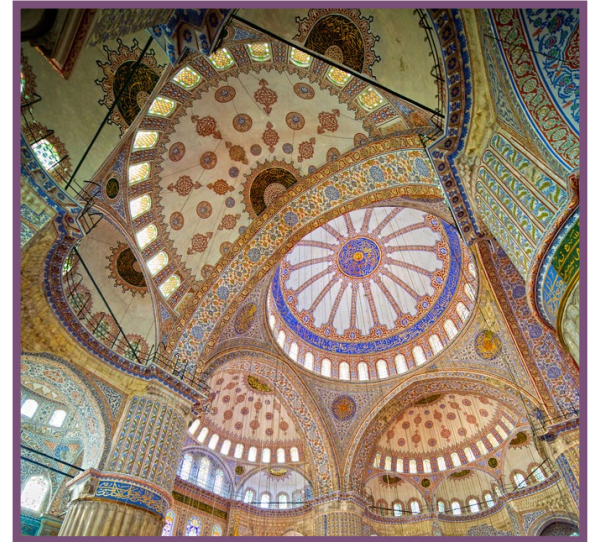
One famous example of Islamic literature is *The Thousand and One Nights*, a collection of folk tales set in an Arabian framework, including *Aladdin*.



The East also influenced Western literature with **orientalism** becoming a feature of several texts, including Shakespeare's *Othello*.

Islamic art refers to all art produced within the Islamic world. Although it encompasses a wide range of themes and styles, some characteristics and forms are common.

- In art produced for a specifically religious purpose, animals and people are not included.
- Geometric patterns have been used widely, particularly inside mosques and religious buildings.
- **Calligraphy** became an important art form that has been used both in the Qur'an and as architectural decoration.

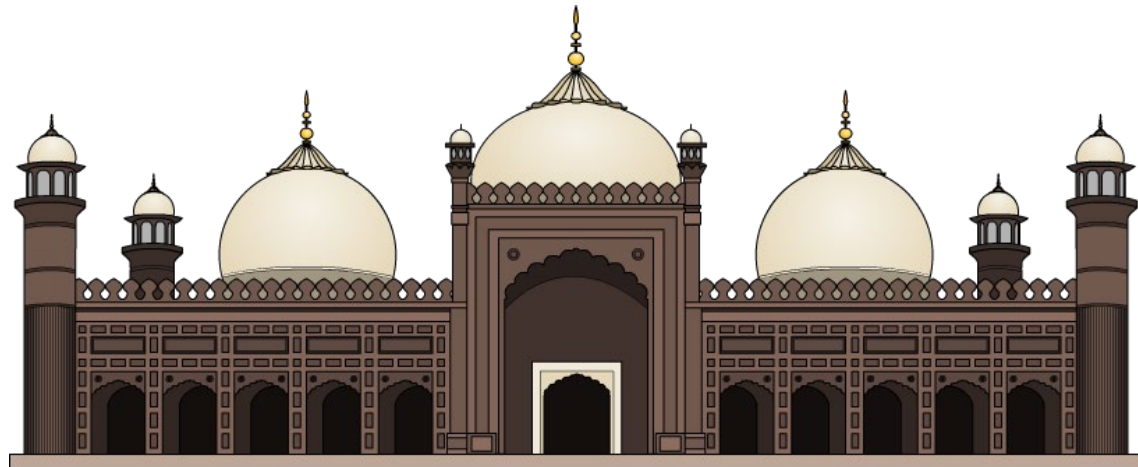


Since the final revelation of Islam in the seventh century, Muslims have created grand buildings, many of which were **patronized** (sponsored) by Muslim rulers.

Islamic architecture typically combines both religious and **secular** styles, showing Islamic and local influences.

Some examples of the types of building made include:

- mosques
- tombs
- palaces.



Can you name any examples of these?

Some famous examples of Islamic architecture include:



What similarities and differences can you see?



# The mosque





From the fourteenth century, a philosophical and cultural movement known as the Renaissance swept across Europe.

## How did the achievements of the Islamic Golden Age influence the European Renaissance?

- Classical texts were translated into Arabic and their teachings preserved.
- Islamic scholars built upon and challenged the work of these texts, helping to develop the **scientific method** of hypothesizing, investigating and drawing conclusions.
- Islamic discoveries were transported to the Western world where they could be used and built upon.

Can you think of any other influences on the Renaissance?



# Keywords

