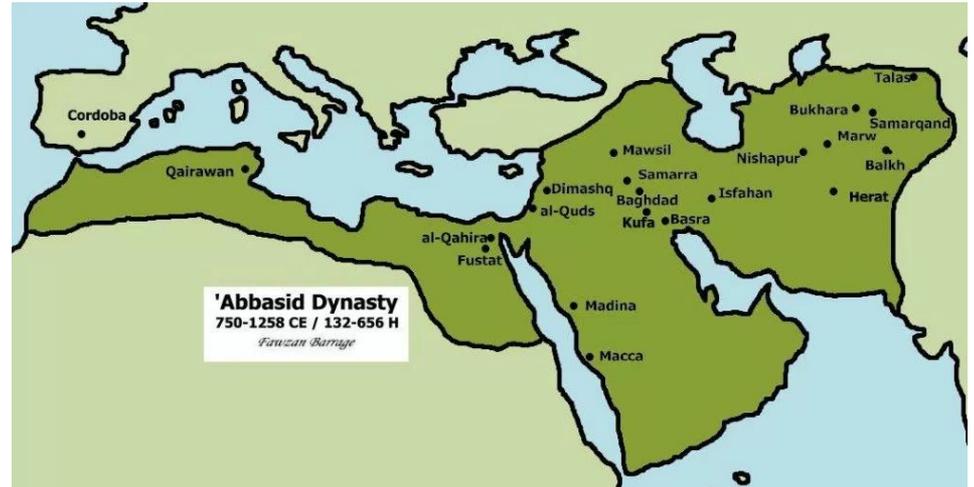


# Day 5

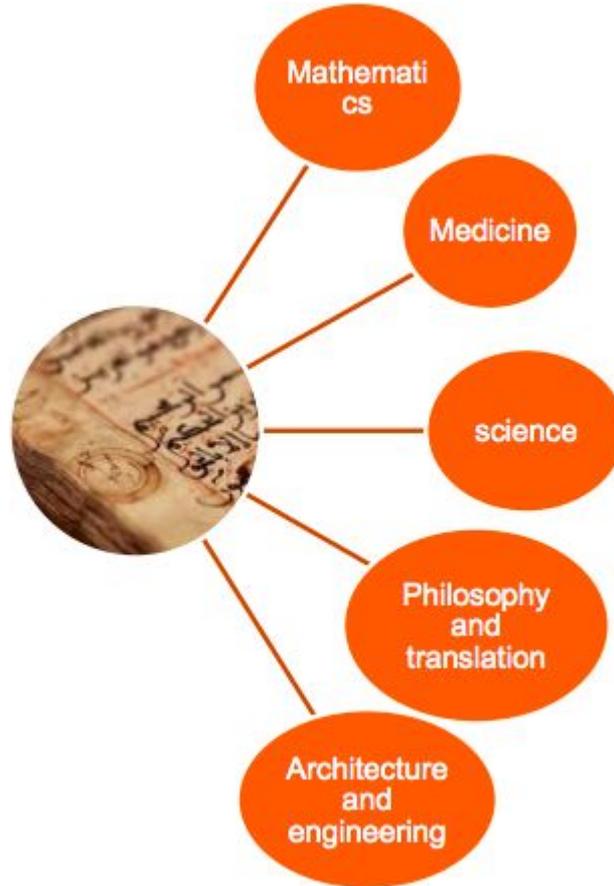
Dec. 7 and 8

# Islamic Golden Age

- Began in the mid-8th century lasting until the Mongol conquest of Baghdad in 1258
- Baghdad was the world center of knowledge, wealth and international significance.
- Two factors that laid down the foundation of this period:
  - Collection and translation of knowledge
  - Sponsoring of scholars
  - Discussion of viewpoints



# Golden Age of Islam-Advancements



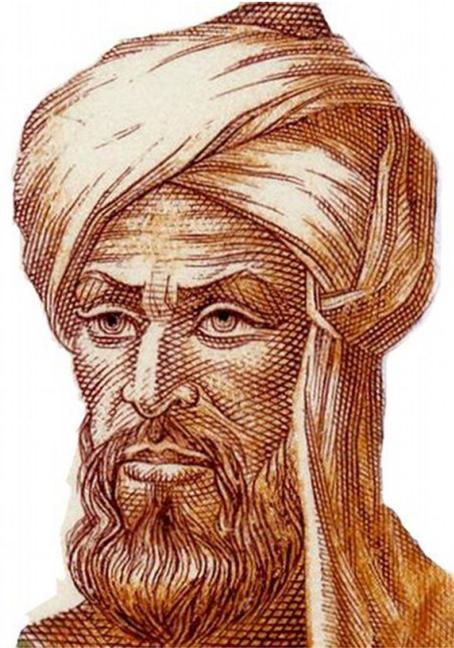
# Catalysts for Success

There are many reasons for the success of the Islamic civilization during this period, most notably:

- The principles and ideals of Islam was practiced.
- Tolerance and respect for the contributions of ethnic and religious minorities. Islam unified the tribes of Arabia.
- Islam was attractive to the conquered: It was easy to become Muslim preaches equality (people could move up in society)

# Mathematics-Muhammad ibn Musa al-Khwarizmi

Islam made major strides in the field of algebra, geometry and trigonometry. They used to solve practical problems. Contributions can be traced to Al-Khawarizmi in the 9th century. He introduced the fundamentals of algebra. Most revolutionary contribution was the development of numbers and the discovery of zero (sifr).

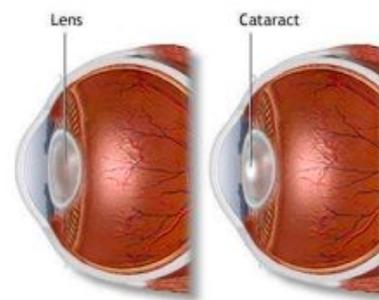


# Science

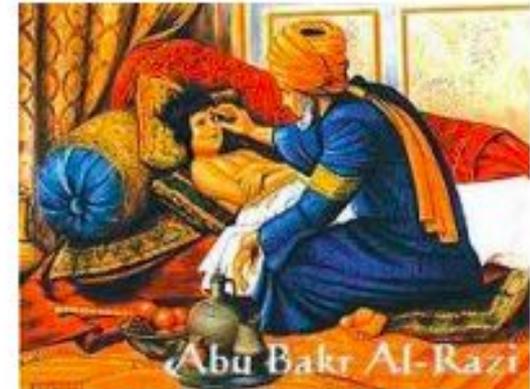
- Scientific method was first developed in the Muslim world, where significant progress in methodology was made.
- The most important development of the scientific method was the use of experimentation and quantification.
- Muslim scientists translated Greek classics and made far-reaching advances in many fields.

# Medicine

- In the field of medicine the Muslims laid down the foundations of many sub areas of medicine.
- Al-Razi, a 9th century Persian physician, made the first major Muslim contribution to medicine when he developed treatments for smallpox and measles.
- Another physician Ibn Sina composed over 276 works and the most prominent is Qanun Ibn Sina (Canon of medicine). Muslims also made advances in the treatments of cataracts (main cause of blindness during old age).



Invention of  
medical tools

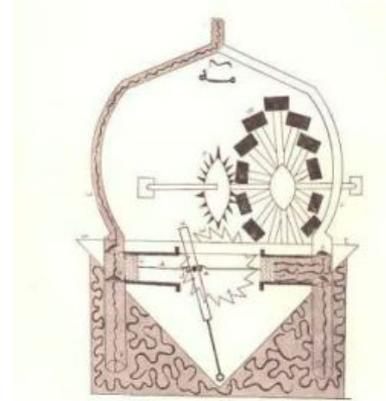


# Philosophy

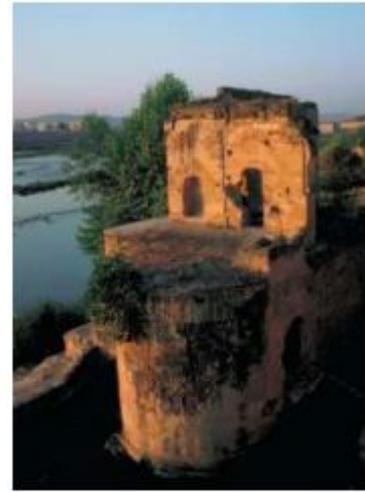
- Muslim philosophers also took ideas from the Qur'an as a starting point for pondering philosophical issues.
- At the heart of the debate between philosophy and theology were arguments for faith vs. reason.
- The key question that was extensively debated was: **In the event of a conflict between human knowledge and revealed knowledge which should prevail?**
- Their faith in Islam led them to recognize that even reason could not be used to fully understand God or his knowledge.

# Architecture and Engineering

- Islamic architecture is distinct in terms of its unique architectural elements and ornamentations.
- Muslims also contributed to the field of engineering by inventing gears, cranks, pistons and pumps.
- These tools were later incorporated into machinery developed during the European-based industrial revolution.



Twin cylinder suction pump by Al-jazri



Mill-house near cordoba

# FakeBook

- 6 groups. Assigned one person who is a mathematician, a scientist, a philosopher, a poet, or some combination of all of them!
- Read over the instructions for the Fakebook. You will be making a poster.
- As a group use the packet on your person and research on your phones to be able to make the Fakebook page.
- Gallery Walk