LOC TPS APWH Muslim contributions 600-1450 to the natural and medical sciences
9-12 Grades
APWH Period 3/World History

This activity is sponsored in part by the Library of Congress Teaching with Primary Sources Eastern Region Program, coordinated by Waynesburg University.

One document as a class starter 5-10 minutes, all documents 30-45 minutes
Description of activity: This could be used to provide examples of Muslim advances in natural and medical sciences. Alternatively, one portion could could be used as a class starter (for one day or multiple days).

Activity Goals: Students will explore artwork and achievements in the natural sciences from the Muslim world in the early modern period.

Focus Question: How did Muslims advance the natural and medical sciences?

Context: This will provide specific, tangible examples of Muslim scientific achievements during a study of the Abbasid dynasty.

Objectives: Students will gain a better understanding of the role Muslims had in advancing scientific knowledge through translating, furthering the work of earlier scientists, and spreading this to others.
APWH 3.2.I, 3.2.II
Virginia SOLS
WHI.1 The student will improve skills in historical research and geographical analysis by

1. identifying, analyzing, and interpreting primary and secondary sources to make generalizations about events and life in world history to 1500 a.d.;
2. using maps, globes, artifacts, and pictures to analyze the physical and cultural landscapes of the world and interpret the past to 1500 a.d.;
3. identifying major geographic features important to the study of world history to 1500 a.d.;
4. identifying and comparing political boundaries with the location of civilizations, empires, and kingdoms from 4000 b.c. to 1500 a.d.;
5. analyzing trends in human migration and cultural interaction from prehistory to 1500 a.d.

WHI.8 The student will demonstrate knowledge of Islamic civilization from about 600 to 1000 a.d. by

1. describing the origin, beliefs, traditions, customs, and spread of Islam;
2. assessing the influence of geography on Islamic economic, social, and political development, including the impact of conquest and trade;
3. identifying historical turning points that affected the spread and influence of Islamic civilization, with emphasis on the Sunni-Shi'a division and the Battle of Tours;
4. citing cultural and scientific contributions and achievements of Islamic civilization.

Assessment: Students will answer analysis questions for each source and evaluate the role of Muslims in scientific advancements.

Activity Details
Primary Sources: see below
Procedure: This can be an activity in which students exmaine and evaluate three primary sources as examples of Muslim scientific advancements or the teacher can use one item as a class starter.

What you will need before implementing: This lesson would be most effective with computer access for all students. The documents, directions, and chart should shared digitally with all students (in Google Doc.s. or another format). This activity could be accomplished with paper copy of the materials for each student.

Faraḥ nāmah (Farah's encyclopedia of nature), also known as *Ajayib al-dunya* (Wonders of the world)
al-Muṭahhar ibn Muḥammad Yazdī flourished 1184
recopied around 1600
https://www.wdl.org/en/item/9711/

How does this book fit with traditional rules of Islamic Art?
What accounts for the deviation?
What seems to have been the purpose of the book?
Put this source into proper historical context.

Tashrīḥ-i badan-i insān (The anatomy of the human body), usually known as *Tashrīḥ-i Manṣūrī* (Manṣūr's anatomy)
Manṣūr ibn Muḥammad ibn Ilyās
1300s, recompiled 1700s
https://www.wdl.org/en/item/9719/

What was the purpose of this work?
How is it a significant achievement in medical science?
What evidence is there of cross-cultural exchange?
Can you explain how this occurred?

On Anatomical Procedures
Written by Galen (Jālīnūs in Arabic, circa 131–201), translated by Ḥunayn ibn Isḥāq al-'Ibādī (circa 809–73)
This copy dates to the 1500s CE
Dar-al-Islam
https://www.wdl.org/en/item/9712/view/1/9/

What can you infer about Galen and his work from the background provided on this source?
How was this book significant?
Put this source into proper historical context. What was the state of medical knowledge in Europe at the time?

Formative Assessment:
Write a short essay that answers these questions.
Why were all of these books recopied in the 16th or 17th centuries?
By whom and for what purpose?
How were Muslims important in the development of science?