

NAME _____

DATE _____

Performance Task – Causation: Spread of Knowledge in Eurasia

Goal of task

Target concept: I can explain why (causes) Muslims adopted Greek learning during the Abbasid Caliphate. I can explain effects of this change such as the addition of new philosophical and scientific knowledge that included learning in medicine and mathematics.

For this task you will be evaluated on your ability to:

- Identify and analyze causes and effects of the process by which Muslims adopted Greek learning.
- Identify the various geo-political participants and their roles in this process.
- Analyze documents for evidence of historical context, intended audience, purpose, and/or author's point of view.

Task summary

This task will help you to gain an understanding of the depth and intensity of certain intellectual pursuits undertaken by Muslim scholars during the medieval period. It is important to remember that, after the fall of the Roman Empire, much of the scientific, philosophical, and medical knowledge that was developed and promoted by the Greeks and other civilizations were ignored in the Mediterranean and European regions. Medieval Christian Europe had limited use for secular learning. The quickly-expanding Islamic Empire, on the other hand, created vibrant urban centers where intellectual learning was supported by both the Islamic faith and the faithful. From 800 CE to 1450, the greatest centers of scientific studies were all in the vast multinational Islamic world. Arabic scholars did not create new learning in a vacuum; they began by collecting ancient knowledge via long-standing trade networks. They collected Greek, Persian, and Indian learning and classics, which they translated in great numbers during the 8th and 9th centuries. On this foundation they made significant advancements, especially in the fields of science and mathematics.

In this task, you will first read background information about the contributions made by Muslim scholars to learning in math, science, and medicine. You will then analyze several documents related to the spread of learning within and outside of the Islamic Empire, focusing particularly on causes and effects. Finally, you will write a thesis and opening paragraph to an essay about the causes and effects of the spread of learning in the Islamic Empire.

Task 1: Introduction to Science and Mathematics in the Medieval Islamic World (Individual)

Read the introduction from the article, “The Contributions of Arab Civilization to Mathematics and Science,” by Julie Peteet. Answer the following short-answer questions in complete sentences.

“The Contributions of Arab Civilization to Mathematics and Science” by Julie Peteet, available at:
<https://georgetown.app.box.com/s/o7jlnaqvqm9hr1pfpebs>

1. Identify the different cultures from which Arabs built their scientific learning.
2. Explain the role of religion in the development of math and science. Be sure to use and define lingua franca in your summary. You may consult the internet or some other reference.
3. What is “cultural assimilation?”
 - a. Identify and explain another example of cultural assimilation from your knowledge of world history or the world today.
4. What is “Arab science?”
5. How did the Islamic Empire support and encourage learning in its empire system?
6. In what ways did learning support and strengthen the Islamic Empire?

Check your understanding

- Can you identify the different cultures from which Arabs learned and built new scientific knowledge?
- Can you explain how the Islamic Empire supported the development and spread of scientific and mathematical knowledge?

Task 2: Arab Learning DBQ – Document Analysis (Group)

Analyze each document in the following DBQ (Document-Based Question). Your analysis should include a summary of the main idea of the document, an explanation of whether it is about a cause or effect or the spread of learning, and a discussion of the document using at least one of the “HIPPP” skills: historical context, intended audience, purpose, and the author’s point of view.

Arab Learning

Analyze causes and effects of the flourishing and spread of learning in the Islamic Empire from about 600 CE to 1450.

1. Document 1

<p>DATA: underline text in the document that supports the claims made to the right</p>		<p>CLAIMS</p>	
<p>“It is He who made the sun a shining light and the moon a derived light and determined for it phases – that you may know the number of years and account (of time). Allah has not created this except in truth. He details the signs for a people who know.</p> <p>Indeed, in the alternation of the night and the day and (in) what Allah has created in the heavens and the earth are signs for a people who fear Allah.”</p> <p><i>Source: Quran, 10:5, 6</i></p>		<p><input type="checkbox"/> Cause: _____ _____</p> <p><input type="checkbox"/> Effect: _____ _____</p>	
<p>WARRANT: why is this a cause or effect</p>			
Historical Context			
Intended Audience			
Purpose			
Author’s Point of View			

2. Document 2

<p>DATA: underline text in the document that supports the claims made to the right</p>		<p>CLAIMS</p>	
<p>“We should not be ashamed to acknowledge truth from whatever source it comes to us, even if it is brought to us by former generations and foreign peoples. For him who seeks the truth there is nothing of higher value than truth itself.”</p> <p><i>Source: Yaqub ibn Ishaq al-Kindi (c. 801-873 CE), Arabic philosopher and prominent figure in the House of Wisdom, was appointed by a number of Abbasid Caliphs to oversee the translation of Greek scientific and philosophical texts into the Arabic language.</i></p>		<p><input type="checkbox"/> Cause:</p> <p>_____</p> <p>_____</p>	
		<p><input type="checkbox"/> Effect:</p> <p>_____</p> <p>_____</p>	
<p>WARRANT: why is this a cause or effect</p>			
<p>_____</p>			
<p>Historical Context</p>			
<p>Intended Audience</p>			
<p>Purpose</p>			
<p>Author’s Point of View</p>			

3. Document 3

<p>DATA: underline text in the document that supports the claims made to the right</p>		<p>CLAIMS</p>	
<p>“Its name is famous, and its fame widespread. Iraq is indeed the center of the world...The people excel in knowledge, understanding, letters, manners, insight, discernment, skill in commerce and crafts, cleverness in every argument, proficiency in every calling, and mastery of every craft. There is none more learned than their scholars, better informed than their traditionists, more cogent than their theologians, more perspicuous than their grammarians, more accurate than their readers, more skillful than their physicians, more melodious than their singers, more delicate than their craftsmen, more literate than their scribes, more lucid than their logicians, more devoted than their worshippers, more pious than their ascetics, more juridical than their judges, more eloquent than their poets, and more reckless than their rakes.”</p> <p><i>Source: Ahmad al-Ya'qubi (d. 897), historian of Islam and descendant of the Abbasid family, Kitab al-Buldan, ninth century.</i></p>		<p><input type="checkbox"/> Cause:</p> <p>_____</p> <p>_____</p>	
		<p><input type="checkbox"/> Effect:</p> <p>_____</p> <p>_____</p>	
<p>WARRANT: why is this a cause or effect</p>			
Historical Context			
Intended Audience			
Purpose			
Author's Point of View			

4. Document 4

DATA: underline text in the document that supports the claims made to the right		CLAIMS	
<p>“Medicine considers the human body as to the means by which it is cured and by which it is driven away from health. The knowledge of anything, since all things have causes, is not acquired or complete unless it is known by its causes. Therefore in medicine we ought to know the causes of sickness and health. And because health and sickness and their causes are sometimes manifest, and sometimes hidden and not to be comprehended except by the study of symptoms, we must also study the symptoms of health and disease. Now it is established in the sciences that no knowledge is acquired save through the study of its causes and beginnings, if it has had causes and beginnings; nor completed except by knowledge of its accidents and accompanying essentials. Of these causes there are four kinds: material, efficient, formal, and final.”</p> <p><small>Source: Ibn Sina (973-1037), Islamic philosopher, physician, statesman, and soldier, The Canon of Medicine, c. 1025 CE.</small></p>		<input type="checkbox"/> Cause: <hr/> <hr/>	
		<input type="checkbox"/> Effect: <hr/> <hr/>	
WARRANT: why is this a cause or effect			
Historical Context			
Intended Audience			
Purpose			
Author’s Point of View			

5. Document 5

<p>DATA: underline text in the document that supports the claims made to the right</p>	<p>CLAIMS</p>
<p>“When, some time ago, I went away to study, I stopped a while in Paris. There I saw idiots rather than men occupying the chairs and pretending to be very important... because they did not know anything, they were no better than marble statues: by their silence alone they wished to seem wise, and as soon as they tried to say anything, I found them completely unable to express a word. When I discovered things were like this, I did not want to get infected by a similar petrification... But when I heard that the doctrine of the Arabs... was all the fashion in Toledo in those days, I hurried there as quickly as I could, so that I could hear the wisest philosophers of the world... Eventually my friends begged me to come back from Spain; so, on their invitation, I arrived in England, bringing a precious multitude of books with me.”</p> <p><i>Source: Daniel of Morley (c. 1140- c. 1210), English philosopher and astronomer.</i></p>	<p><input type="checkbox"/> Cause: _____ _____</p> <p><input type="checkbox"/> Effect: _____ _____</p>
<p>WARRANT: why is this a cause or effect</p>	
<p>Historical Context</p>	
<p>Intended Audience</p>	
<p>Purpose</p>	
<p>Author’s Point of View</p>	

6. Document 6

DATA: underline text in the document that supports the claims made to the right		CLAIMS
<p>“When the Byzantine emperors conquered Syria, the scientific works of the Greeks were still in existence. Then God brought Islam, and the Muslims won their remarkable victories, conquering the Byzantines as well as all other nations. At first, the Muslims were simple, and did not cultivate learning, but as time went on and the Muslim dynasty flourished, the Muslims developed an urban culture which surpassed that of any other nation. They began to wish to study the various branches of philosophy, of whose existence they knew from their contact with bishops and priests among their Christian subjects. In any case, man has always had a penchant for intellectual speculation. The caliph al-Mansur therefore sent an embassy to the Byzantine emperor, asking him to send him translations of books on mathematics. The emperor sent him Euclid’s Elements and some works on physics. Muslim scholars studied these books, and their desire to obtain others whetted. When al-Ma’mun, who had some scientific knowledge, assumed the caliphate, he wished to do something to further the progress of science. For that purpose, he sent ambassadors and translators to the Byzantine empire, in order to search out works on the Greek sciences and have them translated into Arabic. As a result of these efforts, a great deal of material was gathered and preserved”</p> <p><i>Source: Ibn Khaldun (1332-1406), Islamic historian and historiographer, Muqaddimah, 1377.</i></p>		<p><input type="checkbox"/> Cause:</p> <hr/> <hr/> <p><input type="checkbox"/> Effect:</p> <hr/> <hr/>
WARRANT: why is this a cause or effect		
Historical Context		
Intended Audience		
Purpose		
Author’s Point of View		

7. Document 7

DATA: underline text in the document that supports the claims made to the right	CLAIMS
<p>Western scholars, usually from the Iberian Peninsula or Italy, began to collect and translate Arabic medical texts in the twelfth century as part of a general enterprise in Western Christendom to recover and examine the philosophical learning of the ancient Greeks, especially Aristotle. Among the first centers of philosophical medical learning in the West was Salerno, in southern Italy, near the famous Benedictine monastery of Monte Casino. At the end of the eleventh century, Constantine the African assembled a school of translators who helped bring philosophical medicine back into the Latin-speaking world. These writings in Latin formed the basis of the curriculum of the so-called School of Salerno, the first medical university in the West.</p> <p>What Constantine and those like him brought into the West was not a mere reconstruction of Greek learning; rather, it was the product of Islamic understanding of the ancient Greeks. Islamic philosophers systematized Greek medical learning to make it easier to teach (most obviously by translating this learning into Arabic).</p> <p>They also added their own observations about astrology and alchemy, advancing Western knowledge of these and other subjects far beyond what it had been in Galen’s time. Western medicine from the twelfth century onward, then, was part of a more widespread interest in the culture of Islam: its philosophy, its art, its poetry, and its technical knowledge. Western armies may have repulsed the armies of Islam, but Western scholars later eagerly embraced the impressive learning of the very people they had fought so hard to defeat.</p> <p><small>Source: Faye Getz, <i>historian</i>, <i>Medicine in the English Middle Ages</i>, Princeton University Press, 1998.</small></p>	<p><input type="checkbox"/> Cause:</p> <hr/> <hr/>
	<p><input type="checkbox"/> Effect:</p> <hr/> <hr/>
WARRANT: why is this a cause or effect	
Historical Context	
Intended Audience	
Purpose	
Author’s Point of View	

Using what you have learned from the documents and your knowledge about the time period, answer the following questions.

8. What basic characteristics can be used to describe Arab learning during the Middle Ages?
9. Why was learning strongly supported in the Islamic Empire during this time?
10. How did Western Europe benefit from Arab learning during the Middle Ages?

Check your understanding

- Can you read primary and secondary sources and identify the main ideas in the sources?
- Are you able to identify and explain at least one of the historical thinking skills associated with reading documents (historical context, author, purpose, and point of view)?
- Can you explain some of the causes and effects of the spread and flourishing of learning in the Islamic Empire?

Task 3: Apply your understanding (Individual or as homework)

To apply what you have learned in the first two tasks of this activity, you will write a thesis statement and introductory paragraph for this DBQ, which is about causes and effects of the spread and flourishing of learning in the Islamic Empire. Effective thesis statements for DBQs are often structured around specific ideas. In this case, you might want to create categories of causes and effects to answer the question. In order to write an effective thesis statement, you may want to group the documents within categories to match their identified causes and effects. Another brainstorming strategy that might help in generating ideas for a thesis is for you to create a T-chart of the causes and effects. Excellent introductory paragraphs will quickly set the question into its historical context and provide an analytical framework for the essay that will follow.

Identify three areas of analysis (either two categories of causes and one of an effect or one cause and two effects) concerning the spread of Islamic learning during this period.

Paragraph 1	Context	<p>4 to 5 Sentences: Contextualization (explain what happened 10 to 20 years prior that caused this <i>In the years leading up to...</i> OR <i>In the early/late ___ century...</i></p>	
	Thesis	<p>Sentence 3: Your position on each part of the question; basically a one sentence answer to the question. (your claim)</p>	
		<p>Sentence 4: Your plan for answering each part of the question; basically list what you are going to say about each part of the question (your data)</p>	