



Hidden Figures: Africa's Light during Europe's Middle Ages

By Matt Cramer, 2019 CTI Fellow
Piedmont Open IB Middle School

This curriculum unit is recommended for:
6th grade and high school World History courses

Keywords: Islam, Golden Age, Abbasid Dynasty, Middle Ages, medieval, caliph, religion, Africa, Persian, Sundiata Keita, Mansa Musa, Mali Empire, Ibn Battuta

Teaching Standards: See [Appendix 1](#) for teaching standards addressed in this unit.

Synopsis: This unit is designed to be taught either in conjunction or as a standalone unit that would follow Europe's Middle Ages. It highlights the medieval accomplishments of Africans during the Islamic Golden Age. Individual lessons can be woven into an already created Middle Ages unit that is heavily Eurocentric or taught as a supplementary unit that puts an Afrocentric lens on the time period. The intention is to show hidden figures of Africa during this period that are often overlooked in our current curriculum. It is also designed to create more content knowledge on Africa that will spark a curiosity for history among African-American students. Please note that this unit focuses only on medieval African history with very little tie-in to Europe during this period. The assumption would be that the teacher would find ways to use these lessons in combination with their already created European Middle Ages unit how they see fit. The activities and suggestions for this unit can be found in [Appendix II](#), [Appendix III](#), [Appendix IV](#), and [Appendix V](#). The strategies and goals outlined may either be a whole unit of study or individual lessons for a teacher to work within time constraints.

I plan to teach this unit during the coming year to 125 students in 6th Grade World History at Piedmont Open IB Middle School.

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Introduction

Teaching African history is not a staple in all middle school social studies classes. Often the extent of coverage of this topic depends on individual teachers' passion for this particular content. For many sixth-grade teachers in North Carolina, instruction is limited by a Eurocentric lens of history, which limits coverage of Africa to topics such as human beginnings, early human migration, and ancient Egypt. The vast number of civilizations around the globe makes it nearly impossible to delve too deep into any one area during the amount of class time allotted. This especially holds true in sixth grade, where many students are for the first time introduced to social studies as an equal core class.

Teachers have the option to briefly cover or completely skip over certain civilizations or regions of the world for time saving purposes and in order to provide adequate instruction to the classic topics always represented on state tests. As a result, students often have a negative analysis or reaction to this period because they received little exposure to the great things happening elsewhere in the world. However, as proposed in this curriculum unit, there is a way to represent and incorporate the progressive Islamic Golden Age of the Middle East and North Africa with the stagnant European Middle Ages so that students can understand a greater context of the world as a whole prior to the Renaissance.

Another reason to incorporate African civilizations into our curriculum is fostering connection between our African-American student population and their own histories, which tends to be sorely lacking at the middle school level. Will teaching more of this content raise their test scores on our North Carolina Final Exam (NCFE)? Probably not, as there are very few mentions of ancient African civilizations on our current state tests. But could inclusion of this content plant a seed of interest and pride with our African American students to become inquirers or life-long learners with an interest in history? Perhaps, and it is worth a shot to try to make these connections. Therefore, the question emerges of how to incorporate a Golden Age of African history into a full curriculum while still covering content to prepare for state exams. The Middle Ages are a perfect time to tie in and compare this culturally lackluster period of European history with a cultural watermark happening in Africa.

School Background

At Piedmont International Baccalaureate Open Middle School, there is quite a mix of students from different racial, ethnic, and socioeconomic backgrounds. Of 1,038 students this past year, 59% were black, 19% white, 9% Hispanic, 8% Asian, and 5% identified as two or more races. Low-income children make up 38% of the student body, and 8% of the student body is diagnosed with learning disabilities. On top of those demographics,

Piedmont has an exceptional academic reputation through its International Baccalaureate (IB) magnet program and being an “A” school on the NC School Report Cards for the past five years. Piedmont has always had a family atmosphere, despite many students traveling each day from far distances to attend the school.

Each year I teach four separate world history classes of approximately thirty students each for fifty-two-minute-long periods. Students’ End of Grade (EOG) scores from fifth grade are the main indicator in grouping. Often this is the biggest discrepancy in both racial and socioeconomic separation. The highest and lowest groups tend to be most homogenous in terms of both race and socioeconomic backgrounds. The higher performing class tends to be motivated by achieving good grades or fear of failure, while the lower performing class’ motivation tends to vary by personal interest in social studies. At Piedmont, my lowest performing classes tend to have the highest concentration of black students. Therefore, if it is possible to make a genuine connection or spark interest in ancient civilizations among a majority of my students through their ancestry, I believe it should become one of my top goals as an educator.

Rationale

This particular unit will focus on four African “hidden figures” not often studied in middle school social studies classes. These figures are as follows, to be taught in chronological order for best comparison over time to the Middle Ages in Europe: 1) the Abbasid Dynasty, a religious civilization that shared geographical borders with European civilizations of its time; 2) Sundiata Keita, who founded the Mali Empire, a West African kingdom; 3) Mansa Musa I, who ruled the Mali Empire at its height; and 4) Ibn Battuta, a traveling Muslim scholar and contemporary of European travelers and explorers such as Marco Polo.

By focusing on these four hidden figures, this curriculum will compare and contrast life in Europe and Africa during this time. Comparing the role of Christianity and its spread throughout Europe with the rise of Islam in the Abbasid Dynasty leads to excellent talking points regarding the culture of religion. Sundiata Keita, followed later by Mansa Musa I of the Mali Empire, and Charlemagne of the Holy Roman Empire, exemplify very different leaders of their respective civilizations. Lastly, looking at both Marco Polo and Ibn Battuta raises many questions as to why some historical figures remain in the forefront of history books while others, whose stories may be just as significant, are often overlooked.

The sixth grade North Carolina Standard Course of Study (NCSCOS) focuses heavily on the culture, history, economics, government, and geography (CHEGG) model. We also look into the environment and civic responsibility of a civilization’s citizens. We will have a heavy focus on standards 6.H.2., 6.C&G.1.2, 6.C&G.1.4, and all of the 6.C.1 cultural standards. History, governments, and culture with specific detail to religion will be areas of focus throughout the unit.

Goals

This unit should serve as an excellent contrast of worldviews during the Middle Ages. We want to take a deeper look into culture, leadership, and religion during this period. By comparing and contrasting Europe with North Africa and the Middle East, we want students to explore the amazing things that were happening around the world. By looking through these different lenses, students should get a better worldview of what transpired outside the Middle Ages of Europe. They may also start to see some overlap between the two, especially with religion, that leads to conflict later on during the Crusades.

This unit will allow opportunities to reinforce and build off other topics covered throughout the year. Marco Polo and the gold trade of the Mali Empire will bring to light the Silk Road's role in both economic and cultural exchange. Monotheistic religions will be both compared and linked together to support the main tenets of their faith such as hajj, the role of Jerusalem, and power in society. Cultural diffusion and the mixing of ideas, culture, architecture, and people along the Mediterranean will be discussed.

One of the last goals of this unit is the application of various skills developed throughout the year in class. First, by focusing on the physical geography of the Middle East and North Africa, the content will lead to class discussions on human's ability to adapt to their environment. This will have natural connections to today's world and talking about how societies live in water deprived areas. This unit will also reinforce organizational skills by having students create various graphic organizers to show how Europe and the Islamic Empires were both similar and different. Students will also utilize research skills to support their opinions and digital learning opportunities to work independently at their own pace. Finally, they will use critical thinking and synthesis skills to relate texts to real world situations.

Content Background: Golden Age of Islam

Due to time constraints, the Golden Age of Islam is often glossed over in middle school social studies classes in favor of Eurocentric Middle Ages. Themes such as Catholicism, the Holy Roman Empire, medieval knights, and the culture of monarchies of this time tend to be the focus of our studies. Only when covering the Crusades do we see much, if any, crossover with the Muslim world. Instead of teaching these regions separately from one another, it could be beneficial to look at these periods side by side. By comparing and contrasting, students will have a much better idea of how important and significant the Golden Age of Islam was in the progression of civilization. This section will provide background, context, and achievements of this region of the world throughout this long stretch of time known as the Middle Ages.

Following the death of the prophet Muhammad in 632 C.E., the influence of Islam, which to this point was concentrated mainly in the Arabian Peninsula, would gradually extend throughout the Middle East and North Africa. The next century saw several successive direct disciples of Muhammad, known as caliphs, militarily expand their territories, or "caliphates," under the Rashidun and Umayyad dynasties. The third series

of caliphs to follow Muhammad was the Abbasid, who ruled over the Islamic world from 750 C.E. to 1517 C.E. with a slight interruption during the Mongol invasion in the 13th century. During this period, many scholars agree, the Arabic world reached its cultural apex.

The Golden Age of Islam occurred between the 8th and 14th centuries, though some argue it was already on the decline by the 12th century due to the Crusades. Regardless, this time was the culmination of an incredible century-long expansion of the world's newest religion known as Islam. During this period, the Arab empire were at their economic, military, and cultural height. While post-antiquity Europe stagnated and became more isolated, the Islamic Caliphates emerged as a rival power to the Byzantine Empire. This cultural watermark saw great advancements in mathematics, education, medicine, science, law, and technology.¹ Scholars from across the empire and beyond came together to share their intellect in Houses of Wisdom by translating the world's knowledge into the Arabic language. They embraced the ideas of ancient Persia, Greece, India, China, Rome, Egypt, and Mesopotamia before them.² This time was critical for humanity following the fall of Rome and continuing through the Middle Ages up until the age of Enlightenment. The work of Muslim scholars was of great importance, serving as a link between the ancient world and the forefront of human progression. Without the Islamic empire to carry this torch, knowledge of the ancient world may have been lost to time.

The Abbasid, who maintained their capital city primarily in Baghdad then later on in Cairo, were responsible for making the Muslim and Arabic world a melting pot, much like the Romans had done before. Also like the Romans, they believed in the uniformity of language. The Quran was a driving force for this decision, written by the prophet Muhammad in his native language, Arabic. Arabic became the official written language of the caliphs and was utilized across the empire from Persia to North Africa. In the 8th century, when the Abbasid Caliphate engaged in battle versus the Chinese Tang dynasty, the Chinese invention of paper made its way to the Middle East via the Silk Road,³ and it became possible to share information among people across a vast area spanning multiple continents. Some scholars say this created a democratization of information from the few to the many that was the opposite of what was happening in the Catholic-dominated kingdoms of Europe during this time.⁴

Besides language, the Abbasid were also firm believers in the value of knowledge. They held closely the ideas of the hadith, the second most holy scripture in Islam after the Quran, as a moral backbone for their leadership. The hadith explained that having scholars and knowledge is a holy act while committing crimes of bloodshed based on ignorance is wrong.⁵ Acquiring wisdom and putting a value on education became an important base for the Golden Age to flourish. The caliphs constructed madrasas, which were educational centers to teach the tenets of holy scripture and serve as cultural centers for scholars to come together. While mostly focusing on Islamic law, they also taught mathematics and medicine, among other subjects. They put their wealth to use by bringing in scholars from areas outside of their rule to share their knowledge and teachings. This ethos, reinforced by monetary backing, fostered this Golden Age.

Scholarship was not just for Arabs or Muslims but open to people of all faiths as long as they were male. Woman could receive access to education, but only within the home through use of private tutors. Persians, who are not of Arab ethnic background, had a large impact on the message and teaching of the Quran.⁶ The son of caliph Harun al-Rashid once said, “The Persians ruled for a thousand years and did not need us Arabs even for a day. We have been ruling them for one or two centuries and cannot do without them for an hour.”⁷ Assyrian Christians, admired for their work as physicians, served many Abbasid caliph families in that capacity. Christians in general received tolerance and respect in their scholarly work. They helped translate and keep alive Hellenistic teachings through the great library of Baghdad commonly known as the House of Wisdom.² Assyrian Christians were the bridge to new Islamic science discoveries and made them available to medieval Europe, where people during this time were often in awe at the progress being made by the Arab world. The newly built capital city of Baghdad became the intellectual center of the world for the next several centuries as a result.

The field of mathematics was among the greatest contributions during this period. Islamic scholars were key in the development of the fields of geometry, algebra, trigonometry, and calculus. You can find geometric patterns in their artwork, architecture, and literature, all engrained in their culture. Muhammad ibn Musa Al-Khwarizmi, a Persian, was the most famous scholar of them all. A mathematician, astronomer, and geographer, he helped spread the use of Hindu-Arabic numerals that we continue to use universally today. He is dubbed the “Father of Algebra” because he created methods to simplify formulas such as linear and quadratic equations. For his work, Al-Khwarizmi received an appointment to become head librarian of the House of Wisdom in Baghdad.⁸ Jamshīd al-Kāshī created the law of cosine, expanded usage of decimal fractions, and created formulas to determine the size of celestial objects.⁹ Omar Khayyam, a Persian known to westerners more as a poet than mathematician, substantiated the importance of the binomial theorem centuries before Pascal’s work in France in the 17th century. All three of these men were Persian, masters of multiple disciplines, and supported by their pro-intellectual caliphs to advance their studies.

In the field of sciences, there were many advancements during the Golden Age. Jabir ibn Hayyan created many chemistry procedures during the 8th century such as sublimation, distillation, and reduction, through his experiments with alchemy.¹⁰ Because of their expansive empire and terrain, Islamic scholars became excellent geographers and opened a cartography school. The Arab Agricultural Revolution led to new methods in farming, plant genetics, land usage, and irrigation.¹¹ Polymath Ibn Bajjah theorized that for every force there is a reaction force, a concept that later culminated in Newton’s Third Law.¹² Another polymath, Ibn al-Haytham, found through his studies on optics the need for mathematical evidence to support hypotheses, building off previous versions of the scientific method put forth by Aristotle and Epicurus.¹³

The field of medicine was of a high priority in the Muslim world, once again backed by hadiths that called for preserving sound health. Physicians made breakthroughs in

identifying diseases such as smallpox and measles, the merits of bloodletting, the establishment of surgery, and created *The Canon of Medicine*, the medical standard textbook by Avicenna that was used in the Muslim and European world for centuries. Scientists and physicians developed pharmacology to create chemical compounds that would treat illnesses.¹⁰ Caliphs built hospitals across the empire to combat illness and military injuries. Many major cities had multiple hospitals with diverse specialties like today's internal medicine. These were the first designated centers for health in the world and available to all people regardless of wealth. Physicians developed medical diplomas and licensing for various areas of medicine.¹⁴ They were at the forefront of healthcare for this time in history and a stark contrast to their European counterparts during this time.

There are many more high points during the Golden Age in the fields of philosophy, law, optics, physics, zoology, theology, metaphysics, epistemology, and technology that lacked coverage in this overview but were critical in their respective subjects. What we take away is that these successes and discoveries were possible through a system of governance that was inclusive, progressive, curious, and even sometimes altruistic as compared to other civilizations of the time. They created and fostered an infrastructure to allow for scholarly discoveries while still staying true to their Islamic faith. The Abbasid caliphate and Arab world were the intellectual light during the European darkness of the Middle Ages.

Content Background: The epic life of Sundiata Keita

If you ever have heard the legend of King Arthur in England, the epic of Gilgamesh of ancient Mesopotamia, the Iliad in Greece, the Aeneid in Rome, or the story of Beowulf in Danish culture, you know the blurred lines each has with creating a story that blends fact and fiction. The story of Sundiata Keita, the “Lion King” and founder of the Mali Empire, is no different. His origin story, *Sundiata: An Epic of Old Mali*, is quite unfamiliar and certainly not taught in American schools with the frequency of the European classics listed above. However, he was of great importance in creating one of Africa's most successful kingdoms of all time. While the Crusades raged on in the Middle East, taking their toll on Muslims and Christians alike, the Mali Empire used its resources to create a new thriving culture in West Africa. Sundiata's nephew, Mansa Musa I, further expanded and developed the empire to new heights, becoming one of the richest people in history. Their stories and histories are important to teach alongside the more stagnant Middle Ages period of Europe to show progress made in the rest of the world.

Distinguishing the myth versus the reality can be a difficult task with minimal written histories and a reliance on oral storytelling. When looking at the epic and other works published in the Arab world around this time, we can place Sundiata's birth at around 1217 C.E.¹⁵ His epic then follows a tale of heartbreak, exile, and finally, redemption that will remind you of a classic Hollywood animated story. A powerful ruler of the kingdom of Sosso (modern day Ghana) named Sumanguru was looking to conquer the Malinke state of Kangaba (modern day Mali) and home to the royal Keita family. To gain power, he killed eleven of their princes and left a young, sickly, and mute child who seemingly

posed no risk, to die. This young child went into exile with his people and eventually grew to be a strong warrior. He rose up in 1235 and with allied tribes defeated Sumanguru at the battle of Kirina. By 1240, he conquered the Ghana capital and acquired the gold minefields in Wangara. He created a new capital city at Niani, known for its trade routes. With peace and prosperity, Sundiata led his people into a new era that would rule West Africa for centuries.¹⁶ This story was passed down from generation to generation until it eventually made its way onto paper and was translated for the rest of the world.

Oral storytelling is not distinct to West Africa, but the job a griot serves within the region certainly is. Early on, griots were part of a caste that served kings and warlords. They were entertainers, musicians, and even counsel to their superiors. As Islam spread into the region, and later western influences took over smaller kingdoms, the role of griots shifted to become keepers of traditions through the medium of storytelling.¹⁷ Over centuries, the epic of Sundiata was told by griots but was never mentioned in written language until the arrival of the Islamic scholar Ibn Khaldun in the 14th century.¹⁸ The first line-by-line griot transcription was not published until 1967. While griots are remarkable in their ability to pass down specific stories and details to the next generation, it can be hard to separate myth and historical fact without written documents.

Content Background: Mansa Musa I and the Mali Empire

After the passing of Sundiata Keita, the first mansa (ruler), in 1255, his newly established kingdom flourished into an empire. Under his great nephew Mansa Musa I, the tenth mansa, the empire reached its greatest heights. Musa was not the heir to the kingdom but served as deputy while his predecessor left to explore the Atlantic Ocean. That person never returned, and Musa received the appointment to mansa.¹⁹ Like his great uncle, Mansa Musa was a great warrior who expanded the boundaries of the empire through conquest while gaining valuable gold mines and cities. Unlike Sundiata, who followed but was not a devout Muslim, Mansa Musa spent much of his time spreading the ideas of Muhammad and the Quran wherever he traveled.²⁰

One of the five pillars of Islamic faith is the pilgrimage to the holy city of Mecca known as the hajj. Mansa Musa I became renowned to history when he embarked on his pilgrimage in 1324. His massive caravan of men, camels, slaves, and riches stopped at every major city along the route, including Cairo, Egypt, and Timbuktu, which would become a major cultural center of the Mali Empire. He built temples, mosques, statues, and madrasas in every area while showering citizens with gold from the largest reserves in the world. In fact, he introduced so much gold currency during his travels to Mecca that he upset the economic stability of the region by devaluing the market while bringing massive inflation.²¹

Timbuktu would become a western extension of the Golden Age of Islam. The city was the trade, cultural, and religious center for both West Africa and the Mali Empire. The wealth of the empire flowed through Timbuktu, making it the central gold location for the known world. This wealth brought in scholars, artists, and travelers from across

the Mediterranean.²² The great world traveler Ibn Battuta noted that by the time of Musa's death, the newly established Sankoré University boasted the largest library in Africa and rivaled Baghdad as the educational center of the Islamic empire.²³

Sundiata and Musa established the Mali Empire as a force in Africa, the Islamic world, and the Mediterranean for centuries. Their military conquests, economic influence, and commitment to religious scholarship had as much impact as any other civilization during the Middle Ages. However, their stories do not receive the same attention alongside their European counterparts. It is hard to say if this stems from a lack of documented history in the case of Sundiata Keita or a Eurocentric worldview with Mansa Musa I. Regardless, these stories have earned the right to be taught side by side with the standards determined by our educational system.

Content Background: Ibn Battuta

Renowned world traveler Marco Polo, in hopes of becoming wealthy, made his way to across the arduous Silk Road during the 13th century to trade goods. He stayed in China for years, serving in Kublai Khan's Yuan Dynasty court. His book inspired later explorers such as Christopher Columbus to take a chance on adventure.²⁴ Polo's journey is remembered as a valuable source and asset to life during the Middle Ages even though some of his biography has been historically proven false or contradictory to other accounts. His life is still taught in classrooms around the country and students even play games with his name attached. Most educators are unaware of another life besides trader that could transport you around the world to new undocumented lands.

Another such job was being a Muslim cleric and judge during the expansion of Islam into the eastern hemisphere during the 14th century. Ibn Battuta, born in 1304 in what is now Morocco, set out on a hajj to the holy Islamic city of Mecca and did not return home for twenty-four years.²⁵ During that time period, his travels brought him through Egypt, Iraq, Persia, Arabia, Somalia, the Swahili Coast, Anatolia, India, Sri Lanka, Maldives, Bangladesh, Sumatra, Malaysia, the Philippines, China, Palestine, Spain, and Mali. Ibn was often commissioned to work as a judge concerning Islamic (Sharia) law in many new territories where the religion was just gaining a foothold. He served under a sultan in the Indus Valley and supposedly met with emperors along his way.²⁶ Using camels, horses, caravans, and ships, Ibn made his way across Asia and Africa in the name of Muhammad. He interpreted and enforced Islamic Sharia law in areas where followers had no background. Raised as a strict Orthodox Muslim, Ibn often experienced culture shock in these civilizations. In particular, he was amazed by the freedom of women he witnessed and the amount of respect they received in society.²⁷

After Ibn returned home in 1349, he made one last trip to the Mali Empire of western Africa where he visited the capital of the empire and met their ruler, Mansa Suleyman. He did not agree with women's dress, which showed off too much skin and was in opposition to his understanding of Sharia law.²⁸ After visiting the commercial and Islamic cultural city of Timbuktu, he finally returned home to transcribe his journey. His writings would reinforce the subjugation of Muslim women to non-Muslim readers. The validity

of his experiences, like those of Marco Polo, has been questioned, as he kept no notes of his travels. Some question whether major trips to China ever happened at all or if his account was just hearsay picked up along the way.²⁵ His manuscripts were not published in any other languages besides Arabic until the 19th century, so westerners rarely learn about his exploits let alone his existence. Battuta's descriptions of the people, culture, and civilizations of Africa and Asia are just as impressive as those of Marco Polo's journey. Their stories taught side by side can give a fuller representation to students of life during the Middle Ages.

Instructional Implementation

The activities and suggestions for this unit can be found in [Appendix II](#), [Appendix III](#), [Appendix IV](#), and [Appendix V](#). The strategies and goals outlined may either be a whole unit of study or individual lessons for a teacher to work within time constraints.

Appendix I: Implementing Teaching Standards

6.H.1.1 Construct charts, graphs and historical narratives to explain particular events or issues over time.

6.H.2.1 Explain how invasions, conquests and migrations affected various civilizations, societies and regions (e.g., Mongol invasion, The Crusades, the Peopling of the Americas and Alexander the Great).

6.H.2.3 Explain how innovation and/or technology transformed civilizations, societies and regions over time (e.g., agricultural technology, weaponry, transportation and communication).

6.H.2.4 Explain the role that key historical figures and cultural groups had in transforming society (e.g., Mansa Musa, Confucius, Charlemagne and Qin Shi Huangdi).

6.G.1.2 Explain the factors that influenced the movement of people, goods and ideas and the effects of that movement on societies and regions over time (e.g., scarcity of resources, conquests, desire for wealth, disease and trade).

6.G.2.1 Use maps, charts, graphs, geographic data and available technology tools to draw conclusions about the emergence, expansion and decline of civilizations, societies and regions.

6.E.1.2 Explain how quality of life is impacted by economic choices of civilizations, societies and regions.

6 C&G.1.4 Compare the role (e.g. maintain order and enforce societal values and beliefs) and evolution of laws and legal systems (e.g. need for and changing nature of codified system of laws and punishment) in various civilizations, societies and regions.

6.C.1.1 Analyze how cultural expressions reflected the values of civilizations, societies and regions (e.g., oral traditions, art, dance, music, literature, and architecture).

6.C.1.2 Explain how religion transformed various societies, civilizations and regions (e.g., beliefs, practices and spread of Buddhism, Christianity, Confucianism, Hinduism, Islam and Judaism).

Appendix II: Islamic Golden Age (Debate)

Duration: This lesson lasts two to three days depending whether you include a lecture day introduction. Add an extra day if you carry out the debate (some may use the argument writing as practice without holding an actual live debate).

Goals: To have students learn some of the basic progress made during the Middle Ages, to learn about specifics of the Islamic Golden Age, to research and organize information, to create written arguments, and finally to participate in a small scale class debate.

Materials: Projector, information slides from content research (up to you how much), either a digital platform or copies of argument worksheets, student notebooks, and a timer if you hold an actual debate.

Day 1 – Introduction

When introducing the Islamic Golden Age I like frame the idea of medieval society and what comes to mind for students. They may say things like knights, castles, the plague, bad hygiene, monarchies, or the Catholic Church. I respond back saying things like, “What about creativity, knowledge and progress?” The students often have a hard time realizing that the Middle Ages happened in other places outside of Europe. I like to follow it up with this clip below on the highlights during the Islam’s Golden Age.

<https://www.youtube.com/watch?v=FFfXDZvvmrg>

From this point, you have the option of doing a lecture style lesson using the content I provided to you on the Golden Age of Islam to give many specific examples of individuals or progress as a whole throughout these areas. This is completely up to your discretion based off time constraints but also the level of your students (middle vs. high school).

After you can introduce two separate articles to students on innovations and inventions of the Middle Ages. You may choose to have half the class use one link while the other half gets the second. Another option is to have the students look through both links and decide which one they like better. Either way they are going to be looking at inventions from medieval Europe in one link and the Islamic Golden Age in the other.

Muslim Invention Link

<http://www.cnn.com/2010/WORLD/meast/01/29/muslim.inventions/index.html>

Medieval Europe Invention Link

<https://www.mnn.com/green-tech/research-innovations/blogs/6-important-things-that-were-invented-during-the-middle-ages>

Students will need to take a side of which set of inventions they think are better overall. From here, they will work on creating a “pro” argument for their side. The idea here is to use the graphic organizer to create ideas and back them up with facts from the article.

Students will complete the organizer and then begin writing out a “pro” argument for their side. A couple things to consider:

- Students may eventually read this out loud so we want it written in their voice.
- A “pro” argument only focuses on the positives of their chosen side and does not go after the opponents (we save that for tomorrow).
- Pro arguments are only 5-6 sentences or a well-developed paragraph that feature up to three pieces of researched information.
- Less is more so it is important to have them be concise and to the point.

More likely than not, students will not complete this assignment in one class especially if you choose to give extra background information to them also. We can save the writing of the argument until day two, which I recommend. For homework or by the end of class they should fill out the information on the “pro” argument sheet located at the end of the section.

Day 2 – Argument Writing

Today students will have an argument-writing day. Have them take out or pass back their “pro” argument research sheets. They will work on crafting a well-written “pro” argument first. This may take 15-20 minutes to complete.

Next, we move onto creating “attack” arguments. The second handout located at the end of this section is for students to focus on their opponents. They will be required to write two separate attacks against the other side using the other link to support their ideas. Have them fill out thoughts, info, and facts on the graphic organizer. “Attack” arguments are half the size of a “pro” and should keep in mind the following:

- Each “attack” is only 2-3 sentences long.
- Attacks are short, concise, and often feature a single piece of research.
- There are two schools of thought for creating an attack:
 - You go directly after a flaw in the other side using research against them;
 - or
 - You compare yourself to them proving why you are better using research.

Students will have the remainder of class to finish this organizer and write their argument. Whatever is not completed should be finished up for homework.

Day 3 – Debate Day (optional)

This day is optional and dependent on how much time you have. I sometimes like to have them research and write arguments to work on informational literacy skills without having a full debate at the end. If you do choose to move forward with the debate, there are a couple ways you can carry it out with your students:

1. Small group debate where you cluster off partners or cluster of five to six students; or
2. Full group debate where you set up two sides of the room facing each other.

There are a few rules when carrying this out but essentially, you are a moderator to either cut students off or lead them to a better conclusion. You can choose to reward points to teams when they use a good argument that has academic research from the links or not. Basic rules are as follows:

- Let each side read out their “pro” arguments.
 - Could be multiple if you have a whole class debate going
- Assign points accordingly using the idea above or not.
- Your job is to be the expert and make sure to correct any incorrect statements.
 - Can take away points from teams for making false claims
- Next using a timer set up 5 minutes for small group or 10 for large group.
- Students will go back and forth reading off their attacks.
- It is important to allow each student or side to respond to the attack against them.
 - Do not let any student read more than a single attack at any one time.
- You can choose to award points for solid attacks or well stated rebuttals.
- Add up points after the timer end if you kept score and award a winner.

As you wrap up the activity, there are a couple important questions to ask:

1. Which side had a better support from their leadership to have more progress?
Why is that?
2. How can two different areas of the world experience a period drastically different from one another?
3. After reading and performing your arguments aloud, what would you change about how you created them?
4. When being attacked, what is the best course of action to be prepared for future debates?
5. Would you consider this a Golden Age for the people of the Muslim world?

Digital versions of the “pro” and “attack” argument graphic organizers are below

Debate “Pro” Argument

After reading the article on your chosen side for this debate, write three separate ideas as to why your inventions were the best during the Middle Ages. Be sure to include **ONE PIECE** of information from the text **FOR EACH** of your facts below.

Fact 1

- _____
- _____

Fact 2

- _____
- _____

Fact 3

- _____
- _____



Pro Argument – In **5-6 sentences**, create an argument using your facts from above. Only focus on positive information at this point do not worry about your opponent. We will wait until our attack arguments to go after them. The argument should feature **2-3 pieces of information** from the graphic organizer above. Write this paragraph on a separate sheet of paper or in your notebook for safekeeping!

Debate “Attack” Arguments

After reading the article on your opponent’s side, write two separate ideas as to the flaws of their inventions. You can call them out directly or simply make a case for why a particular invention of yours is better than one of theirs. Be sure to include **ONE PIECE** of information from the text **FOR EACH** of your facts below.

Attack 1

- _____
- _____

Attack 2

- _____
- _____



Attack Arguments – In 2-3 sentences **each**, create **two separate arguments** using ideas and facts from the graphic organizer above. You can find flaws in their inventions or make a case comparing yours to theirs. Be specific and make sure there is **one fact per argument from the reading!** Write this paragraph on a separate sheet of paper or in your notebook for safekeeping.

Appendix III: Sundiata Keita vs. Hamlet: Who is the real “Lion King”?

Duration: Two days total. One for “The Lion King” portion and a second for students creating their own “Hero’s Journey.”.

Goals: To learn about the life of Sundiata Keita. To give students multiple perspectives on a famous Hollywood tale and look into the myth of a hero.

Materials: Projector, information slides from content research (up to you how much), either a digital platform or copies of worksheets, and student notebooks.

Day 1 – Sundiata and “The Lion King”

I start class with this quick video (show a minute or so) of Disney’s “The Lion King.”. I ask students in their notebooks to jot down if they can remember any reasons why Simba was a hero. We discuss the plot briefly talking about the death of his father, his banishment, and finally his redemption that ended in the death of Scar, resulting in him becoming king.

Lion King Movie Link: <https://youtu.be/GibiNy4d4gc>

Next, I ask them to imagine the person on whom they think the story is based upon. I put up a visual of the character Hamlet in a classic picture holding a skull talking to his dead friend. I tell students that there is a controversy as to whom is responsible for the “The Lion King” main story. Many say it was Shakespeare’s *Hamlet* while other say it is this historical figure. The next slide is a picture of Sundiata Keita the “Lion” of the Mali Empire in western Africa. I tell students how griots have passed down the story of his rise and usurping of western kingdoms in the face of doubt and how he has a classic hero story while Hamlet is a tragic figure. Lastly, I let them know that we are going to look into both claims and decide for ourselves who was responsible for one of Disney’s classic films.

At this point teachers can take some time to give some more in depth information on Sundiata Keita from the content section for more historical background. This depends on how much class time you have to devote. If after the intro you want to move onto the next step, you will deliver the *Hamlet* link from *The Oprah Magazine*. You will want to have printed out the graphic organizer I provide at the end of this appendix to hand out to students. Instruct students to read the magazine article and make note of the four most convincing arguments or pieces of information that show “The Lion King” is based on Shakespeare’s *Hamlet*. They will write these four notes on the graphic organizer as evidence for later. Next students will watch a short video that tells the story of Sundiata Keita and makes cross connections to the film. In the same way as before students will write down up to four pieces of evidence that shows the Disney film taking ideas from Sundiata’s life to create their story.

The Oprah Magazine Hamlet Link: https://www.oprahmag.com/entertainment/tv-movies/a28376309/the-lion-king-hamlet-comparison/?_sm_au=iVV5BrqVDHVImN4H

When students are finished watching the movie, it would be good to over their examples with the whole class so they can share information amongst each other in case something is missing or they did not write enough examples. Each student now has a case for each side on their graphic organizer. Students should use the rest of class to write a short response using their evidence as to which story they feel Disney used as the main inspiration for their movie. If they do not finish the writing, it should be finished for homework to go over first thing next class.

Day 2 – My Hero’s Journey

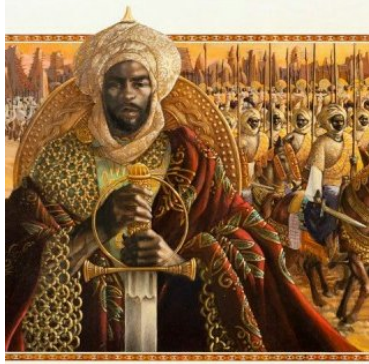
Start class by asking students to take out their responses from yesterday. Take a response or two from a student who represented either the *Hamlet* or Sundiata Keita side. Conclude by saying there is no right answer but it seems like they took more of a historical side from Sundiata and the story structure from Shakespeare’s *Hamlet*.

Next, ask the student to write down three things that they think makes a hero like Simba or Sundiata. Have the class share out several examples and tell them many of the classic myths and films follow a similar pattern called the Hero’s Journey. Show them this TED Ed video on this cycle next.

TED Ed Hero’s Journey Link: <https://youtu.be/Hhk4N9A0oCA>

Finally tell students it is now their turn to reflect on their lives and give us a journey from their past. Give each student the “My heroic journey” handout located at the end of the appendix. Read the directions with them and give them the rest of class to write about a time in their lives where they failed and had to persevere. You may collect these for a grade or have some students share out their journey with the class.

Who is the real Lion King?



VS.



Epic of Sundiata (video)

Connections to "The Lion King"

- 1)
- 2)
- 3)
- 4)

Connections to "The Lion King"

- 1)
- 2)
- 3)
- 4)

Hamlet (article)

In 4-5 sentences make your case for which story had the most impact on Disney's "The Lion King"

My heroic journey



After reading about the connections that Disney's "The Lion King" has with both *The Epic of Sundiata* and *Hamlet*, it is now time for you to take your own personal hero's journey. Use the diagram below to help you but in 200-300 words I want you to explain a time where went to a new and unfamiliar situation and failed. How did it happen? What did you do to adapt? In detail, how did the process go to get better? Explained how your life changed from it.



Appendix IV: Mansa Musa: Responsibility of the history richest figures

Duration: Two days total. One for article evaluation and creating their graphic organizer. A second day to write a five-paragraph essay on responsibility of history's elite to their societies.

Goals: To teach students about the life of Mansa Musa, great ruler of the Mali Empire. Discuss the moral and ethical obligation of the ultra-wealthy to their society.

Materials: Projector, information slides from content research (up to you how much), and either a digital platform or copies of graphic organizer.

Day 1 – Mansa Musa

Start class off with a slide that says the following, “What would you do with a million dollars?” Show a second slide saying, “What about a billion dollars?” Finish with a final slide saying, “What about one-hundred billion 100,000,000,000?” Ask them whom they think the world's richest person ever and have students give out answers. Tell them this person was worth an estimated 400 billion in 2019 currency and gave away so much gold that he ruined the global market for a decade from his generosity.

At this time, you will show a video of the richest person in history Mansa Musa, the king of the Mali Empire. Before you begin the video tell students to write down in their notebooks any instances in the video where they see this person using their wealth for the greater good of society.

TED Ed Link: <https://youtu.be/O3YJMaL55TM>

From here, you have the option of creating more background slides using the content section on the life of Mansa Musa or you may move forward to the next step based off your available class time. Moving forward tell students they are going to look into an article on Mansa Musa and also one on today's biggest humanitarian Bill Gates. Their goal with each of these articles is to record examples how each man was able to give back to people by using their wealth. They will write these down on the graphic organizer provided at the end of this appendix.

History.com Mansa Musa Link: <https://www.history.com/news/who-was-the-richest-man-in-history-mansa-musa>

Forbes Magazine Bill Gates Link:

<https://www.forbes.com/sites/noahkirsch/2017/08/15/philanthropy-king-bill-gates-gives-away-4-6-billion-unveils-new-campaign-to-combat-malaria/#650f353930d3>

Give students the remainder of class to work on this and have them finish for homework.

Day 2 – Five paragraph essay

Have students take out their graphic organizers from yesterday. Tell them they are allowed to use it as a resource throughout class. Put a slide with the topic of the essay on the projector that has the topic of their essay, “What responsibility do the ultra-wealthy

have to give back to their society?” Tell them this is a five-paragraph essay where they need an introduction, three separate arguments, and a closing to tie together their ideas. Two of their three arguments should be Mansa Musa and Bill Gates but they can talk about whatever rich figure they like for the third. Ask for any questions and then give students the rest of class to write their essay. You may choose to collect these for a grade or simply use it as a practice exercise.

Battle of the wealthy \$\$\$\$



From the video and the articles, please write down the ways that each individual has used their wealth to help their society.

Mansa Musa

Bill Gates

☐☐☐☐☐☐☐☐

Appendix V: “Marco!” ... “Battuta!”...

Duration: Two days total for full lesson. First day to answer questions on Marco Polo and Ibn Battuta. The second day is for them to design their traveling lifestyle.

Goals: This activity explores the travels of both Ibn Battuta and Marco Polo through the Middle East. Students will gain background information on both voyagers to understand their motivations, successes, and hardships. From there the students will then create their own modern trip based off their newly acquired knowledge. Students will exercise critical thinking, geography, economic, and literacy skills to complete their journeys.

Materials: Projector for videos and laptops.

Day 1 – Life of the world’s greatest travelers

First, ask your students if they know of or can you tell you anything about Marco Polo. Mostly likely, they will mention the pool game that bears his name while other might be able to tell you about his travels or the Silk Road he took to China.

Next, ask them if they have ever heard of another great traveler by the name of Ibn Battuta. When the class falls silent tell them to take a couple minutes to watch an introductory video of this unknown person.

Ibn Battuta Video Link: <https://youtu.be/H1okjBhc3mw>

After the video ask the class, “Why have we heard of Marco Polo but not Ibn Battuta?” This is a great opportunity to bring up a variety of topics you may have taught recently including the Silk Road, Crusades, the Mongols, the five pillars of Islam, the spread of Islam, the Golden Age of Islam, and various other Middle Ages examples. It is also a good time to remind students that western textbooks may sometimes have biases to choose stories from Western people such as Marco Polo instead of similar foreign example.

Segway into students booting up their devices while you explain what they will be looking at today. Through whatever medium you choose to share information with your students (Google Classroom, Edmodo, Google Docs, etc.) which will include the websites below and question document attached at the end of the appendix.

Ibn Battuta Link: <http://exploration.marinersmuseum.org/subject/ibn-battuta/>

Marco Polo Link: <http://exploration.marinersmuseum.org/subject/marco-polo/>

Travels Map Link: <http://revistacultural.ecosdeasia.com/wp-content/uploads/2015/12/BattutaChina-1.jpg>

Muslim World Map Link: http://www.islam101.com/dawah/muslim_world_mapp.html

Explain to them they will be looking into the lives and journeys each of these world travelers made. Tell them that their explorations and writings were key influencers for the Age of Exploration to follow. Directions for the questions are on the attached at the end

of the appendix. The questions go from easy reading comprehension to evaluating and synthesis by the end.

You should plan to give students thirty minutes of work time to answer the questions. That leaves them about ten minutes per section. During this time, you can circulate to help with technology issues or higher-level questions that they are having trouble answering.

After thirty minutes, have students stop working and project the answer sheet (located at the end of the appendix) on the board. Have students give out their answers and see how they did providing feedback while having them type in any corrections. This should take about ten minutes maximum and finish the class for the day.

Day 2 – Modern Day Travelers

On day two or the second half of your block, you will ask students to write down three things that they learned about both Ibn Battuta and Marco Polo. Have students share their findings. Next, tell them that will become modern day travelers like Ibn Battuta and Marco Polo but must follow a couple rules:

1. They must have a job that allows them to make money and travel.
 - a. Ibn was a Qadi (Islamic Judge) and Marco was a merchant
2. Must visit three different countries on three different continents.
3. They must tell us what they are visiting in that country and how it applies to their job. This will get them to do some research and realize that life is not free!

Show this opening video to students as they boot up their devices about a woman who made \$100,000 teaching internationally. She traveled to 27 countries last year through work related and leisure trips.

Travel Video Link: <https://youtu.be/cZJ1-sv1gOY>

Students will open up their day two document located at the end of the appendix. They have a website attached to look at with job related field that require international travel as a starter.

Job selection Link: <https://www.jobmonkey.com/jobs-require-international-travel/>

Once they have chosen a job, there are a couple questions to answer before moving onto picking locations. These questions make connections to part 1's reading selection. Students will then begin researching and choosing their destinations. They are required to write down their round trip mileage, reason for the visit with their job, and a fun attraction they want to see.

Distance Calculator Link:

https://distancecalculator.globefeed.com/World_Distance_Calculator.asp

The assignment ends with a small reflection that they may or may not have time to finish during class time which brings everything full circle. Have students finish by the end of class or for homework.



****Answer the questions below in a complete sentence after reading each biography****

Ibn Battuta

<http://exploration.marinersmuseum.org/subject/ibn-battuta/>

1. What was Ibn's motivation for his very first trip?
 - a.
2. Why was his ability to speak Arabic helpful on his travels?
 - a.
3. How was Ibn able to afford travelling so much and for so long?
 - a.

Marco Polo

<http://exploration.marinersmuseum.org/subject/marco-polo/>

1. What was the original purpose of Marco's trip with his father and uncle?
 - a.
2. Why did Kublai Khan like Marco and send him on missions across the empire?
 - a.
3. While he was not very popular at the time of his death, why was the legacy of Marco Polo important for the world during the Middle Ages?
 - a.

Journeys

<http://revistacultural.ecosdeasia.com/wp-content/uploads/2015/12/BattutaChina-1.jpg>

http://www.islam101.com/dawah/muslim_world_mapp.html

1. Looking at a map of their travels, who went a further distance and how can you tell?
 - a.
2. Name two geographic and two cultural hardships they faced in their travels abroad.
 - a.
3. Comparing the two maps, what do you notice about where Ibn traveled compared to Marco? Why do you think he chose those destinations instead of straight route?
 - a.

Ibn Battuta

- 1. What was Ibn's motivation for his very first trip?**
 - a. He worked as a Qadi (Islamic judge) and was taking his hajj (pilgrimage) to Mecca to be expand his education.
- 2. Why was his ability to speak Arabic helpful on his travels?**
 - a. It allowed him to communicate with Muslims across the Middle East since the Koran is written in Arabic.
- 3. How was Ibn able to afford travelling so much and for so long?**
 - a. Ibn was able to travel to different Muslim communities across the Middle East and make money as a judge that paid for his travel.

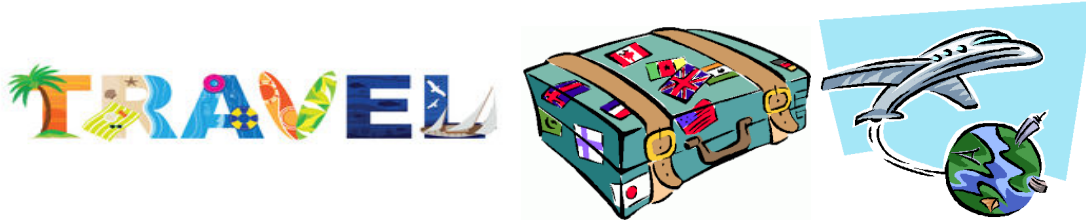
Marco Polo

- 1. What was the original purpose of Marco's trip with his father and uncle?**
 - a. To bring priests and holy water to Kublai Khan for conversion to Christianity.
- 2. Why did Kublai Khan like Marco and send him on missions across the empire?**
 - a. Kublai liked that Marco knew the Mongol language and customs so he made him ambassador. He also liked the detail of culture Marco gave on his missions that told Kublai about different areas of his empire.
- 3. While he was not very popular at the time of his death, why was the legacy of Marco Polo important for the world during the Middle Ages?**
 - a. Marco Polo was able to keep connections and curiosity between the East and West. His book was read by many future explorers.

Journeys

- 1. Looking at a map of their travels, who went a further distance and how can you tell?**
 - a. Ibn Battuta went a much longer distance by using the scale and adding in the travel areas through the continent of Africa.
- 2. Name two geographic and two cultural hardships they faced in their travels abroad.**
 - a. Geographically they would face extreme heat, slow travel through the sand, lack of resources, marauders/pirates, and disease. Culturally they would be foreigners who had to learn new languages and customs to assimilate.
- 3. Comparing the two maps, what do you notice about where Ibn traveled compared to Marco? Why do you think he chose those destinations instead of straight route?**
 - a. Ibn chose to stick mainly to the Islamic world except for his time in China. He had a common language (Arabic) and religion with them. It also allowed him to work as a judge, which paid for his travel. Marco had more limited options and worked directly for Kublai Khan for years until granted permission to return home.

A tale of two travelers... part 2



Part 1: Choose your profession

Use the link below to look at the job options. Remember that travel has many costs. Ibn Battuta worked as an Islamic judge and Marco Polo was a merchant before serving Kublai Khan in his court for years! Choose and answer the following questions below.

<https://www.jobmonkey.com/jobs-require-international-travel/>

My profession:

My salary:

I chose this job because:

Part 2: My voyage

Your new job will be taking you to three different countries on three different continents. You need a reason to be visiting each location so pay attention to what your job actually does from the link above. You will tell us the distance from each leg of your trip using our mileage calculator along with an attraction you want to visit during your stay.

https://distancecalculator.globefeed.com/World_Distance_Calculator.asp

Location	Distance (miles)	Reason for visit	Fun attraction

Total Miles Traveled:

Part 3: Travel Reflection

In a paragraph below, explain what would be difficult for you in making this job your new life. Give two examples of how it compares to Ibn and Marco from your reading yesterday. Do the benefits outweigh the hardships to make this a career?

Classroom Resources

Chromebooks or computers, digital (via google classroom, Canvas, Edmodo) or physical worksheet copies, projector with speakers, social studies notebooks

Reading List for Students

MNN - Mother Nature Network. "6 Important Things That Were Invented during the Middle Ages." Accessed October 20, 2019.

<https://www.mnn.com/green-tech/research-innovations/blogs/6-important-things-that-were-invented-during-the-middle-ages>.

This article will be used by students to create arguments either for or against their stance on the topic called "Who made it better?" Students will have either be on the side of the Muslims or Europeans during the Middle Ages. They will take direct quotes and paraphrase information from the text to form their arguments.

CNN. "Muslim Inventions That Shaped the Modern World - CNN.Com." Accessed October 20, 2019.

<http://www.cnn.com/2010/WORLD/meast/01/29/muslim.inventions/index.html>.

This article will be used by students to create arguments either for or against their stance on the topic called "Who made it better?" Students will have either be on the side of the Muslims or Europeans during the Middle Ages. They will take direct quotes and paraphrase information from the text to form their arguments.

Vincenty, Samantha. "The Lion King Is Basically Hamlet." Oprah Magazine, July 12, 2019. <https://www.oprahmag.com/entertainment/tv-movies/a28376309/the-lion-king-hamlet-comparison/>.

Students will read this article to determine if they feel the *Epic of Sundiata* or *Hamlet* was more inspiration to the Disney movie "The Lion King." After reading it, students will construct a simplified version of a hero's journey using their own life as the storyline.

Morgan, Thad. "This 14th-Century African Emperor Remains the Richest Person in History." HISTORY. Accessed October 20, 2019. <https://www.history.com/news/who-was-the-richest-man-in-history-mansa-musa>.

Students will use this article to create a T-chart on the accomplishments of Mansa Musa in regards to his wealth. They will compare this against Bill Gates and his charities.

Kirsch, Noah. "Philanthropy King: Bill Gates Gives Away \$4.6 Billion, Unveils New Campaign To Combat Malaria." Forbes. Accessed October 20, 2019. <https://www.forbes.com/sites/noahkirsch/2017/08/15/philanthropy-king-bill-gates-gives-away-4-6-billion-unveils-new-campaign-to-combat-malaria/>.

Students will use this article to create a T-chart on the accomplishments of the Bills Gates Foundation in regards to spending his wealth. They will compare this to Mansa Musa's wealth and hajj to Mecca.

The Mariner's Museum. "Marco Polo - Ages of Exploration." Accessed October 20, 2019. <https://exploration.marinersmuseum.org/subject/marco-polo/>.

Students will use this website to look into the life of Marco Polo and answer questions on his explorations.

The Mariner's Museum. "Ibn Battuta - Ages of Exploration." Accessed October 20, 2019. <https://exploration.marinersmuseum.org/subject/ibn-battuta/>.

Students will use this website to look into the life of Ibn Battuta and answer questions on his explorations.

Resources for Teachers

Please refer to the **content overview** for all necessary background information needed to prepare yourself for any of the lessons. This unit has all the required background content provided so you may pick what you need. For the Sundiata Keita lesson, please use the following texts for additional background knowledge:

Paterno, Domenica R. *The True Lion King of Africa: The Epic History of Sundiata, King of Old Mali*. 18 Nov 94. pp. 2.

Conrad, David C. (1992), "Searching for History in the Sunjata Epic: The Case of Fakoli," *History in Africa*, 19: pp. 147–200.

Endnotes

1. Huff, Toby E. (2003). *The Rise of Early Modern Science: Islam, China, and the West* (2nd ed.). Cambridge, UK: Cambridge University Press. pp. 209–239.
2. Hyman and Walsh. *Philosophy in the Middle Ages*. Indianapolis, 1973, pp. 204' Meri, Josef W. and Jere L. Bacharach, Editors, *Medieval Islamic Civilization Vol. 1, A–K, Index*, 2006, pp. 304.
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4. Quraishi, Silim. "A survey of the development of papermaking in Islamic Countries," *Bookbinder*, 1989. pp. 29–36.
5. Brown, Jonathan A.C. (2014). *Misquoting Muhammad: The Challenge and Choices of Interpreting the Prophet's Legacy*. Oneworld Publications. pp.6.
6. Lewis, Bernard (2004). *From Babel to Dragomans: Interpreting the Middle East*. Oxford University Press. pp. 44.
7. Spuler, Bertold (1960). *The Muslim World: A Historical Survey. I: The Age of the Caliphs*. Translated by Bagley, F. R. C. Leiden, Netherlands: E. J. Brill. pp. 29.
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9. Struik, D.J., *A Source Book in Mathematics 1200-1800*. Princeton University Press, New Jersey, 1986. pp. 122-125.
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11. Hernández Bermejo, J.E. & Garcia Sánchez, E. (1998). "Economic botany and ethnobotany in al-Andalus (Iberian Peninsula: 10th-15th Centuries), an unknown heritage of mankind." *Economic Botany* 52 (1), pp. 15-26.
12. Franco, Abel B. "Avempace, Projectile Motion, and Impetus Theory." *Journal of the History of Ideas*. 64 (4), pp. 543.
13. Schramm, Matthias. *Ibn al-Haytham's Weg zur Physik*, Vol. 55, No. 4 (Dec., 1964), pp. 463-465.
14. Alatas, Syed Farid (2006). "From Jami'ah to University: Multiculturalism and Christian-Muslim Dialogue." *Current Sociology*. 54 (1): pp. 112-32.
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16. Paterno, Domenica R. *The True Lion King of Africa: The Epic History of Sundiata, King of Old Mali*. 18 Nov 94. pp. 2.
17. Panzacchi, Cornelia. "The Livelihoods of Traditional Griots in Modern Senegal." *Africa: Journal of the International African Institute*, Vol. 64, No. 2 (1994), pp. 190.
18. Conrad, David C. (1992), "Searching for History in the Sunjata Epic: The Case of Fakoli." *History in Africa*, 19: pp. 147-200.
19. Al-Umari, Masalik al Absar fi Mamalik el-Amsar, French translation by Gauddefroy-Demombynes, Paris, Paul Geuthner, 1927, pp. 59, 74-75.
20. Niane, D.T., *Sundiata: An Epic of Old Mali* translated by G. D. Pickett (Harlow, England: Longman Drumbeat, 1965, 1982), pp. 96.
21. Goodwin, A. J. H. (1957), "The Medieval Empire of Ghana." *South African Archaeological Bulletin*, 12: pp. 109-110.
22. De Villiers, Marq, and Sheila Hirtle. *Timbuktu: Sahara's Fabled City of Gold*. Walker and Company: New York. 2007. pp. 87-88.
23. Said Hamdun & Noël King (edds.), *Ibn Battuta in Black Africa*. London, 1975, pp. 52-53.
24. Landström, Björn (1967), *Columbus: the story of Don Cristóbal Colón, Admiral of the Ocean*, New York City: Macmillan. pp. 27.
25. Dunn, Ross E. (2005), *The Adventures of Ibn Battuta*, University of California Press, pp. 30-31, 253, 262.
26. Aiya, V. Nagam (1906). Travancore State Manual. Travancore Government press. pp. 328.
27. Gibb, H.A.R., ed. (1958), *The Travels of Ibn Baṭṭūṭa, A.D. 1325-1354* (Volume 1), London: Hakluyt Society. pp. 480-481.
28. Bentley, Jerry, *Old World Encounters: Cross-Cultural Contacts and Exchanges in Pre-Modern Times* (New York: Oxford University Press, 1993), pp. 131.

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- Brown, Jonathan A.C. (2014). *Misquoting Muhammad: The Challenge and Choices of Interpreting the Prophet's Legacy*. Oneworld Publications. pp.6.
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