



**Apex Collegiate Academy
Summer Reading Project
Grade 6**

Scholar's Name

Assignments Given:

6/6/18

Assignments are Due:

6/22/18

You are required to complete this reading packet for promotion to the 7th grade. Make sure you annotate the text, answer all questions in complete college sentences and write professional essays with 5 paragraphs.

Parent Signature

Arachne

From *A Book of Myths*

By Jean Lang

The hay that so short a time ago was long, green grass, with fragrant meadow-sweet and gold-eyed flowers growing amongst it in the green meadow-land by the river, is now dry hay—fragrant still, though dead, and hidden from the sun's warm rays underneath the dark wooden rafters of the barn. Occasionally a cat on a hunting trip comes into the barn to look for mice, or to nestle cozily down into purring slumber. Now and then a hen comes tip-toeing through the open door and makes for itself a secret nest. Sometimes children come in, chasing cat or hen, or merely to tumble each other over the soft hay, and when they have gone away, a little more of the sky can be seen through the little window in the roof, and through the wooden bars of the window lower down. Yet, whatever other living creatures may come or go, near those windows of the barn, and high up on its dark rafters, there is always one living creature working, ceaselessly working. When, through the skylight, the sun-god drives a golden sunbeam, the web of the unresting worker can also to be seen, for the window is hung with shimmering grey cloths made by Arachne, the spider, and from rafter to rafter her threads are suspended with matchless skill.



She was a girl once, they say—the daughter of Idmon the dyer, of Colophon, a city of Lydia. In all Lydia there was no one who could weave as well as the beautiful Arachne. To watch her brush the wool of the white-fleeced sheep until in her fingers it grew like the soft clouds that hang round the hill tops, was pleasure enough to draw a crowd from all over. And when she drove her swift weaving shuttle here and there, the crowd would catch its breath. Magical was the growth of the cloth through her darting fingers, and yet more magical the exquisite images that she then embroidered upon them. For birds and flowers and butterflies and pictures of all the beautiful things on earth were created by Arachne, and old tales grew alive again under her creative needle.

One day, Athené, goddess of craftsmen, heard news that there was a girl whose skill rivaled that of the goddess herself, and she, always jealous, disguised herself a woman bent with age, and, leaning on her cane, joined the little crowd that so often hung round Arachne as she did her busy work with the needle. As the crowd watched, woven flowers sprang up under Arachne's fingers, just as real as the flowers that spring from the ground. Despite herself, Athené marveled at the magic skill of the fair Arachne.

Gently she spoke to the girl, and, with the words of a wise old woman, and warned her that she must not let her ambition soar too high. "Be careful girl, there is no better craftswomen than the goddess Athené, and were you to dream that one day you might equal her...that would indeed be a crime for any god to punish."

Glancing up for a moment from the picture whose perfect colors grew fast under her slim fingers, Arachne fixed scornful eyes on the old woman and gave a merry laugh.

"Did you say *equal* Athené? Old woman," she said. "You must be from the far-off hills where the goat-herds live, otherwise, you would not speak to

me, Arachne, of *equaling* the work of Athené; *excelling* is the better word."

Athené flushed with anger at the bold words of the girl.

"Be careful what you say child, there may indeed be punishment with time." The old woman croaked.

Laughing still, Arachne replied, "I don't fear Athené." And turning to the crowd who, half afraid, listened to her daring words, she said: "You who watch me day by day, you know well that I and not just boasting. My skill is as great as that of Athené, and greater still it shall be. Let Athené compete with me if she dare! Well do I know who will be the victor."

Enraged at the girl's bold words and her challenge, Athené cast off her disguise. The crowd cowered as before them stood the radiant goddess with eyes that blazed with anger and insulted pride.

"Athené is here," she said, and crowd fell on their knees before her, humbly adoring. Arachne alone was unabashed. Her cheeks showed how fast her heart was beating. From rosy red to white went the color in them, yet, in firm, low voice she spoke.

"I have spoken truth," she said. "Not woman, nor goddess, can weave like me. I am ready to abide by what I have said, and if I did boast, by my boast I stand. If you will agree, great goddess, to try your skill against mine and you win, I will gladly pay the price."

The grey-eyes of Athené the goddess, grew dark as the sea when a thunder-cloud hangs over it and a mighty storm is coming. Not for one moment did she delay, but took her place by the side of Arachne. On the

loom they stretched out two webs with a fine yarn, and quickly set to work.

Athené and Arachne began their weaving, covering the splendid cloths with pictures such as no skilled worker of tapestry has ever since dreamed of accomplishing. Under the fingers of Athené grew up scenes so real and so perfect that the crowd could not tell whether the goddess was indeed creating life. And each picture was one that told of the power of the gods and of the doom that came upon those humans who had dared to struggle as equals with them.

Arachne glanced up from her web and looked with eyes that glowed with the love of beautiful things at the creations of Athené. Yet, unafraid, her fingers still sped on, and the goddess saw, with a look that grew yet more clouded, how a mere girl had chosen for subjects the tales that showed the weaknesses of the gods. One after another the living pictures grew beneath her hand, and the crowd held their breath in mingled fear and excitement at Arachne's godlike skill and daring.

It was impossible to choose between the work of the goddess and the girl.

Darker and yet more dark grew the eyes of Athené as they looked on the magical beauty of the pictures, each one of which was an insult to the gods.

Then at last the storm broke, and with a scream, the enraged goddess shredded the Arachne's weaving, the beautiful pictures were torn into rags and ribbons.

Arachne, shamed to the dust, knew that life for her was no longer worth living. She had aspired, in the pride of her splendid genius, to compete with a god, and knew now that such a contest can never be won.

Athené looked at her and smiled with icy kindness. "Oh guilty and shameless Arachne! For evermore you and your descendants will live and weave as you did today so that men will never forget the punishment of those dare to rival a god."

Even as Athené spoke, Arachne's fair form dried up and withered. Her straight limbs grew grey and crooked and wiry, and her smooth white arms were no more. Eight legs sprouted and her body shrank. And then just as suddenly as it had started, there was silence. Tiny beside the loom, where just moments before the beautiful weaver of Lydia had stood, crawled a creature that few love and many fear.



The sun has not long enough shown his face to dry up the dew in the garden, and look at the little clipped tree of boxwood, a great wonder! For in and out, and all over its twigs and leaves, Arachne has woven her web, and on the web the dew has dropped a million diamond drops. And, suddenly, all the colors in the sky are mirrored dazzlingly on the grey tapestry of her making. Arachne has come to her own again.



Name: _____

Date: _____

Student notes for: Arachne

Day: Day 1

1. Jean Lang states, "Magical was the growth of the cloth through her darting fingers, and yet more magical the exquisite images that she then embroidered upon them." Based on this description, what does a weaver do?
2. What phrases does Lang use to describe Arachne's weaving skills?
3. How do Athené's actions provide evidence that this story is a myth?
4. Why is Athené offended by Arachne's claim to be better than her?



Name: _____

Date: _____

Student notes for: Arachne

Day: Day 2

1. What clues does Lang use to signal a shift in time as she begins her myth?
2. What does the line, "Not woman, nor goddess, can weave like me. I am ready to abide by what I have said, and if I did boast, by my boast I stand. If you will agree, great goddess, to try your skill against mine and you win, I will gladly pay the price" reveal about Arachne's personality?
3. What challenge does Athené pose to Arachne? What happens during this challenge?
4. Lang states, "Gently she spoke to the girl, and, with the words of a wise old woman, and warned her that she must not let her ambition soar too high." What does the word ambition mean in this quote?
5. Why does Lang choose to include the line, "It was impossible to choose between the work of the goddess and the girl."?

Name: _____

Date: _____



Focus question: What is the series of episodes that lead to Arachne being transformed into a spider?

Description of an Event	How does the event lead to the resolution?



Name: _____

Date: _____

Student notes for: Arachne

Day: Day 3

1. After Arachne loses the competition the text states, "Arachne, shamed to the dust, knew that life for her was no longer worth living." What does the phrase shamed to the dust mean?
2. How does the line "It was impossible to choose between the work of the goddess and the girl" lead to the consequences Arachne and Athené receive?
3. At the end of the text it says, "Arachne has woven her web, and on the web the dew has dropped a million diamond drops. And, suddenly, all the colors in the sky are mirrored dazzlingly on the grey tapestry of her making. Arachne has come to her own again." How can this be considered a negative consequence for Athené?
4. Athené says, "Oh guilty and shameless Arachne! For evermore you and your descendants will live and weave as you did today so that men will never forget the punishment of those dare to rival a god." What are the terms of Arachne's punishment?



Name: _____

Date: _____

Student notes for: Arachne

Day: Day 4

1. What language does Lang use to contrast Arachne's physical descriptions before and after the transformation?
2. "Arachne's fair form dried up and withered. Her straight limbs grew grey and crooked and wiry, and her smooth white arms were no more. Eight legs sprouted and her body shrank." What does this line convey about Athené's feelings for Arachne?
3. What language does Lang use to describe Arachne before and after the transformation?
4. Why does Athené want to punish Arachne?
5. Athené says, "Oh guilty and shameless Arachne! For evermore you and your descendants will live and weave as you did today so that men will never forget the punishment of those dare to rival a god." What does the word "descendants" mean in this quote?

Name: _____

Date: _____

Focus question: What is the impact of the phrase "Arachne has come to her own again?"

Archaeology 101

INTRODUCTION

Archaeology is the study of past cultures through the material (physical) remains people left behind. These can range from small artifacts, such as arrowheads, to large buildings, such as pyramids. Anything that people created or modified is part of the archaeological record.

Archaeologists use these remains to understand and re-create all aspects of past culture, from the daily lives of ordinary people to the grand conquests of emperors. Often, these objects are buried and have to be carefully uncovered or excavated before they can be studied. In many cases, they are the only clues archaeologists have to help them reconstruct the lives of ancient people. These objects are like pieces of a giant jigsaw puzzle that the archaeologist must solve.



Careful excavation of Iron Age pots at Tongobriga, Portugal

Archaeology helps us to appreciate and preserve our shared human heritage. It informs us about the past, helps us understand where we came from, and shows us how people lived, overcame challenges, and developed the societies we have today.

The focus of archaeology has changed over the years. Archaeologists today study everything from ancient pots to DNA to theories of cognitive processes. This expanded scope of archaeology has necessitated the creation of many new interpretive approaches and recovery techniques. While the trowel continues to be a primary tool, archaeologists have also added satellite imagery, computers, and robotics to their arsenal. Excavations now often include dozens of experts from varied disciplines, including ceramics, osteology, geology, and botany, as well as research technicians with highly specialized talents.

MATERIAL CULTURE

When we talk about *culture*, we mean the behavior and beliefs of groups of people. These cannot be excavated directly, although they influence the physical remains, *material culture*, that archaeologists find. These remains range from stone tools to buildings to written records. *Features* are remains that cannot be moved (large buildings, post holes), while *artifacts* are smaller, portable objects.

The preservation of material culture depends on the type of materials (*organic*, which decay more quickly, or *inorganic*) and the environmental conditions to which they have been exposed. Materials deposited in the open are affected by factors such as rain, sun, snow, wind, and other natural phenomena. Buried materials are usually better preserved than those exposed to the environment. Dry conditions generally preserve remains better than wet, although the airlessness of bogs and other underwater conditions can also preserve many objects. In rare circumstances freezing, in mountaintop glaciers or tundra, can also preserve sites, artifacts, and even human remains.

TYPES OF ARCHAEOLOGY

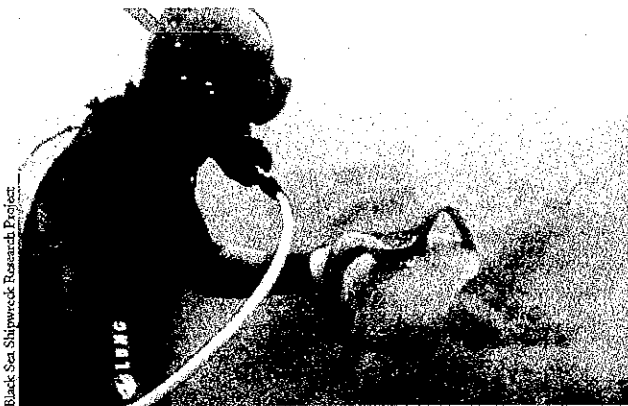
There are many branches of archaeology, some of which overlap. Prehistoric archaeologists deal with time periods before the invention of writing. Historical archaeologists have the luxury of examining both physical remains and texts (when they survive). Industrial archaeologists study buildings and remains that date to the period after the Industrial Revolution. Archaeologists generally choose to focus on a particular culture that often is associated with a chronological period: classical archaeology covers the civilizations affected by the Greeks and Romans, Egyptian archaeology deals with Egypt, Mesoamerican archaeology focuses on cultures in Central America and Mexico, and so on.



An excavator brushes sand away from an elephant bone at Hierakonpolis, Egypt

LESSON PLANS

Archaeologists help reconstruct the past in other ways besides simply excavating sites belonging to a particular culture. Ethnoarchaeologists study people living today and record how they organize and use objects. The study of modern behavior can help reveal how and why people in the past left behind certain types of remains in certain patterns. Environmental archaeologists help us understand the conditions that existed when the people being studied were alive. Experimental archaeologists reconstruct techniques and processes used in the past to create artifacts, art, and architecture. Underwater archaeologists study material remains that survive underwater, including shipwrecks and sites inundated by a rise in sea level. Others, working in the field of cultural resource management, assess archaeological remains at construction sites in order to record critical information and preserve as much as possible before the site is destroyed or covered over.



A fragmentary amphora or storage jar recovered from a thirteenth-century shipwreck

THE PROCESS OF ARCHAEOLOGY

Archaeology uses scientific principles to guide its practices. Before beginning to excavate, an archaeologist needs a reason to dig, an excavation plan, and permission from the government of the place being excavated. Although archaeology is usually associated with digging, sometimes the goal is not to excavate, but rather to identify and plot sites across a landscape or region to see the big picture of habitation or activity in an area.

These are some of the steps of an archaeological project:

Hypothesis creation

Archaeologists do not dig randomly in search of artifacts. Excavations are conducted to answer specific questions or resolve particular issues. The only exception is in cultural resource management, undertaken when sites are in danger of being destroyed.

Survey and site location

Once archaeologists have a reason to dig, they must identify where to dig. Sometimes, unexpectedly discovering evidence

that a site existed in an area is the impetus to dig—but even then the goal is not just to dig the site, but to answer questions about the people in their environment. Evidence for sites can take many forms, including information provided in myths and stories, historical references, old maps, farmers' reports of finds in their fields, satellite photographs showing patterns not visible from the ground, and the results of subsurface detection methods such as ground-penetrating radar. Traditional surface survey often involves hours of walking over miles of terrain to find sites. Sites identified during survey (usually by patterns of small finds, such as broken pieces of pottery) are plotted on a map. Once an excavation site has been located, a detailed map is also made before digging begins. The map is the first of a series of records made during an archaeological investigation.

Excavation

This is the most well known aspect of archaeology. Archaeologists excavate remains buried under the earth. Soil and other deposits build up naturally above sites over time through slow accumulation and more dramatic climatic events. As sites grow, change, are destroyed, and rise again over time, successive layers of soils develop around artifacts and features. These layers are called *strata*, and the recording and "reading" of the layers is called *stratigraphy* (to write or record strata). Archaeology and the earth sciences share the goal of examining the changing layers of the earth, although the archaeologists' focus is on human time and human agency.



A trench wall showing various strata at Welqamex, a Native American site in southern British Columbia

Unlike the image in cartoons and movies of archaeologists as treasure hunters, excavation requires extremely careful work. Like detectives at a crime scene, archaeologists evaluate and record an archaeological site with great precision in order to preserve the context of artifacts and features, and they work in teams with many other specialists. A site is divided into squares to help keep track of the location of each find, and a site plan (a map) is created to keep track of all the features and artifacts. Since they will continue to develop better techniques and tools

LESSON PLANS

for recovering the past, archaeologists usually leave areas unexcavated so that others can examine the site again in the future.

The site architect establishes a *datum point*, an easily identifiable, fixed spot at a known elevation above sea level. Excavators record the vertical as well as horizontal relationships of every object. Within each square, every artifact is located vertically in relationship to the datum point and horizontally in relationship to the sides of the square and to structures.

Data collection and recording

Artifacts must be carefully removed for further analysis and study. However, before they are moved records—including photographs, drawings, and detailed notes—are made of all artifacts and features and their surroundings. Archaeologists are trained to notice changes in soil texture, color, density, and even smell, and to draw and record on a top plan any changes they notice in the soil as they excavate. A photographer photographs every find as it starts to emerge from the ground, again after it has been uncovered, but before it is removed from the square, and then again after it has been removed, cleaned, and recorded. The dirt removed from the square is sieved if it seems likely that small finds, perhaps seeds, small bones, or other evidence, may have been missed. Any sieved finds are recorded as coming from the square or a particular deposit within it.



Students measure the depth of an excavated surface in a 1 by 1 meter trench at Welqamex, British Columbia

As at a crime scene, if information is missed or lost because of careless procedures, it may be lost forever. It is very important to excavate properly and record everything (even the unexciting finds and the things that no one was looking for), and then to publish thoroughly, so others can perhaps interpret finds the current excavators do not yet understand. Archaeological *context* is the association of artifacts and features found within an area or layer, and the relationship of this area or layer to what lies above and below it. The context of archaeological finds is what allows us to interpret them and understand their meaning.

Laboratory and conservation

Ancient objects that have been preserved underground or underwater for years have to be cared for appropriately once they are exposed to the air. Conservators are specialists trained to preserve and restore delicate or damaged objects. Conservation is usually done in a lab, but sometimes objects are so fragile that some work to save or stabilize them must be attempted in the field. In the lab, objects are further cleaned, stabilized, and conserved, and thorough records are maintained about the object: its material, its dimensions, color, function, and more.

Interpretation

Once excavation is completed and the features and objects have been conserved and analyzed, the archaeologist is responsible for interpreting the findings and explaining the story of the site and the significance of the finds to the people of the past. The story is one possible version of the site's history.

The evidence archaeologists interpret is incomplete, since many remains have been destroyed and many will never be found. Even when written records survive, they generally provide only a partial account of what really happened. Together the specialists evaluate what survives, consider what seems to be missing, and develop a theory about what happened.

Publication

The end result of excavation is the publication of all the finds, plans, and photographs along with an interpretation of the site. Ideally, the publication will be thorough enough that other archaeologists and historians can look at the data for themselves and agree, disagree, or take the interpretation further—or in a different direction.

TECHNIQUES AND TOOLS

Archaeologists use many tools, some created for them, and others borrowed from other fields.

Excavation

Common archaeological tools include shovels and trowels to loosen dirt, brooms and brushes to sweep the loose dirt, buckets to carry the dirt, and sieves to screen it.

In addition to these usual tools, archaeologists utilize any object that can be used to carefully move earth and uncover objects. For very fine and delicate excavations, archaeologists use dental picks, brushes, spoons, and very fine blades. For larger scale operations, archaeologists may use large earth-movers, such as bulldozers and backhoes, but only to remove topsoil and overgrowth.

The primary tool used by most archaeologists is the flat mason's trowel, with which they slowly scrape away the soil

LESSON PLANS

in horizontal motions. Scooped gardening trowels have a tendency to dig holes, which the archaeologist does not want to do. The goal is to work horizontally until all the finds in an area have been exposed and their relationships noted.

Survey and Mapping

Imagery from satellites (photographic, infra-red, and radar), space shuttles, and airplanes helps archaeologists identify surface features, while geophysical prospecting tools, such as magnetometers, conductivity meters, and ground-penetrating radar, aid in locating subsurface features.



Magnetometer survey results from Sagalassos, Turkey, show subsurface features including iron kilns (indicated by red arrows) and slag heaps (indicated with yellow)

Traditional survey tools used in finding and recording sites are taken from land survey. Archaeological surveyors use compasses, tape measures, stadium rods, and various other survey tools. Today, most archaeologists also employ electronic devices, such as Total Stations and Global Positioning System (GPS) units, to help them map an area or site. A Total Station is an instrument set on a tripod that shoots a signal at a target placed on the feature to be mapped. The signal bounces off the target and returns to the Total Station, which calculates the distance and angle of the object. This information is stored in the instrument's memory and can be downloaded to a computer with software that generates a map. GPS technology uses satellite signals to record a feature or site's location. It is especially useful in surveying. This information can also be downloaded and used to create a map.



Archaeological survey using a Total Station on an Iron Age dwelling at Ytterby, Sweden

DESTRUCTION OF CULTURAL HERITAGE

Unfortunately, fascination with the past does not always translate to careful scientific study. Often sites are destroyed by people interested solely in finding objects to collect or sell for profit, with no regard for legal concerns or the loss of knowledge caused by such activity. Sites are also destroyed by development when attention is not paid to what lies beneath the soil. In many cases, cultural heritage is destroyed and information is lost during construction. Unfortunately, sites can also be badly damaged even by well-meaning tourists who touch or take pieces of objects, art, or architecture. Over time our very interest in the past can be detrimental to a site when many people visit, breathe on, touch, or take away remains.

Most archaeologists are actively involved in the conservation and preservation of cultural heritage. They try to ensure that there are adequate laws to protect and preserve archaeological remains and devise plans to save sites that are being destroyed.

RESOURCES

Books

Darvill, Timothy. 2002. *The Concise Oxford Dictionary of Archaeology*. Oxford: Oxford University Press.

Gamble, Clive. 2004. *Archaeology: The Basics*. London: Routledge

Loubser, Johannes H. 2003. *Archaeology: The Comic*. New York: Altamira Press.

McIntosh, Jane. 2000. *Archaeology*. New York: Dorling Kindersley (Eyewitness Books).

Moloney, Norah. 1995. *The Young Oxford Book of Archaeology*. Oxford: Oxford University Press.

Also see "Resources and Standards" under AIA's Simulated Dig lessons.

Interactive Digs

The ARCHAEOLGY website has several "Interactive Digs" (accessible at www.archaeology.org/interactive), with field reports from current excavations such as Hierakonpolis (Egypt), Sagalassos (Turkey), the Black Sea Shipwreck Research Project (Ukraine), and Johnson's Island Civil War POW Camp (Ohio) and past digs at Pompeii, Mount Vernon, the Lott House (Brooklyn), and elsewhere. From small-scale to large international projects, they show how archaeology is practiced in the field today and can serve as a complement to the AIA's Simulated Dig lessons.

Summarizing Handout

"Archaeology 101" from the Education Department of the Archaeological Institute of America

Important Details

Central Idea

S1 (introduction):

S2 (Material Culture):

S3 (Types of Archaeology):

<p>S4 (The Process of Archaeology):</p> <p>S5 (Destruction of Cultural Heritage):</p>	
Summary	