

## Archaeoastronomy—Study Guide

**INSTRUCTIONS:** **Make sure that your first and your last name and date appear at all applicable locations, yes, even the first page.** This examination is in the form of multiple choice and a few fill-in-the blank questions/statements. After reading the question or instructions carefully, select your answer(s) and mark it (or them) plainly on the answer sheet provided with this test. The answer sheet can be found at the end of the exam. You may detach it. Only answer the odd or even questions depending upon whether your exam number is odd or even. **Take a moment to circle the questions which are your questions throughout the exam.** You may work alone or with **ONE PARTNER** who is taking the other portion of the exam to help each other attain a higher grade. **There will be no communications between teams.** All correct answers must be provided to receive full credit; however, partial credit will be given unless stated otherwise. This exam has a total value of 20 points. **MUCH SUCCES!**

**CANVAS INSTRUCTIONS:** This Quest is in the form of multiple-choice questions and a few fill-in-the blanks. After reading the question carefully, select your answer or answers. **If the question calls for multiple answers, two or more, you must provide all answers and all answers must be correct.** Canvas does not allow for partial credit. Because of this, I will give you two attempts to take the test. Consider this open book. All answers can be found in the lecture material created in class, the assigned reading material, and the PowerPoint presentations, but if you feel the need to consult online sources, books, or magazines, please feel free to do so. This Quest has a total value of 20 points. **MUCH SUCCESS!!!**

### **ARCHAEOASTRONOMY**

1. Archaeoastronomy will never have the same importance as a more traditional science because.  
**Key Concept:** Understand the difference between deductive reasoning and the scientific method to obtain quantifiable data.
2. Pick the **BEST** answer. An archaeoastronomer is a person who  
**Key Concept:** Understand the goals of an archaeologists who specializes in the astronomy of ancient cultures that did not leave written records.
3. Ancient civilizations first turned to observations of the sky to regulate agriculture and government because  
**Key Concept:** Understand why the sky was the most important indicator for creating order in a culture.
4. The Ancestral Puebloans of the Four Corners area of the United States evidenced signs of sophistication because  
**Key Concept:** What makes a culture that did not write sophisticated in the eyes of an archaeologist or archaeoastronomer?

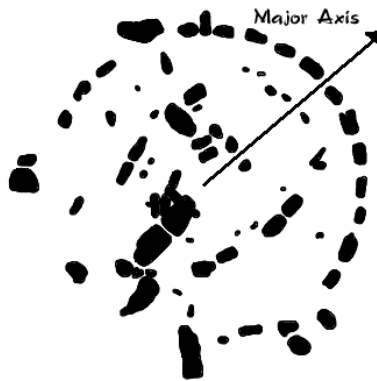
5. Astronomically speaking, Chacoan priests accurately followed the seasonal changes by  
Key Concept: How did ancient cultures formulate calendars?
6. An archaeoastronomer coming across an Ancestral Puebloan town would be interested in  
Key Concept: What do archaeoastronomers look for when they survey a site?
7. All cultures that engaged in precise astronomical observations...  
Key Concept: I remember a quiz with a similar question. Why would any culture or civilization be so interested in the sky as a resource?
8. State the **LEAST SIGNIFICANT** astronomical relationship and the most difficult one to prove that Pueblo Bonito possessed.  
Key Concept: I remember a lab with similar concepts. Bonito is just chocked full of astronomical interpretations. Which one would be the least significant and the most difficult to convince others that it was real?
9. Give **TWO** good reasons why the Ancestral Puebloans may have chosen Chaco Canyon as the focal point of their culture?  
Key Concept: Why would people want to live in a region of the country where life was so hard?
10. Many of the Great Houses of Chaco Canyon like Pueblo Bonito  
Key Concept: Emphasize the astronomy of Pueblo Bonito. What did Pueblo Bonito incorporate into its architecture that was astronomical?
11. One of the interesting aspects of the **sun dagger** on Fajada Butte and the **mini-sun dagger** (summer solstice only) which I investigated north of Gallo Campground at Chaco Culture National Historical Park is  
Key Concepts: How is the noontime motion of the sun reflected in the motion of these two sun daggers?
12. The pictograph (picture) of the crescent moon, star, and hand found on West Mesa, east of the ruin call Penasco Blanco most likely  
Key Concept: Interpret the symbols of the crescent, hand, and the star at Chaco.
13. Pick one correct answer. Stonehenge is located  
Key Concept: Where is the greatest and first archaeoastronomy site in the world found?
14. Today Stonehenge continues to remain shrouded in mystery because  
Key Concept: What is a problem associated with interpreting ancient astronomical sites?
15. Which two of the following answers would **BEST** describe Stonehenge's use?  
Key Concept: Understand the interrelationship of astronomy and spirituality.
16. Name two seasonal indicators that could be observed from Stonehenge.  
Key Concept: What are the astronomical alignments at Stonehenge?

17. The heel stone which dates back to the last construction phase of Stonehenge and which faces the open horseshoe of five free standing sarsens with their lintel caps, 256 feet from the center of the monument, was most famous for

Key Concept: What is the astronomical significance of the Heel Stone?

18. The major axis of Stonehenge, as well as the self-supporting horseshoe trilithon configuration in the center of the sarsen circle points toward the

Key Concept: The orientation of Stonehenge is important with respect to the seasons.



19. Standing in the center of Stonehenge when it was a working structure

Key Concept: How did the sarsens and trilithon horseshoe create the astronomical effects that were observed? Think horizons...

The five, free-standing trilithons which compose the center horseshoe at Stonehenge, consisting of two large vertical stones (sarsens) supporting a third stone set horizontally across the top (lintel) were significant in what way? The following four statements use the same series of answers.

20. The trilithon to the northwest...  
21. The great trilithon to the southwest...  
22. The trilithon to the southeast...  
23. The trilithon to the northeast...

Key Concept: Consider the lab on Stonehenge that you completed and how the trilithons specifically funneled light to certain key points on the horizon. What were they with respect to the trilithons mentioned above?