

## NEWSPAPER ASSIGNMENT

**Purpose:** This exercise will help solidify concepts pertinent to understanding archaeoastronomy and the seasons.

**Instructions:** You, as a respected member of our newspaper team, have been assigned by your editor to interview Dr. David Moyer, an archaeoastronomer, about a discovery that his team has just made. Your report on his work is crucial in disseminating this vital information. Make sure that the following seven items noted below are included. When a concept has been covered, indicate this with the appropriate number before the sentence or paragraph. Reporters do not have to write about the ideas in any particular order.

1. Give the site a name.
2. Describe the site. Use colorful adjectives as witnessed through the five senses.
3. How do the site alignments function as an astronomical calendar?
4. Who were the Ancestral Puebloans?
5. Define archaeoastronomy.
6. Explain the cause of the seasons.
7. Explain the effects of the seasons as witnessed in a mid-latitude region, such as Bethlehem, PA.

Students can choose an actual or fictitious site; however, the calendar creation method must follow the guidelines for Ancestral Puebloan settlements, as discussed in class.

**Template:** Use the style sheet for the Mini-Term Paper, which can be found in the Student Information section of your Lab Manual. This assignment is content-driven. I am looking for correct facts, grammar, spelling, and punctuation. Footnotes, a bibliography, and a title page are unnecessary since all information needed is contained in Session Three. The length of the presentation should fall between 500-800 words. Students will submit their presentation in a double-spaced Word format using 14-point New Times Roman font with one-inch margins. Remember, the archaeoastronomy pictures are online at [www.astronomy.org](http://www.astronomy.org). You may work with one partner. The total point value is 20.

### **Due Date:**

**Sample paragraph:** Please see a sample storyline that you can use, word for word, to begin your presentation.

### NEW ALIGNMENTS SHOW THE SOPHISTICATION OF ANCESTRAL PUEBLOANS

Recently discovered astronomical alignments have unveiled a new level of sophistication among Ancestral Puebloans who lived in the southeastern corner of \_\_\_\_\_ over 700 years ago. The discovery, made at \_\_\_\_\_ by Princeton astronomer Dr. David Moyer and a team of six undergraduate students, is a significant leap in our understanding of ancient cultures. Moyer's group found that specific ports, small openings near the top of the red sandstone walls of Square Tower Ruin, could have been used to monitor the passage of the seasons and, thereby, establish a calendar for the planting and harvesting of crops. The Ancestral Puebloan inhabited this region... Students continue from here.

## ANCESTRAL PUEBLOAN WORD LIST

<b>Acoma Pueblo</b>	<b>ecliptic</b>	<b>ports</b>
<b>Albuquerque, NM.</b>	<b>elliptical orbit</b>	<b>potsherds</b>
<b>Anasazi</b>	<b>faces NE, faces SW</b>	<b>pueblo</b>
<b>Ancestral Puebloans</b>	<b>Fajada Butte</b>	<b>Pueblo Alto</b>
<b>archaeoastronomy</b>	<b>Fajada Wash</b>	<b>Pueblo Bonito</b>
<b>archaeology</b>	<b>foresight</b>	<b>Pueblo del Arroyo</b>
<b>architecture</b>	<b>Four Corners</b>	<b>Pueblo Indians</b>
<b>Arizona</b>	<b>Gallo Campground</b>	<b>Puebloan Society</b>
<b>astronomer priests</b>	<b>great house</b>	<b>Red Mesa</b>
<b>autumnal equinox</b>	<b>Halley's Comet</b>	<b>right ascension</b>
<b>axial tilt</b>	<b>helical rising of object</b>	<b>Rio Grande Valley</b>
<b>axis</b>	<b>Hopi</b>	<b>roadways</b>
<b>Aztec Nat. Monument</b>	<b>Hovenweep Castle</b>	<b>Rt. 57</b>
<b>Balcony House</b>	<b>Hovenweep Nat. Mon.</b>	<b>Rt. 550</b>
<b>backsight</b>	<b>I-40</b>	<b>Salmon Ruins</b>
<b>beans</b>	<b>indirect sun</b>	<b>San Juan River Basin</b>
<b>cannibalism</b>	<b>hunter gathers</b>	<b>shade during high sun</b>
<b>cardinal points</b>	<b>Jackson Stairway</b>	<b>solstitial marker</b>
<b>Casa Rinconada</b>	<b>kiva</b>	<b>south</b>
<b>Chaco Canyon</b>	<b>masonry styles</b>	<b>South Gap</b>
<b>Chaco Culture Nat Historical Park</b>	<b>matriarchal</b>	<b>Square Tower Ruin</b>
<b>Chaco Wash</b>	<b>measuring shadow lengths</b>	<b>squash</b>
<b>Chacoan</b>	<b>Mesa Verde Nat. Park</b>	<b>stairway</b>
<b>check dam</b>	<b>moon</b>	<b>stationary observer, moving sun</b>
<b>Chacra Mesa</b>	<b>moving obser., stationary sun</b>	<b>Square Tower Ruin</b>
<b>Chetro Ketl</b>	<b>Nageezi, NM</b>	<b>strategic</b>
<b>Cliff Palace</b>	<b>Navajo</b>	<b>summer solstice</b>
<b>Colorado</b>	<b>New Mexico</b>	<b>sun</b>
<b>Colorado Plateau</b>	<b>niche</b>	<b>sun dagger</b>
<b>Colorado River</b>	<b>nomadic</b>	<b>sun room</b>
<b>corn</b>	<b>north</b>	<b>supernova pictograph</b>
<b>corner windows</b>	<b>North Mesa</b>	<b>Tsin Kletsin</b>
<b>declination</b>	<b>North Road</b>	<b>Una Vida</b>
<b>direct sun</b>	<b>north-south alignment</b>	<b>unit house</b>
<b>directional alignment</b>	<b>north-south wall</b>	<b>Utah</b>
<b>doorways</b>	<b>outlier</b>	<b>variation in length of day</b>
<b>east</b>	<b>passive solar</b>	<b>vernal equinox</b>
<b>east-west alignment</b>	<b>Penasco Blanco</b>	<b>west</b>
<b>east-west wall</b>	<b>petroglyph (rock pecking)</b>	<b>West Mesa</b>
	<b>pictograph (rock painting)</b>	<b>Wijiji</b>
	<b>pit house</b>	<b>winter solstice</b>
		<b>Zuni Pueblo</b>

July 15, 2024