

THE MYSTERY OF THE ANCIENT DESIGNS ON THE DESERT IN PERU
A CHILDREN'S BOOK

BY DR. BOLON'S LITERATURE CLASS
ROBERT E. LEE HIGH SCHOOL
Fairfax County Public Schools, Virginia

ENGLISH AS A SECOND LANGUAGE

GRADES 9–11

The unit will take six ninety-minute classes to complete.

Summary of the unit:

ESOL standards set goals for reading, writing, and speaking English. While students learn English, they also learn content information required as knowledge for graduation from high school. The content they will learn in this unit is the early history of Peru with a focus on the mystery of the Nazca lines. We will compare these less known geoglyphs to other famous ancient or early creations of various cultures. We will write a non-fiction children's book in English and Spanish about the Nazca lines. First we will read a selection of children's books, since some students were never exposed to children's literature at a younger age. Students will then read about five theories that have been published (my summaries of adult books beyond their reading level). We will discuss the theories. They will choose a theory and write a short text about it and illustrate it as group work. We will refine it, put it on a computer, and make a mock-up of the book. We will learn about Peru, historical research, archaeology, and writing and publishing while we gather vocabulary and knowledge.

Stage 1- Desired Results

Established Goals

The project addresses all 5 Framework Standards for Fairfax County, Virginia for Language Arts K–12:

Standard 1 - Know and apply the knowledge of the structure of English, including vocabulary, grammar, and usage.

Standard 2 - Know and understand the variety and range of communication forms and strategies in the English language.

Standard 3 - Know and apply the techniques of effective communication in writing and speaking.

Standard 4 - Do effective research.

Standard 5 - Read and understand major literary types, genres, and traditions of the English language.

Understandings

The unit will enhance students' ability to read and write English while writing a children's book. They will learn that children's literature is an important resource for early learning and that some is fiction and some is non-fiction. Their writing ability will be applied to create a non-fiction book. To do this they will read supplied texts, including my summaries of books, encyclopedia articles, and Web site articles as background research, and will use Google Earth to view the Nazca lines. They will develop their computer skills while researching and writing the book.

The hoped for outcome is that the students will master a subject that is of cultural relevance and interest to many of them and all will realize that there are frontiers of knowledge to be explored. They will realize that writing in English can be a profession for them. They will also learn about endeavors of previous researchers to understand the Lines. Above all, it is important for the students, most of whom were not read to as children, to learn that this is crucial to language development and that their children will benefit from early reading. They will learn the difference between "child" and "children" and that childrens as a plural does not exist.

Essential Questions

The most difficult part of the unit will be to get the students to "own the problem." They are charged with only presenting the theories that have already been offered to explain the Nazca lines. To actually do the fundamental investigation to unravel the mystery is not my request. But, I want to encourage them to think about how to solve such an unknown.

Which theory do you think is right, if any? Could they all be wrong?

Do you think that looking at other cultural material, like textile patterns or pottery patterns from objects made at the same time as the lines, could help us understand more? How and why?

Do you think that it would be good to know the history of the time period when the lines were made?

Do you think that we need to know about the religion of the people who made the lines to get some insight into these giant drawings on the earth?

Would the fact that these people lived in a desert environment maybe have some relation to the lines?

Students will know...

Students will be able to....

In addition to the team **writing** of the text for each theory to be included in the book (about 5 sentences for each theory), the students will keep a journal in which they will write their personal opinions of the mystery. They will improve their original writing abilities. This will depend on their own thinking. Their opinions will be respected as there is no right answer to the mystery. They will be able to form their own opinion, which is a skill they need to develop. They should eventually be able to look at a problem, gather information and make an informed judgment.

Ancient Designs

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The product, a children's book, will have all the required parts and the students will know what they are: publication page, title page, illustrations, resources list.

We will discuss the theories and the possible research that would be needed to further investigate the

FULBRIGHT-HAYS STUDY ABROAD CURRICULUM PROJECT SUPPLEMENT 1

NAZCA LINES RESOURCES

Print:

Daniken, Erick von. Arrival of the Gods: Revealing the Alien Landing Sites of Nazca. Boston: Element Books Limited, 1998.

Hadingham, Evan. Lines to the Mountain Gods: Nazca and the Mysteries of Peru. New York: Random House, 1987.

Jepson-Gilbert, Anita. Maria and the Stars of Nazca/Maria y las Estrellas de Nazca. Westminster, CO: TAE Nazca Resources, 2004.

Morrison, Tony. Pathways to the Gods: The Mystery of the Andes Lines. New York: Harper and Row, 1978.

Peru: Eyewitness Travel Guide. New York: DK Publishing, 2008, pp. 126-8.

Stierlin, Henri, "The Pre-Columbian Civilizations," The World of the Maya, Aztecs and Incas. New York: Sunflower Books, 1979, pp. 81-84 (photographs).

Web:

"Nazca Lines" on Wikipedia: <http://www.Wikipedia.com>

"Nazca Lines" (photos) on GoogleEarth: <http://www.GoogleEarth.com>

"The Nazca Lines," Morgana's Observatory:
<http://www.dreamscape.com/morgana/rosalind.htm>
Summary of theories.

"The Nasca Lines Project (1996–2000)," Prof. Don Proulx, University of Massachusetts, Amherst:
http://www-unix.oit.umass.edu/~proulx/Nasca_Lines_Project.html
Study of the correlation of underground water lines and the lines, inconclusive.
Provides bibliography.

Joe Nickell, "The Nazca Lines Revisited: Creation of a Full-Sized Duplicate," *The Skeptical Inquirer*: <http://www.onagocag.com/nazca.html>
Theory of how the lines were made with sticks and cord to lay them out.

"Nazca Lines and Culture," Ellie Crystal's Metaphysical and Science Website:
<http://www.crystalinks.com/nazca.html>
Discusses pottery of Nazca people in relation to lines. Many photos.

Film:

"Indiana Jones and the Kingdom of the Crystal Skull," Dir. Stephen Spielberg, 2008.
Involves aliens in Peru and shows views of the Nazca Lines.

FULBRIGHT-HAYS STUDY ABROAD CURRICULUM PROJECT SUPPLEMENT 2

On the Nazca Pampa (an area 60 miles long by 5 miles wide) in southern Peru there are huge markings on the earth, some more than 20 kilometers long. They were put there around 700 A.D. by the people who lived there then, the Nazca people. This area of Peru is a dry and windless desert. The lines were made by removing the red stones on the surface and exposing the white earth beneath. They are so large they can only be seen from above—from an airplane. Thirty-two represent animals (such as a monkey, hummingbird, spider, condor, iguana, dog, and whale), human-like figures, weapons and large arrows. Lots more are extremely long lines that cross and crisscross each other. Others are spirals and zig zags. Very few people go into this area. Now tourists fly over it to see the markings.

These geoglyphs (marks on the earth) are very mysterious to modern day archaeologists who study them. They wonder "Why were these markings made?" Maybe as part of the ancient religion of the people? Aliens from space made them? Ancient astronomers made them? They mark water sources under the ground? How were they made? No one knows how and why the lines were made. Maybe one day someone will finally unlock the mystery of the Nazca Lines.

There are some theories that try to explain the Nazca Lines, as they are now called.

BOOK SUMMARY ONE

Erich von Daniken. Arrival of the Gods: Revealing the Alien Landing Sites of Nazca. Boston: Element Books Limited, 1998.

The author of this book is not an archaeologist. He is a writer who believes in extra terrestrial life. (Do you?) Since some evidence of the possibility of life on Mars was discovered (bacteria and water) in 1996 (p. 152), he feels certain that extraterrestrials exist now and existed long ago. His theory is that the Nazca lines were put there by alien beings as landing fields, that is, lines to show others from space where to land their spacecraft. They direct aliens to the "airport."

What do you think?

BOOK SUMMARY TWO

Tony Morrison. Pathways to the Gods: The Mystery of the Andes Lines. New York: Harper and Row, 1978.

What is an archaeologist? What was the religion of the Nazca people? This author is a zoologist, filmmaker, traveler, and writer, not an archaeologist. He studied the lines. He was amazed that they were absolutely straight up and down hills, and across gullies, sometimes running 29 kilometers. Morrison believed that the lines led to small religious shrines called *wak'as*, where burnt offerings were made to the Indian gods.

BOOK SUMMARY THREE

Maria Reiche. Mystery on the Desert. Lima: 1949.

Maria Reiche began her work in 1949. She studied and lived in Nazca for 30 years. She died when she was 95. She was a German-born mathematician.

She believed that the lines had to do with astronomy. They were maps of the courses of the stars and planets at different times of the year and their precession (changes in course) that occurs over large periods of time, that is their points of rising and setting change, and Reiche thought that each point was recorded by a different line. The animals represented constellations seen above at certain times of the year, and perhaps all this was used by the people to keep track of time which they needed to do to determine season and proper planting and harvesting times. This actually is known to have been a concern of other great cultures of ancient South American and Mexican peoples. Reiche measured all the lines and recorded her findings. She believed that the sketches corresponded to constellations and thought they were part of an astronomical calendar made by the people of the Nazca culture, and designed to send a message to the gods. She also thought that her favorite design, the monkey with a spiral tail, was the ancient symbol for the constellation we call the "Big Dipper," a constellation linked to rain. When rain was overdue, as it often is in this area, the Nazca people drew the monkey to tell the gods that the earth needed rain.

BOOK SUMMARY FOUR

Anita Jepson-Gilbert. Maria and the Stars of Nazca/Maria y las Estrellas de Nazca. Westminster, CO: TAE Nazca Resources, 2004.

The story of Maria Reiche is told in a bilingual children's book. We will read this book as a class. It is like our book (the one we will write) except that it talks about one theory. We will write about four others.

BOOK SUMMARY FIVE

Evan Hadingham. Lines to the Mountain Gods: Nazca and the Mysteries of Peru. New York: Random House, 1987.

This author is not an archaeologist. He is a writer and he visited the lines in Peru. His book tells about all the theories of the meaning and reasons for making these lines. He discovered another possible reason for the lines to have been made. He thinks they have to do with the makers' beliefs and religious rituals, including a cult of severed heads and powerful hallucinogenic plants. He found some of these rituals still going on in Peru today high in the Andes Mountains. He compared the Nazca designs to some found on pots and woven into textiles from the same culture and time period.

Is that a good way to try to understand the Nazca Lines?