

CULTURE EVERYWHERE

SUBJECTS:	Social studies, language arts
SKILLS:	Knowledge, comprehension, analysis, evaluation
STRATEGIES:	Brainstorming, categorizing, discussion
DURATION:	30 to 45 minutes
CLASS SIZE:	Any

Objectives:

In their study of culture students will use a chart to:

1. Show the different ways that cultures meet basic human needs.
2. Recognize that archaeologists study how past cultures met basic needs by analyzing and interpreting the artifacts and sites that those cultures left behind.

Materials:

"Comparing Cultures" activity sheet for each student.

Vocabulary:

anthropology: the comparative study of human behavior.

archaeology: a method for studying human cultures by analyzing material evidence (artifacts and sites).

cultural relativism: studying other cultures without making judgments about them.

culture: the set of learned beliefs, values and behaviors generally shared by members of a society. "The way the members of a group of people think and believe and live, the tools they make, and the way they do things" (Braidwood, 1967, p. 30).

ethnocentrism: the attitude that one's traditions, customs, language, and values are the only right and proper way and that other cultures are inadequate or wrong.

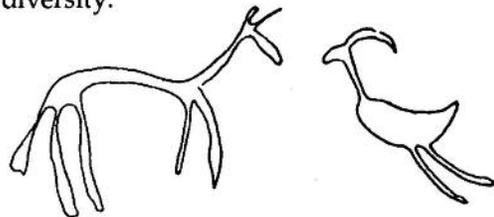
Background:

Anthropology is the comparative study of humans and their behavior. Cultural anthropologists usually study behavior by observing the members of a cultural group as they live their lives and interact with one another. Archaeologists learn about past cultures by analyzing material evidence (sites and artifacts).

All people everywhere have several basic needs which must be met. These basic needs may be categorized as follows:

1. The need for food and water (economics).
2. The need for protection from the elements (clothing and housing).
3. The need to reproduce the culture (marriage, kinship, education).
4. The need for explanation (religion, philosophy, science).

What must be satisfied is universally human. *How* needs are satisfied is cultural. The many different ways that cultures have evolved to meet the basic human needs results in the world's rich cultural diversity.



When studying other cultures, there is a tendency to emphasize the differences among people, and to look at other cultures ethnocentrically. Cultures with less sophisticated forms of technology are frequently portrayed as simple-minded and naive. However, on the contrary, such people often have unequaled understanding, knowledge and adaptability to the environments in which they live. It is important not to accentuate "them" and "us." When scientifically studying other cultures it is necessary to suspend judgment. One culture is neither better nor worse than another, just different. This is the concept of cultural relativism.

A basic assumption of archaeological study is that people who lived in the past had the same basic needs for existence as do people living in the present. Archaeologists are anthropologists who study past cultures by analyzing material remains (artifacts and sites) to learn how people met their basic needs.

Many people mistake archaeology for a swash-buckling "Indiana Jones" adventure, and archaeologists often are thought of as questing after rare and beautiful artifacts. Although it is true that at times archaeologists do find rare and beautiful things, they could more accurately be compared to Sherlock Holmes, a detective of the past, gradually piecing together the culture of a people to understand more about them. A lone artifact discloses very little about a culture. It is by studying many sites and artifacts and their relationship to each other and the environment that one discovers the way people lived. Archaeologists study a people's culture by studying the things they left behind.

Setting the Stage:

1. List on the board students' responses to the following: What do you need to have in order to live?
2. Now, help students categorize their list. They do not have to arrive at the four categories outlined above. Anthropologists themselves do not agree on how to categorize the needs. For example, the students may come up with eight needs: food, water, shelter, clothing, reproduction, transportation, education, and explanation.

Procedure:

1. Distribute the "Comparing Cultures" activity sheet to the students. Write the category of basic needs (food, shelter, etc.) down the vertical column on the chart's left side. Choose another culture to analyze—for example, an East African culture, the culture of Mexico, or any culture with which your students are familiar.
2. The students construct the chart, comparing and contrasting the basic human needs as they are met in different cultures.

3. In a class discussion, the students compare and contrast our culture with others. If different cultures seem strange or inferior to the students, inform them that our culture can be baffling to people from another culture. For example, Hindus are horrified at the thought of eating meat; it is against their religion to do so.

4. Explain that because archaeologists can neither ask the people who left the artifacts how they met their needs, nor observe them using the artifacts, past behavior must be inferred from the material remains of the culture. For example, if corn cobs are present archaeologists could infer that the people were farmers.

Note: Do not single out or make an example of students in your classroom who are from minority ethnic groups. The attention can be embarrassing and hurtful. However, welcome what these students might freely offer to the study of other cultures.

Closure:

As you analyze the chart, what do you notice about the ways cultures meet their basic needs? How do archaeologists study past cultures?

Evaluation:

The students turn in their activity sheets for evaluation.

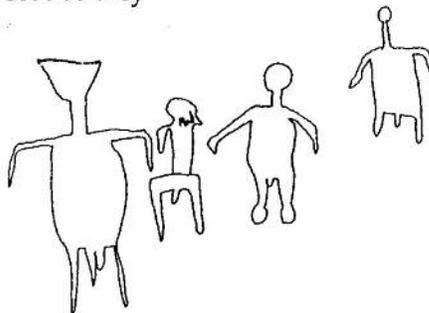
Links:

Section Two, Lesson 15: "Archaeology and Ethnographic Analogy: The Anasazi and the Hopi"

Section Three, Lesson 27: "State Place Names"

Reference:

Braidwood, Robert J., 1967, *Prehistoric Men*. 7th ed. Scott Foresman, Glenview, IL.

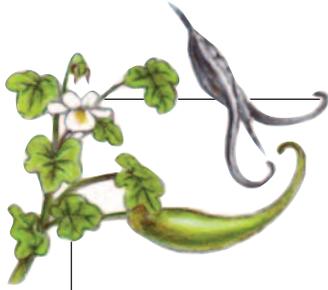


Comparing Cultures

Name _____

Basic Needs	Us	Settlers	

Use additional sheets if necessary.



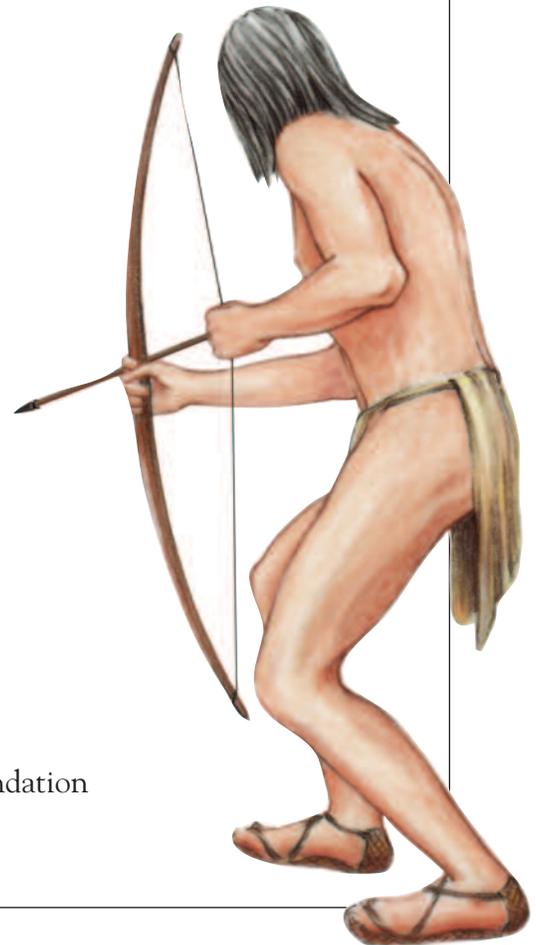
SUBSISTENCE STRATEGIES

IN MIDDLE TO LATE
PRECONTACT ARIZONA

Lesson Plan for Grades 4-7

Teacher's Materials

Lesson Plan



Created by Carol J. Ellick, M.A., RPA, SRI Foundation

Illustrations by: Cindy Elsner Hayward

ACKNOWLEDGEMENTS

I would like to thank the Arizona Department of Transportation (ADOT) for the opportunity to go beyond the basic standard outreach effort that is included in their compliance projects. Their willingness to listen to an idea and accept a proposal for an experimental project that could be used as a role model for future outreach efforts not only in Arizona, but across the country, is truly impressive. It proves that anything is possible, even within the restricted environment of a state agency. All it takes is a person with vision and an understanding of how the rules are a framework to work within as opposed to being rules to be restricted by. Though she is no longer with the ADOT, I would like to thank Serelle Laine, the original project manager for her spark and enthusiasm, and her ability to see what could be done. I would also like to thank Kae Neustadt and the others at ADOT who contributed to making this project happen.

Special thanks to Carol Warren, Social Studies Education Program Specialist at the Arizona Department of Education for her help in reviewing the materials and promoting them within the social studies education community.

The first stage of this project involved the presentation of a workshop for teachers within the project area. Ten educators participated in this initial outreach effort and each of them offered to continue their involvement in the project by reviewing draft materials. I would like to personally thank each teacher for their time and their support of these efforts

I would like to thank Monica Marquez, Yavapai Culture Director, Vincent Randall, Apache Culture Director, and Chris Coder, Archaeologist for speaking at the workshop, supporting the project, and reviewing the draft of the materials.

These materials were developed based on the information gathered during the State Route 89A archaeological project. The principal investigator for the archaeological project was Dr. Carla Van West. When it came time for ADOT to select a project to be used as a base for the development of educational materials, they selected the 89A project. This was as far as I was concerned, an excellent choice. Carla is not only a talented field archaeologist and project director; she is also gifted in presenting archaeological and cultural information to the public. Carla continued her involvement on this project by writing the essays and the Harvest Festival story included in the lesson plan. This was her first effort at producing a fictional story geared to a fourth through seventh grade audience and she did a spectacular job of it. I hope that everyone enjoys the essays and story as much as I do, and more than that, I hope it sparks the imagination of every child who reads them.

Cynthia Hayward deserves credit for the beautiful illustrations. She took words, painted them in, and brought them to life.

Thanks to all who helped bring this project to life and give it a home.



Carol J. Ellick, M.A., RPA
August, 2008

SUBSISTENCE STRATEGIES IN MIDDLE TO LATE PRECONTACT ARIZONA

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Guiding Question:

Once farming became known and used in the area we now call Arizona, why would some groups remain hunters and gatherers?

Elements of Understanding:

There are 5 key concepts that students will learn through the completion of the activities in this lesson.

- Archaeological research adds to our understanding of the past.
- According to the scientific record, people have lived on this continent for at least 12,000 years.
- During each time period, a variety of cultural groups lived throughout the territory we know as Arizona.
- People satisfy their basic needs from the resources available within their environment, through travel, and through trade.
- Through time, the area we know as Arizona has had people who follow a hunting-gathering subsistence strategy or an agricultural subsistence strategy, and during the later precontact period, both strategies existed.

Post the Guiding Question and the Elements of Understanding (on the following page) for all students to see. This should be available through this lesson for students to visit as they participate in the activities.

These materials
may be reproduced
for educational use.

Subjects: Social studies,
science, language arts

**Arizona Social Studies
Standards, Concepts, and
Performance Objectives
(Grades 4–7):** See the
Vocabulary, Resources,
Content Standards folder

Skills: Knowledge,
comprehension, application,
analysis, synthesis, and
evaluation

Duration: 2–4 Class periods

Instructional Groupings:
Individual, small group, and
whole class activities

To gain an understanding of the subsistence strategies and life-ways of precontact cultures in Arizona, students will:

- Conduct original research, using primary and secondary sources, on the topics of the cultural groups, territories, time frames, and land-use of the area.
- Develop timelines indicating both BC/AD and years before present (BP).
- Use maps, charts, and graphs.
- Create maps, charts, and graphs to convey information relating to cultural groups, territories, time frames, and landuse of the area.
- Use role-play to evaluate the cause, effect, and impacts of adopting new subsistence strategies.

Materials:

Included in the lesson: Tables, maps, and essays; folder of illustrations; Lesson 2, “Culture Everywhere” from, *Intrigue of the Past: A Teacher’s Activity Guide for Fourth through Seventh Grades*; and “The Archaic Hunter-Gatherers” from *Discovering Archaeology in Arizona*. Photocopy a sufficient quantity for groups or individuals. If students work in groups, each group could be assigned one time period.

From outside sources: Popped and un-popped popcorn, walnuts, pinyon nuts, pumpkin seeds, beef or turkey jerky; Dixie cups or small bowls; maps; research sources.

Inquiry and Learning:

Inquiry as Integral to Learning

Archaeological research develops understandings about and abilities to do scientific inquiry. This lesson will take students through a guided inquiry process to learn about subsistence strategies in precontact Arizona. Students will be asked to generate questions, examine and analyze data, and come up with some conclusions using essays based on real archaeological data.

The design of learning experiences is critical to the success of learning for the student. These materials use the following learning cycle:

- students are **invited to learn** through a question, problem, or scenario;
- students **explore** ideas through hands-on experiences, stories or scenarios, or by watching a demonstration or video;
- students **discuss** their ideas, questions, or discoveries about the content they explored;
- students have opportunities to develop and refine their own **questions**;
- through some guidance, students **review and analyze information based on real data** from archaeological sites while learning new content;
- students **synthesize and apply** their ideas about their own question and the group question, problem or scenario presented in their invitation to learn.

Why is Subsistence in Precontact Arizona an Important Concept to Teach?

All humans need food, shelter, and water. Examining how humans located and used land in historic and precontact time periods helps students connect past to present. What we eat, how we acquire our food, and how we live are fundamental to understanding human survival.

Procedures:

Invitation to Learn

1. Bring in various food props: grass with seeds, corn on cob, popcorn, pumpkin seeds, turkey jerky, walnuts, pinyon nuts, etc. Ask the students: Do you know where your food comes from? How did people who lived before modern times acquire their food?
2. Students have opportunities to sample foods and share ideas. This provides an opportunity for students to share their prior knowledge about food and subsistence.
3. Further engage students by asking them to read a story or scenario about how young Ancestral Puebloans (for example) acquired their food for the year.
4. Ask students to record all evidence of food and how people got their food as they read or listen to the story. After the story is complete, give students a chance to share their ideas with each other in small groups. The small groups then share with the larger group.
5. Ask students to develop a list of questions about how people got their food in precontact Arizona. A sample of possible questions could include the following:
 - What is the process involved in hunting and gathering as a subsistence strategy?
 - Who practiced hunting and gathering?
What were the benefits and hardships of this practice?
 - What is the process involved in agriculture as a subsistence strategy?
 - Who were the first people to practice agriculture in Arizona?
 - What were the benefits and hardships of this practice?
 - When was agriculture introduced in Arizona?
 - Why did some people adopt agricultural practices? Hunter-gatherer practices? Both subsistence practices?

Explore

1. Begin the next phase of learning with the lesson “Culture Everywhere” from, *Intrigue of the Past: a Teacher’s Activity Guide for Fourth through Seventh Grade*. This lesson provides the base for the knowledge by introducing basic human needs, how people obtain the resources to satisfy those needs, and how archaeologists define culture based on the material remains. The focus will be on 3 cultures: one that practices hunting & gathering (Archaic period people), one that practices agriculture (precontact, first farmers in Arizona), and one that practices both (early settlers). A copy of this lesson has been included as a separate file.
2. Working in small cooperative groups of 3–5 individuals, students will explore more about each of these subsistence practices. Each group will be given a subsistence strategy practice to explore. They will be asked to find out as much as they can about that practice.

Discuss

1. Students will discuss their findings with the rest of the class. They will be asked to present evidence for how people met the basic needs and the benefits and hardships of their practice.
2. After each student group shares with the class, the listeners will be asked to develop questions and comments about that particular practice.
3. After every group has shared, students will be asked to refine the list of their questions forming the questions that they would like to investigate.

Data Analysis

This part of the lesson has been developed from the research conducted on the Arizona State Route 89A project. Essays in this lesson provide students with basic information on the peoples and subsistence patterns within Arizona and the Verde Valley.

The lesson is designed for fourth grade upwards. For grades 4–5, use only the essays appropriate to the reading levels and the available time. **At a minimum, students will need to read the essays “People of the Verde Valley”, “To Farm or Not to Farm”, and “The Harvest Festival” fictional story.** For grade 6 and above, students should read the cultural history of Arizona, as well as the others, so that they may synthesize and evaluate a broader spectrum of information.

To answer the research questions and ultimately, the Guiding Question, students will analyze data and synthesize, and evaluate the information that they have gathered through individual research and group projects.

The lesson plan includes structured tables in which students will lay out their data on territory, time period, and subsistence strategies. To better understand people and environment, students will illustrate maps of territories by time period. These worksheets may be completed by individual students or by students working in groups. The tables, maps, and answers to the questions will provide students with the information they will need to answer the Guiding Question.

Synthesize and Apply

Lower grade-levels or those only reading “People of the Verde Valley,” “To Farm or Not to Farm”, and “The Harvest Festival” fictional story will compare and contrast subsistence patterns of the peoples listed in these texts. They will use the information to answer their questions, the questions on the Questions for Understanding page and ultimately, answer the Guiding Question: “Once farming became known and used in the area we now call Arizona, why would some groups remain hunters and gatherers?” Students may also construct a timeline for the Verde Valley using the information contained in the essays and the data recorded on the activity pages.

A file folder has been provided that contains artifact illustrations. Students may illustrate the cultures and time periods with this or with other images located during independent research.

Students completing all of the readings will compare and contrast the cultures and subsistence patterns of the Verde Valley area with those in other parts of the state.

Closure: As a group, reflect back on and discuss the *Elements of Understanding* that should have been gained through this lesson. Based on all of the information, discuss the final two questions of *The Harvest Festival Questions for Understanding* page and the *Guiding Question*.

Extension Activities: If time permits, end this lesson with the role-playing activity, “The Archaic Hunter-Gatherers” from *Discovering Archaeology in Arizona*. A copy of this lesson is contained in a separate folder. Students may also consider drawing alternative scenes from the essays and stories.

Evaluation: Evaluation is based on the accurate completion of the worksheets, cooperative work, and growth in understanding of the key elements presented through the readings, discussions, and research conducted during this lesson. Individual rubrics should be developed for evaluating work and knowledge gained for each worksheet as well as overall knowledge gain and personal growth. Since rubrics set the standard for measuring achievement, it can be helpful to provide the rubrics to students prior to beginning each activity. With rubrics in hand, students know exactly what is expected and can perform to the highest level.

An excellent FREE on-line tool for the creation of rubrics is available on the Rubistar Webpage: <http://rubistar.4teachers.org/index.php>.

Teacher’s Background Information:

The following background information is provided to assist you with directing student learning. Please note, the Native American groups included in this lesson plan include those currently in the Verde Valley area. There are many other contemporary Native American groups in the state of Arizona who may feel connected to the Verde Valley.

Essays included in this Lesson Plan

Native Peoples and Native Cultures in what is Now Arizona: Time Periods and Peoples

This essay covers the cultural history of the entire area that we now call Arizona. It is a general overview of the peopling of the area. The essay provides information necessary for filling in the geographic information and time periods segments of this lesson. *The use of this essay is optional for lower grade-levels. It is geared to grades six and above.*

People of the Verde Valley

This essay focuses specifically on the cultural history of the Verde Valley area. *“People of the Verde Valley” provides essential information for all students in all grade-levels.*

To Farm or Not to Farm: That is the Question

This essay helps students think about the benefits and drawbacks of a hunting-gathering subsistence pattern and an agriculturally-based subsistence pattern. *“To Farm or Not to Farm” provides essential information for all students in all grade-levels.*

Information to assist with directing student conversations and answer questions:

Advantage of being Nomadic

- Frequent movement might prevent certain health issues and sanitation problems (waste-borne diseases) caused by staying in one place too long. Frequent movement may also prevent local resources, like firewood, from being depleted.
- A predominantly wild food diet made possible by frequent residential moves provided greater access to a wide variety of nutritious wild foods, especially under challenging and unpredictable environmental conditions, as well as an opportunity to collect other desirable resources, such as special stone for making tools, weapons, and jewelry.

Advantage of being a Farmer

- In areas that were over-hunted or poor in wild plant foods, cultivation was the only reasonable way of securing a food supply.
- Women who have carbohydrate-rich diets often have more children than women that do not. Communities would become larger with more people contributing to the food supply and well being of the group.

Reasons for the Formation of Larger Villages

Archaeologists have suggested three reasons for the formation of larger villages. These include:

- Competition for the best-watered farmland during an era of frequent drought;
- Fear of raiding by other people who want to steal food and other desirable resources; and,
- The need for large groups of people to (1) share work, food, and social responsibilities, and (2) protect their village and its valuables.

The Harvest Festival

The Harvest Festival is a story based on archaeological information. It provides essential information for all students in all grade-levels.

The story is *fiction*, not *fact*. It is, however, based on facts gathered by archaeologists and others who are interested in Native American people and their traditional ways of life. It takes place in the year A.D. 1366, at Tuzigoot Pueblo, and tells the story of the friendship between a 12-year old Sinagua girl and a 13-year old Yavapai boy, who see each other every autumn when their families come together to trade and visit.

To extend this lesson and discuss the connection with modern-day descendents, the Hopi names may be introduced when the “Harvest Festival” essay is introduced.

See website:

- http://www.native-languages.org/hopi_animals.htm/ and
- http://www.native-languages.org/hopi_colors.htm for Hopi words used as names.

Yavapai words similar to the names in the story can be found in Kendall, Martha B. (1983) Yuman Languages. In *Southwest*, by Alfonzo Ortiz, pp. 4-12. Handbook of North American Indians, vol. 10, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

	English
Hopi Name	Translation
Sikya-muuyaw	Yellow Moon
Paalang-wuuhti	Red Woman
Tawupu	Rabbit Skin Blanket
Hoonaw	Bear
Kwahu	Eagle
Toho	Mountain Lion
Pòoko	Dog

	English
Yavapai Name	Translation
Yamita	Bobcat Boy
Kwakta	Big Deer
Kathar	Coyote Woman

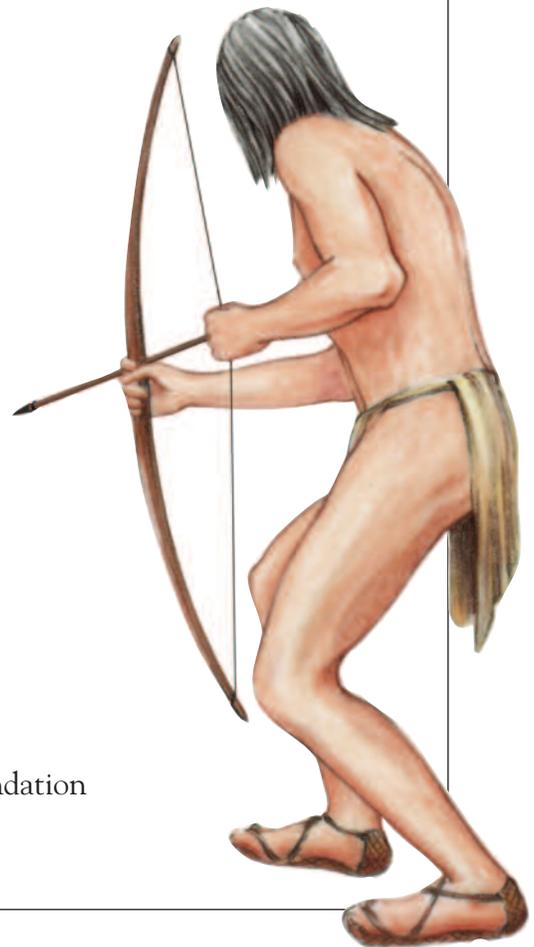


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Vocabulary



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VOCABULARY

agave—a plant that grows in dry environments, it has long, spiny, sword-shaped leaves and grows a tall flowering stem. Native peoples gather agave, cut off the sharp leaves and cook the center “heart” of the plant for food. The fiber from the leaves is used for weaving and making twine and thread.

agriculture—the cultivation of domesticated plants such as corn, beans, and squash, as primary sources of food; agriculture refers to the practice of cultivating soil, producing crops; farming.

amaranth—a plant that produces small seeds that look like poppy seeds, high in protein.

Anasazi—an archaeological term for the people living in the Four Corners region of the Southwestern United States; the term Ancestral Puebloan or Ancestral Pueblo People is now considered more appropriate and used instead of the term Anasazi.

ancestor—a person from whom one is descended; a past relative who is no longer alive.

Ancestral Puebloan—people living in the Four Corners region of the Southwestern United States during the Formative time period; also called the Anasazi.

archaeologist—a scientist who studies past people.

archaeology—the method for studying past human cultures based on the materials they left behind.

Archaic (time) period—the time period after the Paleoindian time period and before the Formative time period; from approximately 8,000 years ago until about 2,000 years ago.

artifact—an object that has been made, or used, by humans.

bargaining—making the best price or trade.

basic needs—food, water, and shelter; the three things that human beings need to survive.

bison—buffalo; *Bison antiquus* was a large ancient type of bison that is now extinct.

bosque—a small wooded area along a river or marsh.

chronology—an arrangement of events in time; a record of events in the order in which they occurred.

Colorado Plateau—the geographic area covering an area of the Southwestern United States in southwestern Colorado, northern Arizona, northwest New Mexico and southeastern Utah.

cultivated—grown by people; with regard to farming, cultivated preparation of soil in order to successfully grow plants.

culture—the set of learned beliefs, values, styles, and behaviors generally shared by members of a human society or group.

data—information, especially information organized for analysis.

devil's claw—a plant that grows a black pod, the fiber from the pod is used for weaving.

domesticated—plants or animals trained or adapted to live in a human environment and to be of use to humans.

drought—a lack of rain over a long period of time.

Euroamerican—people whose family or ancestors came to America from Europe.

extinct—no longer existing, no longer alive.

foraging—the act of gathering food and other resources.

Formative (time) period—the time period when a major commitment to agriculture (farming) , combined with the use of pottery containers and sedentary living co-occurred and persisted; from approximately 2,000 years ago to the present.

game—wild animals hunted by people.

geographic—of or relating to the science of geography; concerning the earth's landforms and its physical characteristics.

grinding stone—usually a flat stone (“metate”) on which grains or grasses are crushed and ground with a hand stone (“mano”).

gourd—a fruit that grows on a vine; it has a tough rind, is not edible, but when dried the hard outside rind can be used as a container.

hearth—a fire pit.

Hohokam—an O'odham word meaning “those who have gone” used by archaeologists to refer to the people who lived in the Sonoran Desert area of southern Arizona between approximately A.D. 1–1400.

hunter-gatherers—people who hunt wild game and gather wild plants for their food. Most hunter-gatherers are nomadic. Some hunter-gatherers follow a seasonal pattern to hunt and gather foods and other resources that they need to survive.

irrigation agriculture—a type of farming that requires a deliberate application of water from rivers, springs, or wells.

knowledge—an understanding of a topic or thing.

lifeways—ways of living that are typical to a culture.

mammoth—extinct elephant-like animal that once roamed the North American continent.

mano—a hand stone that is used on a metate for grinding.

manta—a type of sleeveless dress worn by Pueblo women, usually draped over one shoulder only.

metate—a grinding stone that forms the base, used with a hand stone or mano for grinding grains, grasses, or paints.

migration—movement from one place to another place, changing locations.

Mogollon—an archaeological term for the people who lived in the mountainous area of eastern Arizona and west and southern New Mexico between approximately A.D. 1–1400.

Native American—another term for American Indian.

nomadic—people who move with the seasons in search of food and resources.

olla—a big pottery jar used to hold water or to store food.

Paleoindians—the first peoples who lived on the continents now called North and South America.

Paleoindian (time) period—the time period when people first lived on the continents now called North and South America; from at least 12,000 years ago until about 8,000 years ago.

Patayan—an archaeological term for a nomadic hunting and gathering people who lived in the western desert areas of Arizona between approximately A.D. 1–1400.

pit house—a house that is built by digging an oval or rectangular hole in the ground somewhat larger than the size of a room; has wooden posts, beams, and brush covered by mud. Some pit houses have ladders through the roof to enter, others have doors on the side of the house.

porridge—a soft cooked cereal made from grain.

precontact—the period of human experience prior to written records; see prehistoric.

prehistoric—the period of human experience prior to written records; in the Americas, prehistory refers to the period before Europeans and their writing systems arrived.

pueblo—apartment-style houses used by precontact people on the Colorado Plateau and by Pueblo peoples today; small village or place of residence.

ramada—an outdoor covered patio; a sun-shade.

relationship—a connection between peoples.

sacred—special or religious.

sedentary—remaining in one place.

Sinagua—a word meaning, “without water” and the archaeological term for the early agricultural people who lived in the Verde Valley and the area near Flagstaff between approximately A.D. 1–1400.

site—a place where human activities took place and material evidence of these activities was left behind.

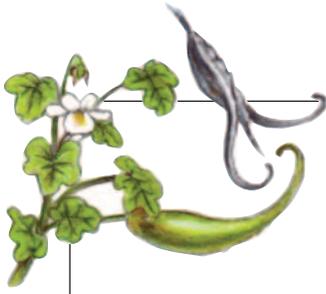
subsistence—way of life based on how people get food, water, and shelter.

territory—an area of land under the control of, or traditionally used by, a people or person.

timeline—a visual representation of events in chronological order.

tumpline—a woven cloth or animal hide strap that is used to help support heavy loads on a person’s back, the tumpline is worn across the forehead.

yucca—a desert plant that has long sword-like sharp-edged pointy leaves. The fibers in the leaves are used for weaving. Some varieties have fruit and flowers that can be eaten. The root of the yucca contains a soapy material that was used as a shampoo by many Native Americans in the past.

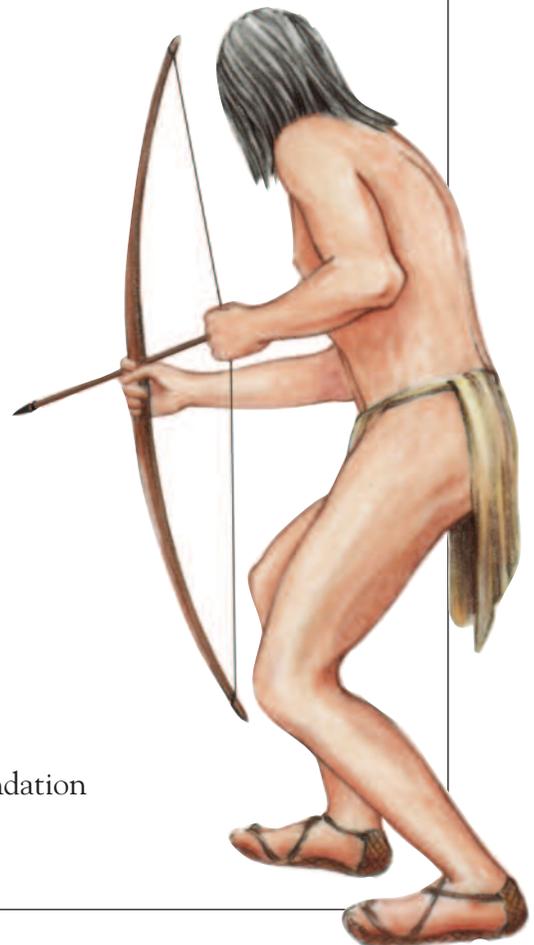


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RESOURCES

General Information on Land-use and Cultures

WorldAtlas.Com, Inc.

<http://worldatlas.com/webimage/countrys/namerica/usstates/az.htm>

Contains:

- Printable maps
- Description of Indigenous peoples
- Information on landforms

WaterHistory.Org

<http://www.waterhistory.org/histories/hohokam2/>

Contains:

- Information on historic and precontact water use
- A section on the Hohokam canals

Minnesota State Museum, EMuseum

<http://www.mnsu.edu/emuseum/archaeology/artifacts/gilapottery.html>

Contains:

- Information on precontact cultural groups of the Formative time period of Arizona and New Mexico
- Map of broad cultural areas of Arizona and New Mexico

DesertUSA.com

http://www.desertusa.com/ind1/du_peo_past.html

Contains:

- Information on precontact cultural groups and modern Native American groups
- Information on time periods by groups and sites
- Photos of dioramas—hunting scenes and house structures
- Section on the Formative time period and transition from hunting and gathering to agriculture

Sipapu: The Anasazi Emergence into the Cyber World

<http://sipapu.gsu.edu/>

Contains:

- Extensive information on the Ancestral Puebloan People (Anasazi)

Bureau of Land Management Anasazi Heritage Center

<http://www.co.blm.gov/ahc/anasazi.htm#top>

Contains:

- Extensive information on the Ancestral Puebloan People (Anasazi)

Phoenix.gov

Desert Farmers at the Rivers Edge: The Hohokam and Pueblo Grande

<http://www.ci.phoenix.az.us/PUEBLO/dfindex.html>

- Book, “Desert Farmers at the Rivers Edge: The Hohokam and Pueblo Grande” about the Hohokam and life at Pueblo Grande

Arizona State Museum

http://www.statemuseum.arizona.edu/archives/pithouse_recons.shtml

Contains:

- Mogollon pithouse reconstruction

Canyons, Cultures and Environmental Change: An Introduction to the Land Use History of the Colorado Plateau

http://www.cpluhna.nau.edu/Places/mogollon_rim.htm

Contains:

- An interactive map of Utah, Colorado, Arizona, and New Mexico
- Extensive environmental information
- Information of human occupation of the Colorado Plateau

Specific Information on the Transition from Hunting and Gathering to Agriculture

Human Ecology Review

<http://www.humanecologyreview.org/pastissues/her52/52kimball.pdf>

- An article in Human Ecology Review that looks at the transition from hunting and gathering to agriculture on a world-wide basis.

Maps

The Arizona Geographic Alliance and ASU’s School of Geographical Sciences have collaborated to produce the outline maps and thematic maps available here.

<http://alliance.la.asu.edu/maps/maps.htm>

Mesa Community College

Course Reading

<http://www.mc.maricopa.edu/dept/d10/asb/anthro2003/readings/transition.html>

- From The People of the Stone Age, American Museum of Natural History, pages: 187-193
- Global perspectives regarding why only some became farmers.

Children’s Books

Children’s fiction based on the Sinagua. Reading level, grade 6 and above.

Helen Hughes Vick, Roberts

Rinehart Publishers

1993 Walker of Time

1996 Tag Against Time

1998 Walker’s Journey Home



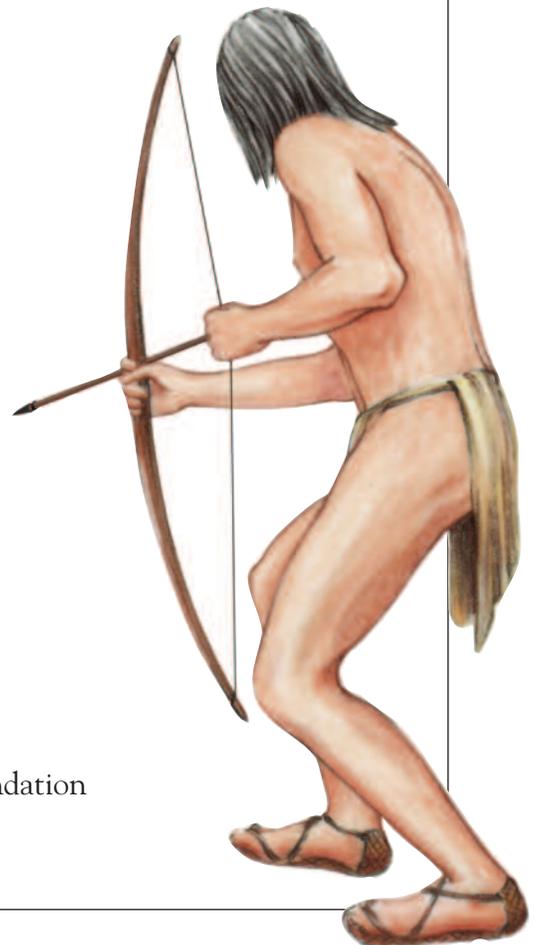
SUBSISTENCE STRATEGIES

IN MIDDLE TO LATE
PRECONTACT ARIZONA

Lesson Plan for Grades 4-7

Teacher's Materials

Alignment to
State Standards



Created by Carol J. Ellick, M.A., RPA, SRI Foundation

Illustrations by: Cindy Elsner Hayward

ARIZONA SOCIAL STUDIES EDUCATIONAL STANDARDS, CONCEPTS, AND PERFORMANCE OBJECTIVES

Grade 4

Strand 1 — American History

Concept 1: Research Skills for History; PO 1, 3, 4

Concept 2: Early Civilizations; PO 1, 2, 3

Strand 4 — Geography

Concept 1: The World in Spatial Terms; PO 3, 4, 6, 7

Concept 2: Places and Regions; PO 1, 3, 5

Concept 5: Environment and Society; PO 1

Grade 5

Strand 1 — American History

Concept 1: Research Skills for History; PO 1, 4, 5

Strand 4 — Geography

Concept 1: The World in Spatial Terms; PO 1, 3, 6

Concept 5: Environment and Society; PO 2

Grade 6

Strand 1 — American History

Concept 1: Research Skills for History; PO 1, 2, 4, 7, 8

Concept 2: Early Civilizations; PO 1, 2, 3

Strand 4 — Geography

Concept 1: The World in Spatial Terms; PO 1, 3, 4

Concept 2: Places and Regions; PO 2, 3

Concept 4: Human Systems; PO 2

Concept 5: Environment and Society; PO 1, 2, 3

Concept 6: Geographic Applications; PO 1

Grade 7

Strand 1 — American History

Concept 1: Research Skills for History; PO 1, 2, 3, 4, 7, 8

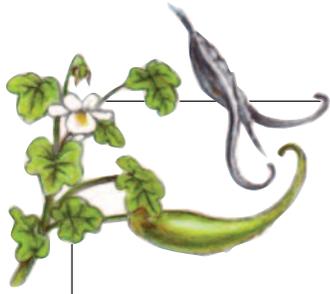
Strand 4 — Geography

Concept 1: The World in Spatial Terms; PO 1, 3, 4

Concept 2: Places and Regions; PO 3, 4

Concept 4: Human Systems; 4, 6

Concept 5: Environment and Society; PO 3, 5, 6



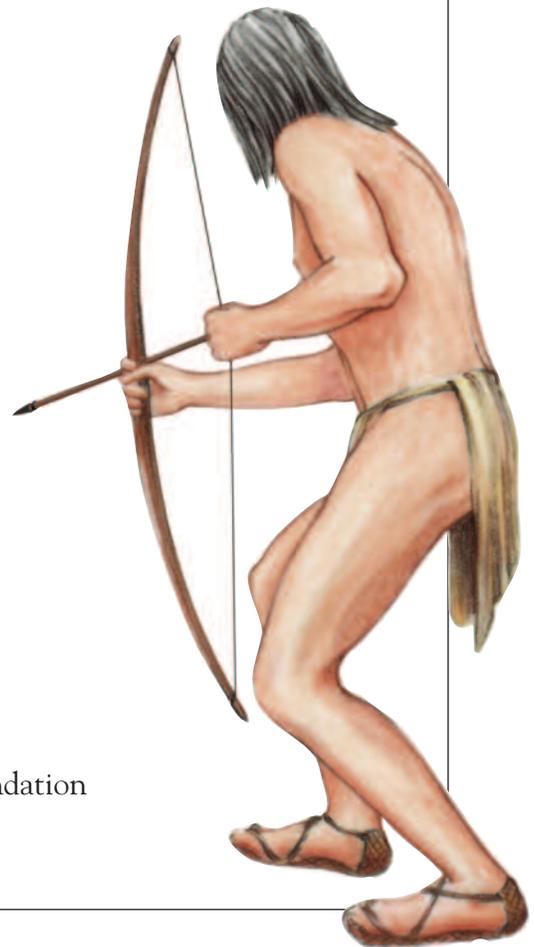
SUBSISTENCE STRATEGIES

IN MIDDLE TO LATE
PRECONTACT ARIZONA

Lesson Plan for Grades 4-7

Teacher's Materials

Teacher's Keys



Created by Carol J. Ellick, M.A., RPA, SRI Foundation

Illustrations by: Cindy Elsner Hayward

TEACHER'S KEY

Using the information listed in the essays, fill in the territory, the time period, and subsistence patterns for each cultural group.

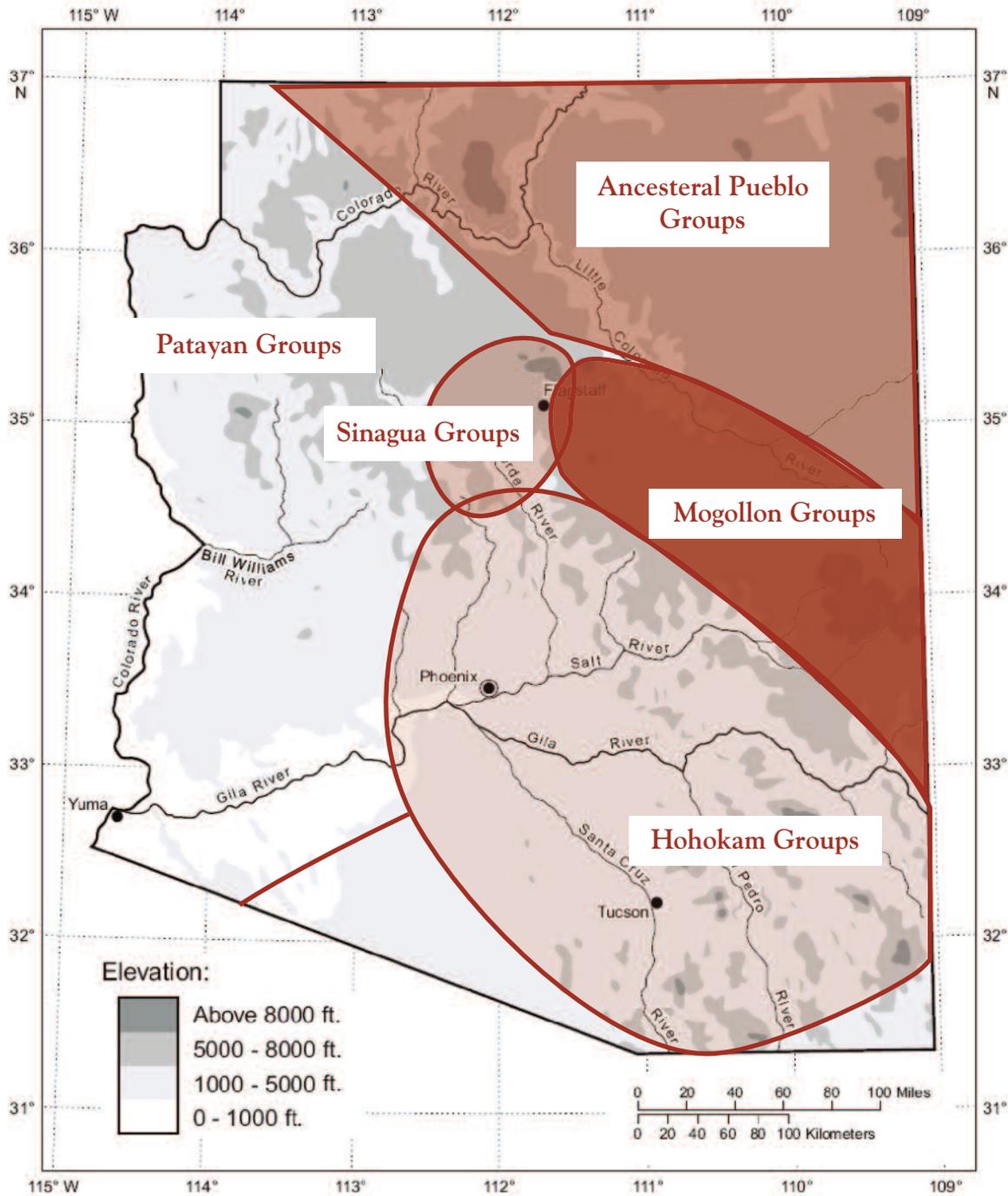
Group, Territory, Time, and Subsistence Strategy

Group	What was their traditional territory?	When did they occupy the area?	Did they mostly practice hunting and gathering or agriculture?
Apache	East-Central and Southern Arizonan	Verde Valley after A.D. 1700	Hunter & Gatherer
Yavapai	West-Central Arizona	In Verde Valley after A.D. 1300	Hunter & Gatherer
Ancestral Puebloans (Anasazi)	Northeastern Arizona	A.D. 1–1400	Agriculture
Mogollon	East-Central Arizona	A.D. 1–1400	Hunter & Gatherer to Agriculture
Hohokam	Southern Arizona	A.D. 1–1400	Agriculture
Patayan	Western Arizona	A.D. 1–1400	Hunter & Gatherer
Sinagua	Central Arizona	A.D. 650–1400 (1350–600 years ago)	Agriculture
Archaic	All Over Arizona	8000–2000 years ago	Hunter & Gatherer
Paleoindians	All Over Arizona	10000–6000 B.C. (12,000–2,000 years ago)	Hunter & Gatherer

TEACHER'S KEY

Based on the information provided in the essays and from research, draw the territories for the Apache and Yavapai peoples from A.D. 1400 to present. (Note: there may be overlap.)

Locations of Groups: A.D. 1400 to present (600 years ago to now)

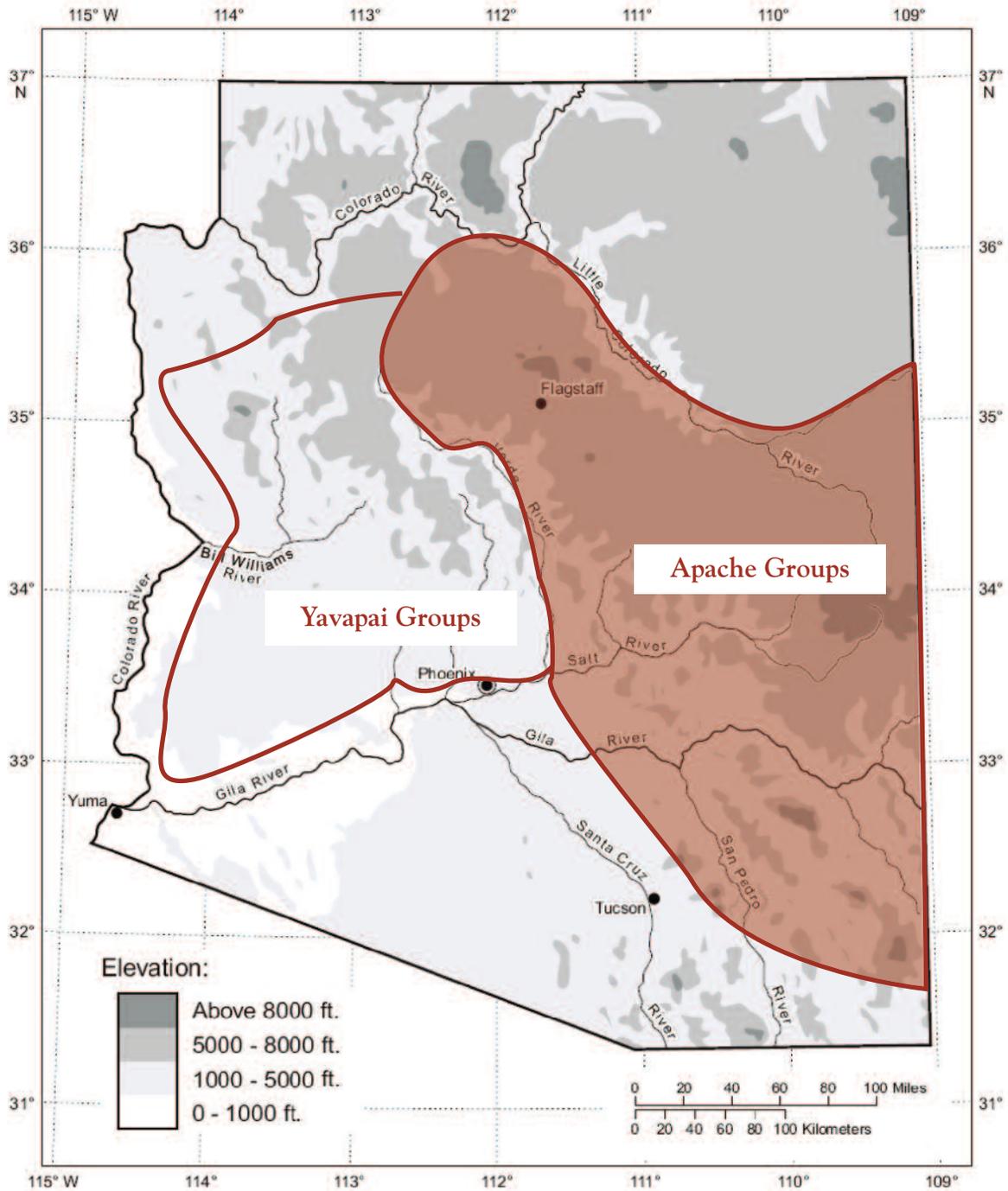


Arizona's Topography and Rivers

TEACHER'S KEY

Based on the information provided in the essays and from research, draw the territories for the hunting and gathering and agricultural groups of people who lived in Arizona between A.D. 1 and 1400. (Note: There may be overlap.)

Locations of Groups: A.D. 1 to 1400 (600 years ago to 2000 years ago)



Arizona's Topography and Rivers

TEACHER'S KEY

Fill in the name of each cultural group that lived during the time periods listed below. Each block will have one cultural group listed in it.

Chronology and Timeline

A.D. 1400 to present — 600 years ago to now				
Yavapai	Apache	Spanish	European	
A.D. 1 to 1400 — 600 to 2000 years ago				
Sinagua	Ancestral Pueblo	Hohokam	Mogollon	Patayan
6000 B.C. to A.D. 1 — 2,000 to 8,000 years ago				
Archaic				
10,000 to 6000 B.C. — 8,000 to 12,000 years ago				
Paleoindian				

After completing the above table, answer the following two questions.

In looking at the time periods for groups and at the maps, what are the relationships between groups, subsistence patterns, and territory?

People during the earlier time periods all practiced hunting and gathering. Between A.D. 1 and 1400, people who lived close to rivers began including agriculture and over time switched from hunting and gathering to agriculture. People who had limited access to water may have had small gardens that relied on the rain. The Yavapai and Apache, who came to the area sometime after 1300, were more nomadic. They practiced primarily hunting and gathering.

What scientific process can be used to understand the lifeways of people who lived in the area before written historical accounts?

The archaeological process can be used to understand the lifeways of people who lived in an area before written historical accounts.

TEACHER'S KEY

Answer the following questions as you read the Harvest Festival story.
Use an additional piece of paper, if necessary.

The Harvest Festival Questions for Understanding

1. What are the three basic human needs?
Food, water, shelter
2. Which group of people was nomadic and were hunters and gatherers?
Yavapai
3. Which group lived in a large village and were farmers?
Sinagua
4. What things did the Sinagua family make to trade?
Cotton, turquoise beads, corn, beans, woven cotton blanket, soft cotton cloth. Yellow Moon wove a soft cotton cloth as a gift for Bobcat Boy.
5. What things did the Yavapai family make to trade?
Willow baskets, seed parching trays, pine pitch olla, hairbrush made of mescal fibers, agave (mescal), saguaro, deer hides, black rock (obsidian). The year before, Bobcat boy gave Yellow moon a shell pendant, this year a prairie dog skin bag.
6. What did the Sinagua family worry about?
Not having enough crops, good weather and rains to grow crops, having the right things to trade
7. Why was trading important to the Sinagua and Yavapai people?
Each group could get the items that were useful to them that they did not make or grow.
8. What changes would the Sinagua have to make if the weather turned bad and they were unable to grow enough food to survive the winter?
They would have to add more hunting and gathering to their subsistence pattern.
9. What is exchanged between the two groups beyond the objects?
Stories, friendship, information, goodwill
10. Do you think that a hunting and gathering subsistence is harder or easier than agriculture? Why?
11. If Yellow Moon lived in your town and Bobcat Boy lived in the neighboring town today, what might they be trading?

TEACHER'S KEY

After reading the *Verde Valley* and the *To Farm or Not to Farm* essays, list the advantages and disadvantages of hunting and gathering and farming.

Subsistence Strategies: Advantages and Disadvantages

<p style="text-align: center;">Hunting & Gathering Advantages</p> <ul style="list-style-type: none">• Frequent movement permitted people to follow the seasonal availability of plants.• People were able to follow the game animals and gather other important resources like rocks, plant dye, salt and other materials from specific areas.• Frequent movement kept diseases down.• Frequent movement kept people from using up all the plants, firewood, and animals in one area.	<p style="text-align: center;">Agriculture Advantages</p> <ul style="list-style-type: none">• People stay in one place. They can build more permanent homes and set up storage areas for food and other belongings.• Crops like corn, beans, and squash provide extra nutrition. They are high in calories and they can be dried and stored to last through the winter and early spring when wild foods are difficult to come by.• The agricultural way of life and living in a more permanent place encourages cooperation. People work together for the survival of the entire group.• Women get enough nutrition which makes them healthier and able to have more children.• Living in a large group is safer.
<p style="text-align: center;">Hunting & Gathering Disadvantages</p> <ul style="list-style-type: none">• Hunters and gatherers moved frequently making it more difficult to accumulate too many possessions.• Frequent movement made it difficult to store extra food for the future.• Moving frequently and having to carry everything would be hard on people. It would be a heavy load. Women would have fewer children.	<p style="text-align: center;">Agriculture Disadvantages</p> <ul style="list-style-type: none">• When people stay in one place for a long time, they use up the local resources, especially the firewood, building materials, local game, and plants.• Eating lots of carbohydrate-rich foods like corn can cause cavities and other nutritional problems.• If people don't hunt enough meat, they will not get enough protein.• People have to find a safe way to store enough seeds and grains for food and for planting the following year.• If the weather is bad, crops might fail.

3

LESSON PLAN

THE ARCHAIC HUNTER-GATHERERS

Subjects	social studies, performing arts, science
Skills	application, analysis, synthesis
Strategies	reading, role-playing, debate, scientific inquiry
Duration	2 sessions—the first 30 minutes, the second 45 minutes
Class size	any—entire class and small group

OBJECTIVES

Through studying about the Archaic hunter-gatherers and the later farmers, students will be able to hypothesize the reason for the change in lifeway.

MATERIALS

Popped popcorn, unpopped corn, teosinte or other wild grass
Situation cards (3-1)

WORD LIST

Page 3-8 lists unfamiliar words. The following words are important for study. Use active approaches such as relating the words to the student's preexisting word knowledge, providing repetition of words and engaging students in meaningful use of the words.

- cultivate
- cultivation
- hunter-gatherer

SETTING THE STAGE

Day 1

Bring popcorn for the students to snack on. If possible, collect some teosinte or a similar wild grass and compare it to present-day corn. Ask which plant looks like it would provide more food. Read aloud the section on the "Origins of Corn" in Chapter 3 and discuss.

PROCEDURE

Following the corn discussion, have students read the rest of Chapter 3 silently to themselves. Follow-up with a discussion. Set the stage for tomorrow by telling the students that they will be acting as a band of hunter-gatherers.

Day 2

Divide students into groups of 4-5, assigning the following roles to each group:

1. The older generation who didn't want to begin farming. Instead, they want to trade for corn.
2. The group that has secretly cultivated the corn plants.
3. The women who prepare the food in camp.
4. The men who have traditionally been good hunters.
5. A mixed age group of people willing to try farming.

Have the students prepare to play these roles. Remind students of the ramifications of each situation. For instance, a low yield from a hunting expedition might increase the group's willingness to try farming. Be sure to have the students consider their assigned person's feelings when acting out the role play, and what they would probably argue for and against. Allow them time to plan as groups.

Give the students the situation cards (3-1) in order as they proceed through the activity.

CLOSURE

Discuss as a group the appropriate portrayals of actions and feelings and assist them in seeing where they were not so appropriate. Discuss other reasons for the change in lifeway. This will review of the issues presented in the chapter.

EVALUATION

Observation of the role play for accurate portrayal of the issues and feelings which might have occurred as the Archaic people changed their lifeway to one of farming.

EXTENSIONS

- Provide some Indian or blue corn. Have students select which kernels would provide the best seeds for growing. (According to the text, these would be the larger ones.) Have students pick some of the smaller ones for comparison. Have the students grow the corn and keep track of which plants do best and what factors affect them.
- Students invent a game that could have been played using only the materials available to the Early Arizonans of this time period. Have them share this with the class.

LINKS

Discovering Arizona—Chapters 4 and 5

Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades, Lesson 2: "Culture Everywhere"

Lesson 13: "Pollen Analysis"

DISCOVERING ARCHAEOLOGY IN ARIZONA

Worksheet 2-2

SITUATION CARDS

<p>1. A few young people from your group show the new plant that they have tried growing over the last few seasons. They got it from people in the south who told them to plant some of the seeds instead of eating all of them.</p>	<p>5. The hunters go out for a week and only bring back 3 rabbits and 2 turkeys.</p>
<p>2. The hunters go out for a week and get 3 deer, 6 turkeys, and 15 rabbits.</p>	<p>6. Several older people volunteer to stay with the crop of corn, if it is planted, through the gathering season.</p>
<p>3. You went to your traditional place to gather mesquite beans and another group had already been there. There were very few beans left.</p>	<p>7. Birds eat all of the planted corn crop just before harvest.</p>
<p>4. A drought hits the area that you live in. You can only gather half the food you usually do.</p>	<p>8. You meet another group who has been cultivating corn. They have a great amount of corn stored up.</p>

Cut the above into "Situation Cards" for use with this lesson.