

Plants in Texas: Then and Now
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Lesson Overview: Students will compare and contrast the ways in which early people used plants in Texas in prehistoric times with the ways that modern man in Texas uses plants today.

Objectives: Students will

- Compare and contrast continuity and change over time
- Identify various plant materials, past and present
- Compare how people in different communities adapt to the physical environment, past and present
- Write to record, develop, and reflect on ideas

Materials: Computers with Internet access, Plants in Texas: Then and Now Activity Page

Activity:

Step 1: Introduce students to the different ways in which early man used plants by viewing Texas Beyond History's Lower Pecos exhibit on with pictures and text.. View [displays](#) of artifacts preserved in the dry caves and rock shelters of far west Texas, including a cane flute, a prickly pear pouch, a sewing needle, cords, nets, sandals, and baskets made from plant fibers. Also see the [artifacts from Ceremonial Cave](#) near El Paso, including an "[apron](#)" made of woven plant fiber cording, a fire hearth made yucca stalk, and spear shafts made of cane and wrapped with plant fibers.

Step 2: Students list different objects made from plants thousands of years ago on the activity page, and the purpose for each object.

Step 3: For homework, students go on a "scavenger hunt" of their own homes and record the modern plant-based materials they find on the Activity Page.

Step 3: Invite students to share their findings in pairs. Then, with the whole class, create a Venn diagram on chart paper that compares and contrasts early and modern people's uses of plants. Put common purposes/objects in the center of the diagram. Discuss what is different and what has remained the same.

Closure: Ask students to separate a blank sheet of writing paper into two columns. In separate columns, respond to the following situations:

Column 1: Imagine you are a hunter-gatherer in Texas 11,000 years ago. You are taking a journey and need a new pair of sandals. How will you get them? Where will they come from? How will they be made?

Column 2: Now imagine that you are a modern person in Texas in the year 2001. You are going camping and need a new pair of sandals. How will you get them? Where will they come from? How will they be made?

Extension: Challenge students to expand their “scavenger hunt” to their schoolyard or neighborhoods. Wildflowers, leaves, and acorns might be sketched into science journals and identified using field guides and Internet resources. Fallen leaves might be [pressed](#) and saved into a class-published field guide to local vegetation.

Extension: Practice [weaving](#) necklaces or baskets out of yarn or raffia.

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THEN

By studying the remains of things that people made out of plants, archeologists learn about how people lived daily life thousands of years ago in Texas. Look at the websites and list some organic artifacts that archeologists have discovered in the dry caves of west Texas:

Artifact	Purpose

NOW

What do we use plants for today? Take a tour of your home and see how many objects you can find that are made from plants. Circle any purposes for these objects that are the same as they were 11,000 years ago. What has changed and what has remained the same?

Artifact	Purpose

Plants in Texas: Then and Now
(Background for the teacher)

Archeologists know about early man's use of plants from several types of evidence. Some plant artifacts are well preserved. In the Southwestern United States, for example, the hot, dry desert conditions have preserved bits of food such as seeds and root fragments, as well as other items such as sandals, plants, mats, wood, and more. These tell us that early man used plants for food, shelter, medicine, clothing, and for making tools and weapons (including fire starters and atlatls).

Although most organic artifacts decay and disappear over time, archeologists can learn about how early man used plants by more indirect means. At the [Gault site](#) in Bell County, Texas, and other sites in areas where plant artifacts are poorly preserved, archeologists can: 1) study charred plant remains (e.g. seeds and nut shells; the burning or carbonization of organic remains tends to preserve them); 2) analyze plant pollen to determine what plants were there in the past and possibly used as a food source or other purpose; and 3) gather indirect evidence (e.g. the polish caused by plant cutting, seed gathering, and wood working that we find on stone tools. This polish is often called "sickle sheen.").

Vocabulary:

artifact: an object made by humans.

atlatl: (pronounced at-lat-ul) a spear thrower made of wood or bone.

fire hearth: a stick of wood or plant cane (i.e. yucca stalk) with holes drilled into it, and in which another stick is rapidly rubbed in order to make fire.

organic: made of living or once-living material.