



Sticks, Stones, Sinews and Stuff: How Early People Used the Environment to Meet Basic Needs

Students learn about the importance of string or cordage in the lives of ancient peoples.

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Grade Level	2-3
Duration	2-4 class periods

National Geography Standards

ELEMENT TWO;
PLACES AND
REGIONS

4. The physical and human characteristics of places

Arizona Geography Strand

Grade 2

**Strand 4 Geography
Concept 5 Environment
and Society**

PO 1 Identify ways in which humans depend upon, adapt to, and impact the earth (e.g., agriculture, structures, roads).

Grade 3

**Strand 4 Geography
Concept 5 Environment
and Society**

PO 1 Identify ways in which humans depend upon, adapt to, and impact the earth (e.g., farming, building structures and dams, creating transportation routes, overgrazing, mining, logging).

Concept 6: Geographic Applications

PO 2 Describe how physical and human characteristics of places change from past to present.

Other Arizona Standards

Grade 2

Strand 1 American History

Concept 1: Research Skills for History

PO 3. Recognize how archaeological research adds to our understanding of the past.

Concept 4: Revolution and New Nation

PO 1. Recognize that American colonists and Native American groups lived in the area of the Thirteen Colonies which were ruled by England
Grade 3

Strand 1 American History

Concept 1: Research Skills for History

PO 2. Recognize how archaeological research adds to our understanding of the past.

Concept 3: Exploration and Colonization

PO 4. Recognize how European exploration affected Native Americans in the Eastern regions (e.g., way of life, loss of land).

ELA Common Core Standards

Reading

Informational Text K-5

Range of Reading and Level of Text Complexity

2.RI.10 and 3.RI.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Foundational Skills

Fluency

2.RF.4 and 3.RF.4 Read with sufficient accuracy and fluency to support comprehension.

Sticks, Stones, Sinews, and Stuff

- a. Read on-level text with purpose and understanding.
- b. Read on-level [text (grade 2)] [prose and poetry (grade 3)] orally with accuracy, appropriate rate, and expression on successive readings.

Writing

Language Standards

Conventions of Standard English

2.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- a. Capitalize holidays, product names, and geographic names.
- d. Generalize learned spelling patterns when writing words.

e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

3.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words.
- f. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.
- g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Vocabulary Acquisition and Use

2.L.5 Demonstrate understanding of word relationships and nuances in word meanings.

- a. Identify real-life connections between words and their use.

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- b. Identify real-life connections between words and their use.

Overview

In order to survive, early people needed to know about the world around them. They needed to know where to find plants with edible fruits, nuts, and berries, when cacti blossomed and bore fruit, how to build shelter, make clothing, hunt and fish, make tools and weapons – all by using the resources around them.

Purpose

Children will understand that archaeologists cannot ask early people how they used the

materials available in their environment to meet their needs. However, experimental replication of artifacts can give students some insight into possible techniques of how early people were able to meet their needs.

Materials

- Assortment of rocks of many different sizes, shapes, and textures
- Bean pods, flowers, cactus fruits, nuts, berries, seeds, sticks, roots, grasses, animal hides, bones, antlers, samples of cactus, or pictures

Sticks, Stones, Sinews, and Stuff

of cholla, prickly pear, saguaro, ocotillo, yucca, or barrel.

- Student copies of Sticks, Stones, Sinews, and Stuff Story
- Raffia (optional, but available at most craft stores)
- Chart paper, writing paper, drawing paper
- Markers, crayons, paints, colored pencils, etc.
- Teachers wishing additional information on the general topic are welcome to visit the online Paths of Life Exhibit at:
http://www.statemuseum.arizona.edu/public/pdf_pp.shtml and specifically Children's Activities for Grades K-4 at:
<http://www.statemuseum.arizona.edu/public/ed/children.pdf>

Objectives

Students will be able to:

- Work cooperatively to create "artifacts."
- Draw a picture to show what their "artifact" could have been used for.
- Write a caption of one to two sentences to explain their pictures.
- Read and illustrate the book "Sticks, Stones, Sinews and Stuff."

Procedures

SESSION ONE

Before class, make an overhead transparency or copy the story "Sticks, Stones, Sinews and Stuff" on chart paper.

1. Brainstorm students' basic needs with them and write responses on chart paper. Discuss the differences between wants and needs. What do they REALLY need to survive?
2. Talk about what they think early people needed. Ask, "Could they go to the drinking fountain if they were thirsty? Could they go to the grocery store when they were hungry? Why couldn't they have pizza? What if they were cold, or hot?"

3. Discuss with the students the items that would be necessary for hunting, gardening, and sewing their own clothing. Explain that there will be a need for string or some type of cordage in order to accomplish these tasks.
4. Ask how they think string was "invented."
5. Read the chart/overhead together. Use decoding strategies necessary for comprehension. Discuss.
6. Go for a nature walk outside and collect "stuff" to make artifacts. Assign the students to think of ways the stuff they collected can be used, and to observe how many ways they see string being used.

SESSION TWO

1. Discuss the assignment with children.
2. Read the story from session one again.
3. Ask the children if they would like to experiment with making string.
4. Give them pieces of raffia or grass collected from the schoolyard or other outside area and pretend they are pieces of grass from down by the river. (If necessary, use yarn or string and a lot of imagination.)
5. Using the materials gathered from session one, decide what could be used for food, shelter, clothing, tools, or weapons. For example, river rocks are smooth and could be used for grinding seeds into flour, for protection, for playing games, or for building shelter.
7. Give them time to experiment with what they have, and what they need to make their artifact. Explain that early people couldn't always find what they needed either.
8. After drawing a picture of how their artifacts could have been used, the children need to write a sentence describing their picture.
9. Distribute the booklet "Sticks, Stones, Sinews, and Stuff" that was introduced on the first day.
10. Each student is responsible for completing the illustrations for "Sticks, Stones, Sinews and Stuff." (The booklet is in the student materials for this lesson, and is the same one used for

Sticks, Stones, Sinews, and Stuff

the chart reading at the beginning of the lesson on the first day.)

11. Each book can be used for shared reading, guided reading, and independent reading. Look for synonyms, antonyms, homonyms, rhyming words, compound words, and other parts of language that are being taught.

Assessment

Students should describe how the artifacts they created are used and they should draw a picture.

Each student will be responsible for writing a sentence, using correct spelling and punctuation, to describe their artifacts and their uses.

Each student is responsible for completing the illustrations for "Sticks, Stones, Sinews and Stuff."

Each student will read the story with 80% accuracy for decoding and 100% for comprehension. Their sentences can be scored for conventions.

Extensions

Have the children spend a day pretending to be early people. Have the children take their shoes and socks off. Walk around outside. Ask, "What did they use for shoes? Do you think they had tougher feet?"

Children can use their cordage to tie sticks together for shelter, make tools, shoes, tie pieces of animal skins together.

Try grinding seeds into flour. See how long it takes to shell enough sunflower seeds to feed the class. Let them use their imagination.

Sources

The following books are available from National Geographic:

Bricks, Wood, and Stones written by Mario Lucca

People Live in the Desert written by Belle Perez