

The Kansa: Adapting to the Environment

Overview: In this two-day activity, students will learn that people adapt their homes to fit the environment they live in. Using pictures and a map, students will follow the Kansa as they moved to Kansas and see how they adapted their homes to a new environment. A picture book is used to look at many of the different environments on earth and the types of homes people build in them. On the second day, students will build a home from resources provided and then adapt it as their resources change.

First Grade Standards:

History (2004):

Benchmark 2, Indicator 4: The student will compare types of shelter used by American Indians in Kansas over time (e.g., grass lodge, tipi, earth lodge, frame house).

Benchmark 4, Indicator 3: The student asks questions, shares information, and discusses ideas about the past using resources such as maps, photographs, books, and people.

Geography (2004):

Benchmark 5, Indicator 2: The student describes how the physical environment impacts humans (e.g., choices of clothing, housing, crops, recreation).

Objectives:

Content

- The student identifies how the physical environment affects the types of houses that are built.
- The student identifies different environments.
- The student identifies on a map where the Kansa migrated from and where they lived in Kansas.
- The student identifies one change in the physical environment the Kansa encountered.

Skills

- The student uses pictures to determine different environments and the houses that were found in those environments.
- The student uses a map to trace the migration of the Kansa Indians to the area they moved in Kansas.
- The student uses pictures and discussion to understand how the type of houses built by the Kansa changed when they moved to Kansas.

Essential Questions: How does the physical environment impact the type of houses people build?

Materials Needed from the Trunk:

- Book, *Houses and Homes* by Ann Morris
- 9 Photographs:
 - #1 – Tall Grass Environment

- #6 – People Standing by Their Grass House
- #7 – Winter in Northern Kansas
- #11 – Completed Earth Lodge
- #14 – Tipi Village
- #15 – Bison
- #21 – Kansa Bark House
- #22 – Map of Kansa Migration West

Other Materials You Need to Supply:

Materials for the day two home building activity. See the activity description for more details and ideas of what to gather and assemble for this activity.

Advance Preparation Needed:

- On page 20 of the book *Houses and Homes* by Ann Morris there is a picture of a little boy with a bare bottom. If you think this will cause a problem with the lesson use a sticky note to cover this before you read the book to the class.
- If you plan to do the “Home Building Activity,” gather materials and prepare the bags. See the directions for this activity for information on what is needed.

Vocabulary:

Natural Resources = Materials found in nature that are useful or necessary for life. Water, forests, and minerals are natural resources.

Content Background for the Teacher:

Kansas is named after the Kansa Indians. The name Kansa has a variety of spellings that include Kanza, Konza, and Kaw. In this lesson, the word Kansa will be used.

At one time the Kansa Indians lived east of the Mississippi River and north of the Ohio River. The Kansa were pushed west as Indian nations from the east moved into the area where the Kansa lived. The Kansa moved down the Ohio River and then westward across the Mississippi River. By the late 1600s, the Kansa had established villages on the west side of the Missouri River in what is today Doniphan County, Kansas.

When the Kansa lived in heavily timbered valleys of the Ohio and Missouri rivers their homes were built in the eastern woodland style. They were constructed mainly of a pole frame covered with a thick, mat-like fabric of leaves, bark, and branches.

As the Kansa migrated westward onto the grass-covered plains, they no longer had enough trees available to continue building in this style. Instead they adapted to the environment. They used the natural resources available to them on the plains. When trees were not available to build their traditional bark houses they built earth lodges. They continued to build a pole frame, but they covered the wooden poles with sod and earth instead of bark. These earth lodges resembled those of Indian tribes already living on the plains of Kansas.

The Kansa lived in northeastern Kansas where earth lodges were built and not grass houses. The earth lodges kept people warmer in the winter than the grass houses of southern Kansas.

Lesson:
Day One

<p>1. Introduce the topic of the lesson</p> <ul style="list-style-type: none"> the connection between the environment and housing styles, and using Indian housing styles from Kansas to explore this topic. 	<p><i>Today we're going to talk about the environment, and we're going to talk about houses.</i></p> <p><i>Who can tell me what the environment is? [make sure plants and animals are mentioned]</i></p> <p><i>People who live in different types of environments build different types of houses.</i></p>
<p>2. Read the <u>book</u>, <i>Houses and Homes</i> by Ann Morris. Discuss the types of environments shown in the book and how the houses fit the environments they are built in. For example:</p> <ul style="list-style-type: none"> where there is a lot of water, houses can be boats; where it is hot, people let the air in to keep it cooler; where it is cold, they fill the cracks to keep it warm; and people build with “what is handy” like wood, stone, straw, or mud. 	<p><i>I have a book about houses and the environment. The title of this book is <u>Houses and Homes</u>. The author of the book is Ann Morris.</i></p> <p><i>Let's read the book and see what we learn about houses and the environments they are built in.</i></p> <p>[Discuss the connection between housing and the environment as you read the book. Make sure to include houses for warm/cold environments and building with “what is handy.”]</p>
<p>3. Connect the discussion of the book to the houses Indians built in Kansas a long time ago.</p> <ul style="list-style-type: none"> The environment provides us with natural resources. 	<p><i>In the book we read that houses built for warm places are different than houses built for cold places. Some environments are hot and some are cold. People built houses differently for different kinds of environments.</i></p> <p><i>In this book we also read that people built with “what is handy” like wood, stone, straw, and</i></p>

<ul style="list-style-type: none"> • Long ago Indians used natural resources to build their houses. 	<p><i>mud. Wood, stone, straw, and mud are all examples of natural resources. Can anyone tell me what a natural resource is?</i></p> <p><i>Some people build houses with natural resources. Different environments provide different natural resources. Different natural resources mean different types of houses. Someone that has a lot of stones will build his/her house differently than someone that has a lot of grass. [Pages 18 and 19 illustrate this.]</i></p>
<p>4. Discuss the relationship between the natural resources Indians in Kansas had available and the types of houses they build. Use <u>photos #15, 14, 1, 6, 7 and 11.</u></p> <ul style="list-style-type: none"> • Photo #15 – Bison • Photo #14 – Tipi Village • Photo #1 – Tall Grass Environment 	<p><i>Indians lived in Kansas a long, long time ago. They built their houses to keep them warm in the winter and cool in the summer. They built their houses from natural resources.</i></p> <p><i>Look at this picture.</i></p> <ul style="list-style-type: none"> • <i>Do you see trees?</i> [no] • <i>Do you see grass? Is it tall or short or in between?</i> [in between] • <i>What else do you see?</i> <p><i>This is a picture of western Kansas. In western Kansas there were very few trees. There was grass that was not too long or too short. It was in between. And, there were bison.</i></p> <p><i>When the Indians lived there a long, long time ago they built houses that looked like these. These houses are called tipis. A tipi was made by covering a wooden frame with bison hides. It took a lot of bison hides to make this many tipis. Do you think there were a lot of bison living by the people in this village?</i> [yes]</p> <p><i>The Indians that lived in tipis made their houses from natural resources.</i></p> <p><i>Here is another picture of Kansas.</i></p> <ul style="list-style-type: none"> • <i>Are there any trees in this picture?</i> [the tips of one or two trees are visible] • <i>Do you see grass? Is the grass tall or short?</i> [tall]

<ul style="list-style-type: none"> • Photo #6 – People Standing by Their Grass House • Photo #7 – Winter in Northern Kansas • Photo #11 – Completed Earth Lodge 	<p><i>A long, long time ago Indians lived in this part of Kansas too. In this part of Kansas there were only a few trees, but there was a lot of <u>very</u> tall grass.</i></p> <p><i>The Indians that lived in this part of Kansas built houses that looked like this. They used natural resources to build their houses. They built houses covered with grass. Why would these people build their houses out of grass? [Lots of very tall grass grew there.]</i></p> <p><i>I have one last picture of Kansas.</i></p> <ul style="list-style-type: none"> • <i>Do you see trees in this picture? Are there a lot of trees or just a few trees? [few]</i> • <i>Do you see grass? Is it tall grass or short grass or in between grass? [in between]</i> • <i>Do you see any bison in this picture? [Yes, a small herd off in the distance.]</i> • <i>How does this picture make you feel? [cold] Why does it make you feel cold?</i> <p><i>A long, long time ago this is the kind of house Indians built in this part of Kansas. This house is called an earth lodge. Lodge is another word for house. Look at this picture and think about the name of this house, earth lodge. What natural resource do you think it is made with? [earth/dirt] The Indians that lived here only had a few trees, but they had a lot of dirt and sod. Can anyone tell me what sod is? They had the natural resources to build earth lodges like this one. It kept them cool in the summer and warm in the winter.</i></p>
<p>5. Introduce the idea of adaptation in housing.</p>	<p><i>We know from these pictures that a long, long time ago Indians used natural resources to build their houses. What if the grass house people had to move someplace where there was no tall grass? Do you think they would stop building houses, or do you think they would change the way they built their houses? [change]</i></p> <p><i>They would change the way they built their houses. They still needed a house to keep them warm in the winter and cool in the summer. They needed a house to get inside during bad storms. They did not stop building houses because they needed houses. The Indians did change how they built their houses. If they couldn't find tall grass they used something else. This is called adaptation.</i></p>

6. Explore the adaptation in housing using the Kansa. Use photos #21, 22 and 11.

- **Photo #21** – Kansa Bark House

Kansas has a very good example of adaptation. The state of Kansas is named after the Kansa Indians. A very, very long time ago the Kansa Indians did not live in Kansas. They lived in a different part of the United States. They lived where there were a lot of trees.

The Kansa Indians built their homes from natural resources. The Kansa lived where there were a lot of trees. What natural resource might they have used to build their houses? [trees]

They built houses from wooden poles and tree bark. Their houses were called bark houses. This is a picture of a Kansa bark house. Can you see the big pieces of bark on this house? The Kansa put poles on top of the bark to make sure the bark didn't blow away. The Kansa Indians lived in villages. Each village had a lot of people and a lot of houses. Do you think the Kansa Indians needed a lot of trees to build a lot of bark houses? [yes]

The Kansa used many trees to build their houses because there were many trees growing all around them. The Kansa had the natural resources to build a lot of bark houses. Many other people thought this looked like a good place to live too. Soon there were not enough resources for everyone. The Kansa moved west. They moved to Kansas.

- **Photo #22** – Map of Kansa Migration West

Look at this map of the United States. This is a map showing where the Kansa Indians used to live. It also shows where they moved to when they left their homes and went west. Can you see someplace where a lot of trees might grow? This is where the Kansa Indians lived before they came to Kansas.

Find Kansas on this map. Does it look like there were a lot of trees or a just a few trees in Kansas? [Just a few.]

The Kansa Indians moved from a place with a lot of trees to a place with just a few trees. They didn't have enough trees in Kansas to build a lot of bark houses. The Kansa did not stop building houses, though. They changed how they built them. They used the natural resources they had handy to build their new houses.

The new environment the Kansa moved to was different from the old environment they had left.

<ul style="list-style-type: none"> • Photo #11 – Completed Earth Lodge 	<p><i>Their old home had lots of trees. Their new home had few trees. The Kansa could have given up and said, “We can’t build houses here, there aren’t enough trees!” But they didn’t. They said, “How can we build houses for ourselves with what we have in this new environment?” They adapted their homes to the natural resources they found in their new environment.</i></p> <p><i>In Kansas they saw that some of the Indians built earth lodges like this one. The Kansa Indians saw that there were not many trees, but there was a lot of earth and sod. The Kansa Indians started to build earth lodges in their new Kansas home.</i></p> <p><i>Adapting does not mean changing everything. Adapting to a new environment means changing only what you need to change. Look at the pictures of the bark house and earth lodge again.</i></p> <ul style="list-style-type: none"> • <i>The bark house and earth lodge were the same in some ways. They both had one door. They both had no windows. They both were round. If you could go inside you would see they look a lot alike inside, too. They both had beds. They both had a place for a fire. They both had a smokehole.</i> • <i>The doors, the shape, the inside – these are the same. The Kansa Indians kept these the same when they built earth lodges. They just covered their houses with earth instead of bark. When the Kansa Indians moved to Kansas they only changed what they needed to change.</i> <p><i>The Kansa adapted to a new environment by building houses from natural resources they found. They used what was “handy” like the people in the book we read.</i></p>
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Day Two

The following activity may be used to reinforce the concept of building with available resources and adapting structures to the resources of a new environment.

- Divide students into groups of fours.
- Give each group a bag of materials with which to build a home. Students do not need to use all the materials in the bag. These materials represent resources found in their environment. No two bags should be the same.

- The assignment is to work cooperatively within each group to build a house with available materials and then adapt their house to a new environment. Each group will share their house with the class. Set a time limit for this activity.
- The assessment will be on each group's work and presentation. When the time is up walk around the room to see each of the homes. Discuss how each group built a home with the resources in its environment and then adapted it to work in a new environment.
- The bags should include a variety of items, but each bag needs to include glue and tape. After each group has completed its first house give it a second bag. The second bag should be basically the same with ONE item changed. For example, replace the Popsicle sticks with straws or toilet paper tubes, replace paper with fabric or thin cardboard or cotton balls. Do not replace the glue and tape.
- Ideas for what could be put in the bags include:

First Bag	Second Bag
pieces of newspaper, Popsicle sticks, glue and tape	pieces of newspaper, toilet paper tubes, glue and tape
several toilet paper tubes, Popsicle sticks, glue and tape	old greeting cards, Popsicle sticks, glue and tape
strips of cloth, Popsicle sticks, glue and tape	strips of cloth, straws, glue and tape
cotton balls, toilet paper tubes, glue and tape	paper towels, toilet paper tubes, glue and tape
cloth piece, straws, glue and tape	cloth piece, toilet paper tubes, glue and tape