

INDIGENOUS ARCHITECTURE

AUDIENCE

Students grades 5 - 12

TOPICS & THEMES

Indigenous architecture
 Responds to Biennial themes of Rights, Civic Life

SKILLS

Using the design process to solve problems
 Compare and contrast based on observation and research

MATERIALS

Pencils
 Paper for sketching
 Handouts A and B
 Markers, crayons, or other drawing materials (optional)

STANDARDS

SS.G.3.6-8.LC
 SS.G.1.6-8.LC
 SS.IS.1.6-8

Overview

Inspired by the Chicago Architecture Biennial contributors Santiago X and the American Indian Center, this lesson introduces students to the architecture of North America's earliest residents using creative design and drawings. Students will design a structure based on a design problem and specific criteria.

Background Information

Native Americans built structures that were much more complex and varied than the housing stereotypes that persist today. By the 17th Century, approximately 300 different Native American groups existed in North America. Their structures followed the designs and building methods that were passed down from their ancestors. Native Americans constructed different building types for different purposes. Structures differed depending on the season and the building's use, such as for religious practice, government, storage, work, or living.

Why do the Native American structures look the way they do?
 Primarily the buildings were influenced by:

- natural building materials available in the region
- climatic conditions
- technological advancements

BIENNIAL CONNECTION:

HAYO TIKBA (THE FIRE INSIDE)
By Santiago X (Chicago, IL)

This project presents a new take on a traditional indigenous shelter to explore how our homes reflect our societies and how indigenous practices have changed over time.

View the project online at: chicagoarchitecturebiennial.org/current/contributors/santiago_x

Land Acknowledgment By American Indian Center (Chicago, IL)

This project looks at how acknowledging the indigenous peoples that lived and continue to live on the land our cities occupy can lead us to think about our own relationship to the environment.

View the Biennial land acknowledgment online at: chicagoarchitecturebiennial.org/current/land_acknowledgement

- social and political structure of the tribe
- religious beliefs
- food needs
- tribe views about the world

Activity Steps

Design a structure based on criteria. Note: DO NOT start this lesson by mentioning Native Americans or Native American structures. With preconceived ideas students may simply replicate stereotypical Native American structures. Instead, present your class with a design problem. They will come up with original solutions. Encourage them to be creative with the resources they will be given when faced with the task of making a home for their family.

1. This activity begins with a challenge for your students—create a solution to a problem based on certain criteria. The challenge is to design a structure for eating, sleeping, and relaxing that fulfills the criteria on the list they will be given. Introduce the concept of ‘criteria’ (resources and needs) to your students.
2. Divide the class into groups. Give each group one of the criteria lists from Handout A. Have each group sketch a design for a structure to be used for eating, sleeping, and relaxing. The structure must use only the resources indicated and must fulfill the needs shown. Students should not make any other assumptions. (Depending on the time and resources available, groups can build a small model of their designs.) Have each group write a short description of their solution.
3. Give each student Handout B. Have each group read the description of their structure and briefly tell the class how their structure fulfills the criteria they were given. While one group is making their presentation, the other groups should listen and write one or two words in the boxes of Handout B to record how the presenting group solved the problem.
4. Ask students what they know about structures built by Native Americans. Do the designs they created have any similarity to what they imagine Native American structures to be like? Have students research images of the structures listed below and compare to their sketches. Did anything about the different types of dwellings surprise students?

VOCABULARY

Acknowledgment:

Acceptance of the truth or existence of something; the action of expressing or displaying gratitude or appreciation for something; the action of showing that one has noticed someone or something.

Architecture: The art or science of designing and creating buildings and other structures or spaces.

Indigenous: Produced, living, or existing naturally in a particular region or environment. Indigenous peoples (also known as First peoples, Aboriginal peoples, or Native peoples) are the original inhabitants and caretakers of a given region, as opposed to groups that have settled, occupied or colonized the area more recently.

Migration: To move from one country or place to live or work in another.

Natural world: Consisting of plant and animal life and the surrounding environment.

Stewardship: The activity or job of protecting and being responsible for something, often used in reference to taking care of the natural environment.

OTHER VOCABULARY

- Chickee
- Cliff dwellings
- Coniferous trees
- Deciduous trees
- Earth lodge
- Growing season
- Igloo
- Longhouse
- Mound construction

Extensions

Look at and discuss Santiago X's project *HAYO TIKBA (THE FIRE INSIDE)*. How is he responding to the indigenous Architecture? What do you think he is trying to communicate with his piece? What do you think about his modern interpretation?

As a class, match the environmental conditions of each North American region with the criteria on a group list.

- Region 1 similar to Great Lakes and Northeastern Woodlands Region
- Region 2 similar to Southeast Region
- Region 3 similar to Great Plains Region
- Region 4 similar to Southwest Region
- Region 5 similar to Pacific Northwest Region
- Region 6 similar to Arctic Region

Focus on the wigwam and the mound construction once found Illinois. Discuss the connections between the solutions the groups found and the real-life architecture. Have students talk about the similarities and differences between their own designs and the Native American structures. Use the Discussion Points to guide your questions.

Structures List

- Great Lakes Wigwam
- Great Plains Tipi
- Great Plains earth lodge
- Northeastern Longhouse
- Pacific Northwest Plank house
- Southeast Mound construction
- Southeast Chickee
- Southwest Pueblo
- Southwest cliff dwellings
- Arctic region Igloo

DISCUSSION QUESTIONS

- In what ways do Native American structures work with the natural environment?
- What kind of materials does the structure use? Why? (only what is available in that region)
- How many families would typically live in each type of structure? Why?
- Which structures were designed to be easily movable? Which were not? Why?
- In what ways does the structure help to keep the people inside cool or warm?
- Is the structure strictly functional or are decorative elements used?

This activity has been adapted from the Chicago Architecture Foundation's K-8 curriculum Schoolyards to Skylines. Available at architecture.org/learn

Cut out and provide each group one of the criteria lists below to begin their sketching. Lists include resources available and needs of the people for a structure in each region.

<p>REGION 1</p> <p>Plant life: Many large deciduous trees, many coniferous trees 5-month growing season</p> <p>Animal life: Deer, bear, wolf, wood-chuck, squirrel, raccoon, beaver, duck, turkey, freshwater fish</p> <p>Climate: Hot / warm summers and cold winters</p> <p>Family structure/people: One family for each dwelling</p> <p>Must the structure be moved often, or can it stay in the same location over time? It must be moved from one location to another</p> <p>Land characteristics: Many freshwater lakes and rivers, some flat areas, some high rolling hills, both large and small rocks</p>	<p>REGION 2</p> <p>Plant life: Some deciduous trees, many coniferous trees 10-month growing season</p> <p>Animal life: deer, fox, muskrat, bobcat, hawk, heron, alligator, saltwater fish, freshwater fish</p> <p>Climate: Hot summers and mild winters</p> <p>Family structure/people: One family for each dwelling</p> <p>Must the structure be moved often, or can it stay in the same location over time? It can stay in the same location over time.</p> <p>Land characteristics: Saltwater and freshwater marshes, some freshwater lakes and rivers, some flat land useful for farming, some hilly areas</p>	<p>REGION 3</p> <p>Plant life: Only a few deciduous trees, some coniferous trees • 3- to 4-month growing season</p> <p>Animal life: Buffalo, coyote, elk, deer, bighorn, sheep, gopher, pheasant, turkey, freshwater fish</p> <p>Climate: Hot summers and cold winters</p> <p>Family structure/people: One family for each dwelling</p> <p>Must the structure be moved often, or can it stay in the same location over time? It must be moved often.</p> <p>Land characteristics: Some rivers, mostly flat open areas with grass</p>
<p>REGION 4</p> <p>Plant life: Cactus, grassland, some coniferous trees 11-month growing season</p> <p>Animal life: Rabbit, snake, mule, deer, kangaroo, rat, roadrunner, freshwater fish</p> <p>Climate: Hot and dry most of the year, cold winters and snow in some higher elevations</p> <p>Family structure/people: Several families for each dwelling</p> <p>Must the structure be moved often, or can it stay in the same location over time? It must remain in the same location over time.</p> <p>Land characteristics: Flat open areas with deep canyons, some rivers</p>	<p>REGION 5</p> <p>Plant life: Mostly coniferous trees, only a few deciduous trees 10-month growing season</p> <p>Animal life: Deer, elk, antelope, raccoon, duck, geese, saltwater fish, freshwater fish</p> <p>Climate: Cool summers and mild winters, lots of rain, snow in the mountains</p> <p>Family structure/people: Many families for each dwelling</p> <p>Must the structure be moved often, or can it stay in the same location over time? It must remain in the same location over time.</p> <p>Land characteristics: Many mountains away from the coastline, some flat land for farming, many rivers and lakes</p>	<p>REGION 6</p> <p>Plant life: Some coniferous trees, small bushes 2-month growing season</p> <p>Animal life: Bear, moose, caribou, fox, otter, whale, walrus, falcon, saltwater fish, freshwater fish</p> <p>Climate: Short cool summers and long cold winters, very windy all year</p> <p>Family structure/people: One family for each dwelling</p> <p>Must the structure be moved often or can it stay in the same location over time? It can stay in the same location and also be moved, if needed</p> <p>Land characteristics: Mountains, coastline area, many flat open areas with some rolling hills</p>

How does the design of the structure work with these resources and needs? *Distribute one handout per group.*

PLANT LIFE	ANIMAL LIFE	CLIMATE
FAMILY STRUCTURE	MOVEABLE OR NOT?	LAND CHARACTERISTICS