

A Cabin for the Whole Family! Learning Plan for the Third Grade

Overview

Families in the mountains had to rely on natural resources to build their homes. In the mountains, homes were shelters from pests, animals, and cold or inclement weather. This learning plan is intended to serve as a supplement to a tour through the Foxfire Museum. Use the following activities to help students learn core curriculum while exploring the history of the mountain region. Feel free to adapt the activities to meet the learning goals of your classroom, or other grades!

Learning Outcomes*

The student will apply classroom-based learning skills to real-life scenarios. Student will explain similarities and differences between pioneer mountain life and today.

Georgia Standards of Excellence*

- **MGSE3.MD.6** Measure areas by counting unit squares
- **MGSE3.MD.7** Relate area to the operations of multiplication and addition.
- **MGSE3.MD.8** Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.
- **S3L1:** Obtain, evaluate, and communicate information about the similarities and differences between plants, animals, and habitats found within geographic regions (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) of Georgia.
- **ELAGSE3RL1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **ELAGSE3RI2:** Determine the main idea of a text; recount the key details and explain how they support the main idea.

Estimated Time

45-60 minutes

Materials

- Ruler
- Pencil
- Colored pencils
- Drawing paper

Activity/Procedures

Part I: House raising

Foxfire students, way back in the 1960s and 1970s, talked with elders in their community about growing up in log cabins like the ones you visited at Foxfire. Aunt Arie Carpenter, who lived in western North Carolina, told Foxfire about when she and her husband Ulysses built their home. They had what was called a “house raising,” where lots of people from their community came over to help build the house by hand! Read her story and answer the following questions:

Foxfire: We’d also like to learn about things like house raisings and barn raisings. Do you remember when people used to do that? The neighbors would come and help build?
(8:45)

Aunt Arie (AA): We had house raisin’ to raise this house.

Foxfire: Can you tell us about it?

AA: We had a house, we had a raisin’ to raise the barn. Well, we’s gonna have a log—you have to go to the mountain and get the logs first, you know, stake ‘em in. And then get your, your nails—whatever you want out—ready, and then ask in a whole lot of men. You know, a whole lot of men to come and raise your house. And there’s four men, four good men with good axes. And they have to know what to do. They have to cut a—now I can’t name the notches, but, you know, had notches like one of them. Now I knowed them, but I still can’t name them. Well, each men—four men—took each corner of the house. And another man stood on the ground and got them logs ready and rolled them up there while they notched them and put them down. Well next thing you know, got up the squares of the house. And if you had your rafters here, lots of times you didn’t have them over here, why somebody’d lay them rafters off—somebody that knows how, a carpenter knows how—laid them rafters off a certain way, and cut the notches in the rafters and nailed them together at the top, then put them down here and leave them alone. I’ve helped with all that. Helped with every bit of it. And same—that was the house. That was the house, that was the house. Now let me tell you about raisin’ the barn. This house ain’t hard to raise like a barn. See the house is made out of little logs. And the barn has to be made out of big logs. Then the barn’s got four big stalls in it. Took eight men for four stalls, to get every—maybe more, I don’t know. Done the same way with it, every man taking his, you never hardly got the barn raised in one day though.

Foxfire: No?

AA: No, they’s too big, too much.

Foxfire: Well, when you had these, did just the men come or did the family come, the whole family come over to help?

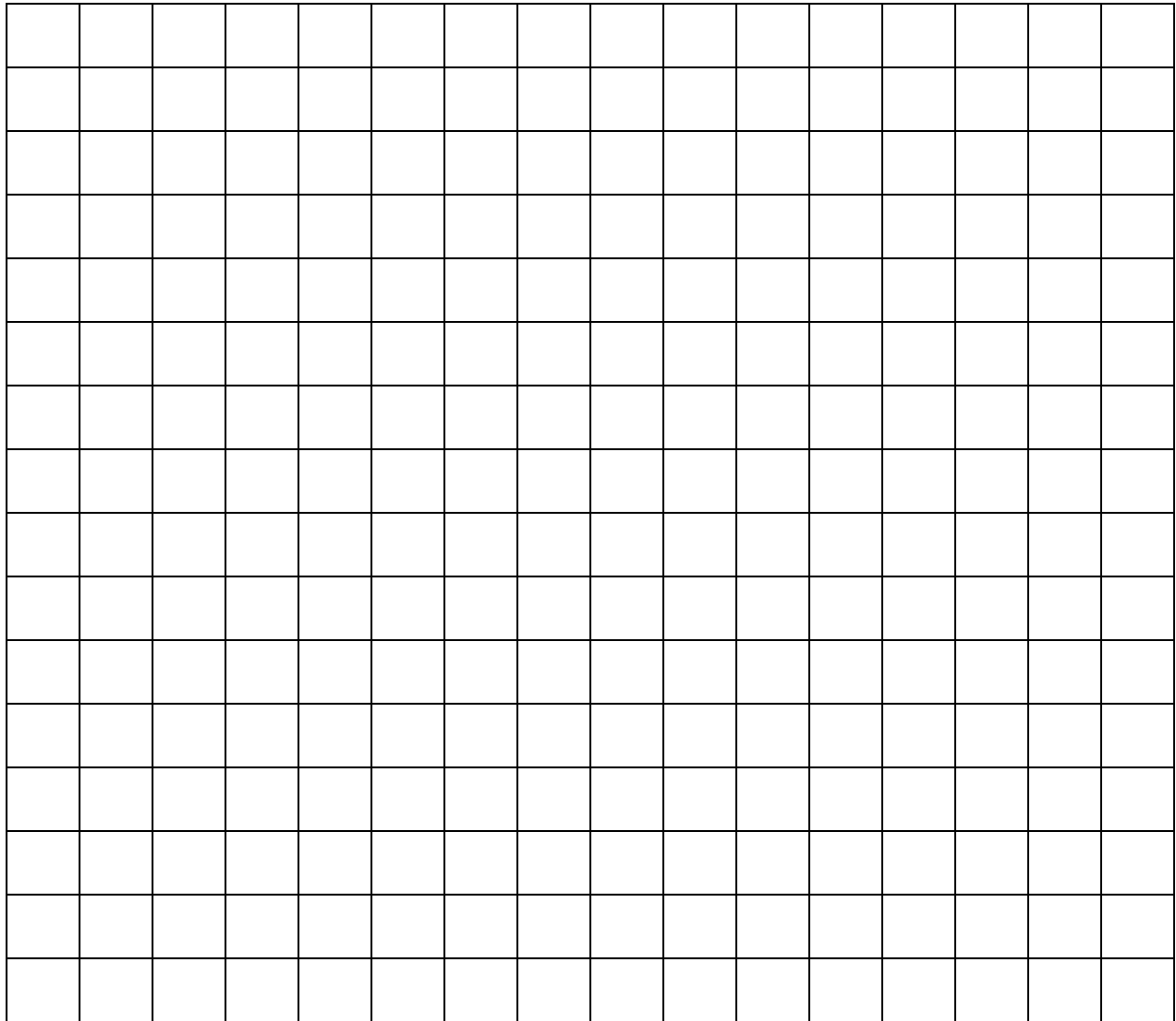
AA: Well, some of the women would come help cook.

Foxfire: Yeah.

AA: But now, the women never come help with the barn hardly ever. Just the men come.”

- What did settlers in the mountains need to make a house?
- Based on what Arie says, did men, women, or both help build the house?
- How long did it take to build a house?
- List one difference between a cabin like Arie describes and your own home.
 - What if you had to share a bed on the floor with your siblings?
 - What would it be like to live in a home without windows?
 - What if your walls were made of clay and wood? How might weather affect the cabin?
 - How would you feel if you had to share a room with your parents and grandparents?

Use the following grid to complete the rest of the activity.



1. Most cabins were built as squares or rectangles, with right angles at every corner. These are known as quadrilaterals. Above is the floorplan for a 16 foot x 16 foot cabin. This means that each side of the cabin is 16 feet long. Each square represents 1 foot x 1 foot. What kind of shape is this?
2. If each side of the cabin is 16 feet long, what is the perimeter?
3. If the small squares represent 1 foot x 1 foot, what is the area of a small square? Using the answer you found for the above question, how might you figure out what the total area for the cabin floor is? Find the area of the cabin.

Part II: Now that your cabin is built, it's time to start adding things! For each question, color the squares with a different shade for each item. e.g. use a red pencil for the bed and a green for the fireplace.

1. Cabins in the mountains didn't have windows because glass was expensive and not available outside of large towns. Instead, most cabins had two doors. The opening for the door is 3 feet long by 1 foot wide. Color the blocks for your doors in blue. Remember, the door should go along outside walls!
2. Every home had a fireplace to serve as a heat source and a way to cook food. If a fireplace is 4 feet long and 2 feet wide, where would you put it? Shade in the squares for your fireplace in red. Remember, a fireplace has to be along an outside wall so that you can have a chimney!
3. Now, make space for a bed that is 5 feet wide and 7 feet long. It might be a good idea to keep it away from the fireplace, so you don't get too hot while you're sleeping! Color your bed in green.
4. Finally, let's place a table in your cabin. Your family dining table is 3 feet wide and 5 feet long. Color the table orange.
5. How much space do you have left over? Count how many squares you have left. What else would you want inside your cabin? Remember--no electricity or running water! What would help your family thrive in the mountains? Color in the spaces for your additions.
 - Spinning wheel: 1 foot by 2 feet, purple
 - Loom: 4 feet by 4 feet, yellow
 - Chair: 1 foot by 1 foot, grey
 - Trunk: 3 feet by 1 foot, black
 - Cupboard: 2 feet by 3 feet, brown
6. Do you think a family of four could live comfortably in this cabin? Why or why not? Support your claim with evidence.
7. *Optional*: Provide students with Lincoln logs and have them experiment with building structures of different shapes. Find the perimeter and heights of these cabins.

Part III: Mountain Habitats

Did you know that Southern Appalachia is one of the most biodiverse regions in the world? There are hundreds of species of edible plants, and the region is home to the most types of salamanders in the world! The following activity will introduce you to the ecology of the mountains and how humans rely on the environment.

Before we start, let's define a few words!

What is...

Biodiversity—the existence of many different plants and animals in a region or environment

Carnivore—an animal that only eats other animals

Climate—the weather patterns of a region

Ecology—the relationship between living things and their environment

Environment—the natural world

Habitat—a place where a plant or animal lives and grows

Herbivore—an animal that only eats plants

Medicinal—used to prevent illnesses, cure sickness, or relieve pain

Microclimate—the climate of a small, restricted area

Omnivore—an animal that eats both plants and other animals

Organism—a living thing

A habitat is where a living thing makes its home—just like you have a home! Are you an organism? What is your habitat like?

Habitat Vocab

C P H G F E Q M N E C E Z M Y
T A E R O V I N M O T U E M T
M D R F T A O C X A L D T C I
P S B N F C O F M Y I O A L S
B D I A I D V I G C I F M U R
G D V N W V L X I P C A I N E
Y V O B A C O N B P M M L Y V
R B R G O G A R B G W T C D I
Q Z E R T L R N E L Y D Y F D
C D C E D M W O S G R A G W O
I I O E N V I R O N M E N T I
M Z S Z K Q L L U H G F B Z B
S H V B U J O H A B I T A T V
Q I B Z U C N W P V P D M F S
M S F C E G W L L M V B N V F

Biodiversity

Carnivore

Climate

Ecology

Environment

Habitat

Herbivore

Medicinal

Microclimate

Omnivore

Organism

Families living in the mountains relied on natural resources to create their homes. They used different types of trees to build their houses and make furniture. Special trees grow in the Appalachian mountains—these are known as *endemics*, a plant or animal that only grows in a specific place. Let’s learn more about these trees, their habitats, and how humans use them!

Use the blank space to the left of the description to draw a picture of the tree’s leaf!

	<p>Tulip Poplar (<i>Liriodendron tulipifera</i>)</p> <p>These trees grow large and straight, and are handy for building structures or larger furniture. These trees usually grow between 80 and 120 feet, but the tallest has been recorded at over 190 feet!</p> <p>Habitat: moist, well-drained soil</p> <p>Uses: cabin logs, foundations, flooring, rafters, furniture, ox yokes</p>
	<p>Black Locust (<i>Robinia pseudoacacia</i>)</p> <p>Locust is a tough, hard wood that naturally resists termites and rot.</p> <p>Habitat: moist, well-drained soil</p> <p>Uses: fences, railroad ties, pegs, foundations</p>
	<p>Flowering Dogwood (<i>Cornus florida</i>)</p> <p>Dogwood is a tree mostly known for its beautiful spring flowers, but this species also had several medicinal uses for Native Americans. Its dense, hard wood is ideal for tools.</p> <p>Habitat: grows in forest understories, prefers moist soil at a consistent temperature, dislikes dry or hot soil</p> <p>Uses: door hinges, wedges, weaving shuttles</p>

	<p>Yellow Pine (<i>Pinus sp.</i>)</p> <p>Pine is a soft wood that grows tall and straight. It is still used today for flooring and furniture.</p> <p>Habitat: shady habitats, moist soil, grows best where ground is layered with fallen leaves</p> <p>Uses: cabin logs, flooring, doors, furniture, fires</p>
	<p>American Chestnut (<i>Castanea dentata</i>)</p> <p>This tree species used to dominate Appalachian forests, but a blight in the mid-1900s wiped out most of the American chestnut trees. Today, these trees are rare, and much smaller. They used to produce chestnuts which both humans and animals would eat.</p> <p>Habitat: well-drained soil, sunny areas</p> <p>Uses: fences, floors, doors, furniture</p>
	<p>Black gum (<i>Nyssa sylvatica</i>)</p> <p>Large trees that become hollow as they decay. Black gums have a twisted grain, which makes them impossible to split. This unique grain makes good handles for tools though.</p> <p>Habitat: dry, hilly regions or wet flat areas in the eastern United States</p> <p>Uses: hollow trunk sections used as beehives, toothbrushes, wagon wheels, tool handles</p>

	<p>White oak (<i>Quercus alba.</i>)</p> <p>These hardy, tall trees grow throughout the eastern half of the country, from Maine to Florida, and as far west as Texas!</p> <p>Habitat: coarse, deep, moist, well-drained soil</p> <p>Uses: shingles, baskets, chair bottoms, barrels, furniture</p>
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	<p>Butternut (<i>Juglans cinerea</i>)</p> <p>Butternut, also known as white walnut, is a medium-sized tree with light gray or light brown bark. The tree produces a nut similar to a walnut that was used by Native Americans and settlers as food and dye.</p> <p>Habitat: cool climates; rich, moist soil</p> <p>Uses: dyes, food</p>
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Use the above table to answer the following questions:

What similarities do you notice about the habitats of each organism?

Do you think any of these organisms live outside the Blue Ridge region? Which ones?

If you listed some organisms that could live in other areas, describe the regions of Georgia where you might find it and why.

Optional activity

Take a walk!

Now it's time to explore the trees in your school's habitat! With your classmates and teacher, take a walk around or nearby your school. Bring a pencil and paper. Pick three trees that you see outside. Draw a picture of them, and write down where you found it. If you know the name, write that down too. When you go back to your classroom, share your findings. Group up with students who wrote down one of the same things. In your group, talk about what you found and share the name of the organism. If you don't know the name, ask a teacher to help you identify it. Then, look through encyclopedias or textbooks to find more information on the tree, such as its scientific name, where it grows best, whether its native or not, and how humans interact with it. Present your findings to the class.

How do the trees that you found outside your school compare to those presented above? Do they have similar uses? What habitats do they prefer?

Tree BINGO!

Part IV: Picturing the Past

Now draw a picture of what your cabin looks like from the outside! Who else lives in this cabin with you? What kinds of animals might you keep? Write a short story describing the color of your cabin, who lives there, what animals you have, and why. What do you think you would like about living in a cabin? What would you dislike?

Look at the picture below. How does your cabin drawing compare to the one in the photo? Are there things that are similar? What is different?

Read the following excerpts:

Beulah Perry: “You could lay down at night and look up through the logs and see the stars. And I remember once, you know boxed up houses and the cracks in those big wide planks, between them—one night it snowed and we waked up and the snow had come through those cracks. And the bed and the floor was white with snow. And I waked up and I said to my husband “It’s rained in here.” And so we made our light and looked at everything in that room, and even my bed was just a little white coat of snow. It come in the cracks, you know, and overhead. And it was fun to us, we got up and got some sheets and put ‘em over the sides of the walls to keep the snow from coming in. Well, it didn’t keep it, but it didn’t go all over the house. And we done things like that and it was fun, to us.”

Lola Cannon: “At our house, we used to sing a lot after supper sitting around the fire. Mother would probably be **knitting**. Daddy would make axe handles and hammer handles and different things like that at night. We didn’t buy them. Boys grew up feeling like they had **accomplished** something when they learned to make a good axe handle or a good hoe handle. They were tasks that we could do at night around the fire and there was a lot of good **fellowship** in families. There was a **habit** among people in our area; we’d get an early supper and go over and visit the neighbors and stay until bedtime. That was quite an event. If there were children, they got together to play and the old folks talked and sang. Sometimes two families would get together and sing. Smaller children would get sleepy quicker and probably go to bed. And some among the group would stay up as long as the parents stayed up. It was a right good time to live then.”

Answer the following questions:

- Beulah tells a story about when snow came into her house! Why did snow get in? How did they solve the problem? How would you keep snow out of your house?
- Lola paints a picture of her family sitting together around the fire. Can you figure out what she means by fellowship?
- What is something that you do with family or friends to spend time together? How does it compare to the activities that Lola mentions?
- List two benefits of living in a small log cabin and two disadvantages. Would you prefer a cabin or your current home?

Suggested Reading

Stories about Appalachia:

My Great-Aunt Arizona

Houston, Gloria

When I was Young and in the Mountains

Rylant, Cynthia

Cherokee Experiences:

Only the Names Remain

Bealer, Alex W.

The First Strawberries

Bruchac, Joseph

Grandmother Spider Brings the Sun

Keams, Geri

Sequoyah

Rumford, James

African-American Experiences:

Before She was Harriet

Cline-Ransome, Lesa

Dave the Potter: Artist, Poet, Slave

Hill, Laban Carrick

Sweet Clara and the Freedom Quilt

Hopkinson, Deborah

Stitchin' and Pullin': A Gee's Bend Quilt

McKissack, Patricia and Cozbi A. Cabrera

Early American Experiences outside Appalachia:

The Ox Cart Man

Hall, Donald

Warm as Wool

Sanders, Scott

Little House on the Prairie

Wilder, Laura Ingalls

Little House in the Big Woods

Wilder, Laura Ingalls

STEM-Related Stories:

From Acorn to Oak Tree

Berne, Emma Carlson

Native American Gardening: Stories, Projects, and Recipes for Families

Caduto, Michael J. and Joseph Bru

chac

The Tree Book for Kids and Their Grown-Ups

Ingoglia, Gina

The Salamander Room

Mazer, Ann

Teacher Resources

floorplanner.com

<https://www.nps.gov/saan/learn/education/upload/Lesson%20Two%20-%20Corn.pdf>

https://www.ducksters.com/history/westward_expansion/log_cabin.php

Chinking a cabin: <https://www.youtube.com/watch?v=p89IPMYtcQI>

Building a Log Cabin: <https://www.youtube.com/watch?v=mczMeOxYLi8>

Log Cabin on a Budget Series:: <https://www.youtube.com/watch?v=rDjDFrP0N0U>

How to build a log cabin: <https://www.youtube.com/watch?v=ffFxf0RUTac>