

THE HOMESTEADERS

Homesteaders in the American West relied on the strength of family to overcome brutal conditions in the fulfillment of their dreams. With tenacity, a sense of adventure, and a strong dose of sheer optimism, homesteading families journeyed over 1,000 miles in crude modes of transportation to a destiny unknown. We know now that many arrived in Colorado to find land claims on dry and barren soil. With ingenuity, grit, and the use of efficient tools and systems, homesteaders made the most of incredibly difficult situations. Families abandoned most of their possessions, their communities, and their entire way of life in order seek brighter futures. The Homestead Act encapsulated a classic American ideal; with hard work and a willingness to take risks, anyone can succeed.


High Trails
outdoor education center

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SETTING THE ROLE

Staff greets students at the stake as head of the family, Ma or Pa. Draw students away from the parking lot to read a telegram from your brother, John Quick, who has just set up a homestead somewhere deep in Central Colorado. Using the letter from your homesteading brother, come to a group consensus about taking the risk to meet him in Colorado to set up your own homestead.

Questions to ask:

What is the American dream for you?

Has Anyone here had to move?

How have you had to rely on your family?

What is your role at your house? What responsibilities do you have?

How do you demonstrate hard work and perseverance in your life?

What risks have you taken? How did you calculate whether it was worth it?

Pop Quiz: Could you be a homesteader?

- *What time do you like to wake up?*
- *What do you like to do in your free time?*
- *Rank your hygiene on a scale from 1-10.*
- *How much time do you spend with your family?*
- *What is your ideal house temperature?*
- *What is your ideal job?*
- *What is your ideal vacation?*
- *How comfortable are you with wildlife?*

***“Come along, come along, don’t be alarmed;
Uncle Sam is rich enough to buy us all a farm.”***

-1800’s folk song

November 11, 1868

Dear Sister,

We made it. We met a lot of nice people on the trail that helped us with a few setbacks. The climate here is warm and sunny, even in November. Not like home when we had the string tied between the barn and the house so we could find our way back in the blizzard snows...remember that? The snow covered mountains here reassure us that there will be plenty of clean, cold water flowing for our crops and livestock. We have built a nice shanty and believe the U S government will grant us title to the land without issue. I believe you have the spirit of determination to make it across the plains. We will be waiting.

Sincerely,

Your brother

HOMESTEADING HISTORY

After walking in the direction of the astropad, pass the cabins and sit the students in a circle to discuss the history of the Homestead Act. Admit to the students you already paid the application fee because you knew they would agree to go. Use the sidebar questions to explain the basics of US history in the mid-1800's:

Questions to ask:

If the government was giving away free land on planet MR2, would you go?

Is land a good investment? Why?

Why would the government just be giving away land to anyone?

What was happening in the US in 1867?

The Homestead Act, passed in **1862** by President Abraham Lincoln, stated that any 21-year-old US citizen (or immigrant with an application to become a citizen) could file for an application for a 160 acre plot of land, mostly west of the Mississippi River. This land could be lived on for 5 years, and then title to the land would be granted if the land had been “improved” by building a 12x14 ft dwelling and growing crops. Title could also be acquired after 6 months by paying the government \$1.25 per acre.

At this time in history, the US government also gave land away to veterans of the Civil War, religious groups, and earthquake victims. But the largest recipient was the railroad companies, who received over **30 million** acres of land to build their tracks across the nation. The goal of the government was to promote settlement and land improvement of a vast territory that the US occupied in name only.

Private land companies also sold land on the frontier for \$1.25-2.00 an acre, often claiming their land was better than government land because they could offer schools, mills, and mercantiles.

Frontier Facts

-270 million acres, or 10% of the lower 48, were homesteaded.

-about 4 million people filed claims between 1862 and 1976, when the law was abandoned. About 1.6 million people received titles.

-5-20% of homesteaders were women. Women over the age of 18 had the right to a claim if single or head of a household.

-to get around the law, some settlers built portable shanties that they could move between different plots.

-today in the US, about 93,000,000 people are descendants of homesteaders.

“Buy land. They don’t make it anymore.”

Mark Twain

Land plots were limited to avoid the big plantations style farming of the South, which required slave labor. 160 acres was the ideal size farm in the east for a small family to operate. Out west, however, people eventually discovered that 160 acres was often too small - land was arid and rocky, with far less water than out east.

Homesteader Math:

A family that arrived in April with a horse and plow and a few boards could set to work to build a house and plant a crop right away. However, they might get only five acres plowed the first year. If the five acres produced 15 bushels of wheat per acre (a good crop in those days) and the price was 50 cents a bushel, how much would the family's total income be for that year?

Who and Why?

People moved west for a multitude of different reasons. But for all who made the decision to pack up and go, it was a new life with new challenges. Several reasons families left their homes to move west included religious persecution, the Civil War, family strife, urban epidemics, the stock market crash of 1837, slavery and large plantation economics. The unknown West represented a chance to start over, and perhaps find a brighter future.

What would cause you to leave home with the possibility of never returning?

Who took advantage of the Homestead Act?

What are a few reasons people might have left everything behind in order to claim a homestead, specifically in the late 1800's?

ACTIVITY:

Break students and high school leaders into "family groups." As they walk toward the astropad, they will come up with family names and roles, as well as why they are moving west. They will present themselves at the next stop, which can act as a springboard into a short discussion about who took advantage of the Homestead Act. When you arrive at the astropad, stop and ask students to analyze the land in the west.

LAND ANALYSIS - WHAT ARE WE LOOKING FOR?

The best homesteads on the plains and in the mountains had close proximity to clean water from a spring, stream, or river, access to lumber for building materials, decent soil, access to roads, towns, railroads, and a plot that was protected from the elements. In order to improve the land, the homesteaders built wells and fences, planted seed, and maintained livestock. If the homestead was on the plains, many homesteaders used sod and bison dung as building material and fuel due to lack of timber. When you get to the homestead, inspect the kitchen walls for evidence of sod/mud *chinking*, a form of early insulation.

What kind of land are we looking for?

What qualities should the land have in order to create a successful homestead?

Look around - where would you place your cabin to meet the specifications we just discussed?

Look at the land around you for 10 seconds then close your eyes. Now picture a typical homestead of the 1800's on that plot of land. How many buildings are there? Did you picture a fence? Anything living? A windmill? Keep this picture in your head and compare it to the real homestead when we arrive.

MODES OF TRANSPORTATION AND TRAIL ROUTES

At the astropad, explain that settlers had options for travel just like we do today. If you are wealthy and powerful perhaps you take a private plane on vacation; others take the bus, or drive. Thanks to the improvement of the steam engine through the late 1700's, wealthy settlers had the option of traveling by steamboat for a majority of their trip west. The transcontinental railroad was completed in 1869, when the final golden spike was pounded in at Promontory Summit, Utah, to connect the east and west lines.

The Homestead Act may have helped to hasten the completion of the rail line that would now serve to supply the homesteaders along the way. Most working class homesteaders rode west in a "prairie schooner," a converted farm wagon so named because it looked like a boat crossing the "sea of grasses" that made up the Great Plains.

Questions to ask:

How did the pioneers get to the west?

What's the longest car trip you've ever taken?

How did you entertain yourself?

THE MORMON HANDCART

Today, to travel to the Quick Homestead, we will be using a Mormon Handcart to carry our supplies. The Mormons were persecuted in the Midwest as religious fanatics and moved west under a holy order from their leader, Brigham Young. A majority of Mormon settlers moved west without the aid of steam or animal power, using only their own carts under their own power.

A unique feature of the Mormon migration was their use of handcarts. Handcarts, two-wheeled carts that were pulled by settlers, were seen as a faster, easier, and cheaper way to bring Mormon converts to Salt Lake City.

The handcarts were modeled after carts used by street sweepers and were made almost entirely of wood. They were generally 6 to 7 feet long, wide enough to span a narrow wagon track and could be alternatively pushed or pulled. The small boxes affixed to the carts were 3 to 4 feet long and 8 inches high. They could carry about 500 pounds, most of this weight consisting of trail provisions and a few personal possessions.

Almost 3,000 Mormon converts, many from factory towns in Great Britain and Scandanavia, made the trip to Salt Lake City in ten different parties. Poor planning doomed many of these travelers - brittle carts made of green wood broke en route; estimated travel times of two months turned into six; and few were prepared for the physical strain of propelling a loaded cart over hundreds of miles. Ill advisedly, two of the ten parties left in August, and encountered the brunt of a Rocky Mountain winter and suffered many deaths.

WHAT SHOULD WE BRING?

Packing the Basics

Planning a cross country move, even today, is no minor feat. With boxes to be packed, movers to be hired, and travel arrangements to be made, relocating is always stressful. But the stresses faced by cross country emigrants 130 years ago - weeks (or months) of grueling, uncomfortable travel, rough or nonexistent roads, and few amenities - were monumental by today's standards. Homesteaders traveling to Colorado in the 1880s had to abandon the majority of their material possessions, bid farewell to family and friends for years if not forever, and prepare supplies that would last not only for the long journey ahead, but for the first few months in their new home.

Homesteaders had to pack essentials for life on and off the trail into a tight space. Although travelers could shoot game and might gather roots and berries along their route, settlers carried the vast majority of food in their wagon. Food dominated the storage space in wagons. Basic staples included flour, bacon, sugar, coffee, tea, dried fruit, corn meal, and rice. Some resourceful emigrants brought along eggs packed in barrels of flour or meal. Settlers packed minimal utensils for cooking, often limiting themselves to a skillet, a coffee pot, tin plates and cups, a camp stove, and a few sets of flatware.

What would you need for a 3 month trip?

What are your basic needs?

If your parents said you could only pack a small backpack, what would you put in it?

ACTIVITY: (10-15 minutes)

In small family groups, create a list of the essential 20 items needed for a trek across the plains. Families may select resources from the laminated cards, using an allowance you prescribe. The instructor might designate a wealthier family, and give them \$100 to use, while a poorer family must buy the essentials with \$50. The families may then carry their resources to use during the challenges to come, turning their unbought items in to the instructor.

ALONG THE TRAIL

Once the family groups are all packed up and ready to go, the real challenges begin. The journey west required cooperation and communication by all involved.

Travel was both boring and dangerous. The greatest dangers were lack of water or food, river crossings, disease, wild animals, other pioneers, and accidents. The threat from American Indian tribes was often over exaggerated by the media. In reality, many travelers might not have survived without the help of knowledgeable native people.

What do you think the trip was like?

1 in 10 people died on the trail, what do you was the major reason? Why?

What will help us have a successful trip to the homestead?

ACTIVITY: The Trek Across the Plains

Using the Mormon Handcart is a teambuilding challenge for students and a central focus of the discovery group. Students can attain a true sense of empathy for the original pioneers who had to work together to move across the plains efficiently. Let them alternate pulling the cart as family groups, while you remain close to monitor safety. Do not have the high schoolers monitor use of the handcart alone. Students can load all their bags/gear in the bed of the cart. You and the high school leaders will present challenges to the students as they blaze a trail to the homestead. As the group leader, it is your responsibility to lead the students with the cart safely to the destination. If they are struggling, stop them, sit, and debrief. They will often go through the natural stages of any group challenge. When experiences their own internal challenges, do not burden them with more issues. Once the students have a good grasp of the cart, stop them with challenges. Incorporate more information and pioneers songs as you move West. Remember, this can be a dangerous activity without proper oversight.

Voices of the homesteaders -

“To enjoy such a trip...a man must be able to endure heat like a salamander, mud and water like a muskrat, and dust like a toad. He must learn to eat with his unwashed fingers, drink out of the same vessel as his mules, sleep on the ground when it rains, and share his blanket with vermin, and have patience with mosquitoes...he must cease to think, except of where he may find grass and water and a good camping place. It is hardship without glory.”

The Trek

Challenges

Ask high school leaders to stop the students in their family groups as they hike to Quick's Homestead with the following challenges (students need to come up with creative solutions to these problems). Students will present their answers to the rest of the group when they are approaching the homestead.

Challenge #1

Two students are struck with typhoid fever (disease was the #1 killer of settlers). What do you do to make them comfortable on the trail?

Challenge #2

A family member breaks their leg. There is no room currently on the wagon for them to ride. What do you do?

Challenge #3

The dangerous South Platte river is raging in spring time. How do you propose getting you and your belongings across the river safely?

Challenge #4

You are behind schedule and have run out of food. What do you eat?

Challenge #5

Both of your oxen break down after too many miles in a row. How do you pull your wagon?

Travel started at dawn and continued until noon each day, when the wagons stopped for a cold meal of coffee, beans, and bacon, which had been prepared that morning. During this break, or "nooning," men and women would socialize, children would play, and draft animals would rest.

Settlers often left notes scrawled on boards, rocks, or animal bones for travelers following them. The messages ranged from advice on good campsites, to more ominous messages: "For God's sake, don't drink this water."

Many families brought along household pets on their journeys. During one 1850 wagon train, a cat saved its owners from starvation by providing a freshly killed rabbit each morning.

The great fluctuations in temperature caused the wood of the wagon wheels to expand and shrink, and if they did not soak overnight in a river or stream bed, their iron rims would roll off the wagon during the day.

After sickness and accidental gunshot wounds, drownings at river crossings were the most common cause of fatalities among settlers.

Some settlers had portable rubber mattresses that could be filled with air or water, an early version of the modern-day waterbed.

Quicks Homestead

Quicks Homestead has been home to many families, though few successfully made a living off this dry and infertile land. The original structure was built in the 1890's by a family who plotted the land based on the tenets of the Homestead Act. Upon arrival at the homestead site, many families first built shelter for their livestock, living in tents or other rough structures until enough lumber was harvested and finished to build a strong cabin with. At one point in the history of the Quicks place, a small wildfire threatened the home. Do you see any evidence of this fire? (Look at the old ponderosas behind the hen house). Encourage students to imagine what life was like for kids their age who lived and worked at this homestead.

Is this what you imagined?

How is this land laid out according to Homestead Act qualifications?

How long has this homestead been around?

TOURS -

Be sure students have enough time to explore the homestead! Sit students around the campfire, and ask the teacher to lead a discussion concerning what resources the students think the pioneers would have needed to build and maintain this site and where those resources may have come from. During this time, give the high schoolers a quick tour of their stations. When the high school leaders are ready, break students back up into family groups and have them rotate through the house, barn, toolshed, and field for 15 minutes each. Bring students together after the tours for the closing discussion and the trip back East (to High Trails).

Tour guide tips:

-Ask lots of questions

-Use the challenges and scavenger hunts

-Be sure students explore through touch!

-Use "what if?" statements

THE HOUSE - Family Life and Recreation

Major parts of the house to inspect:

Notching - refers to the construction technique used to build the log frame of the home. When you look at the corners of the exterior of the log frame, notice how the logs were hand cut and flattened. The notch used at this homestead (which is triangular in shape) strengthens the frame as the house shifts and does not require any nails to hold it together.

Glass window frame - a large stone fireplace was originally where the window is.

Foundation - the stone used to support the frame of the house is made from a volcanic formation known as Wall Mountain Tuff. This rock was used for two reasons: it is local and easily accessible, and it is easy to block into level, square chunks.

Chinking - refers to the packing of sod and dirt into the cracks between the log framing to insulate the house from cold and wind

Kitchen implements - use the following questions as a guide for a scavenger hunt:
Where is the refrigerator?
What could be used as a toaster?
Look closely at the stove, how was it heated?
Which kitchen tools could you find in your kitchen today?
Which tool have you never seen before?

Laundry implements - can you tell which machines are used for washing, and which for drying? Pick up an iron...how heavy are they? Homesteaders were strong!

-To conserve even more water, many families did not wash or rinse their dishes. When a pioneer mother commanded her children to clean their plates, she meant business.

-Because of the scarcity of water, homesteaders conserved it in ways that would be unthinkable to most 21st century Americans. Commonly, an entire family would take turns and bathe in a single tub of water. The oldest bathed first, and the youngest last - thus the phrase, "don't throw the baby out with the bathwater."

-Bathing usually happened no more than once a week, and dirty bathwater was used for light cleaning around the house.

-After their journeys to the frontier, settlers frequently built their wagon boxes into the design of their new homes to recycle materials. One Montana settler used her wagon box as a root cellar for her new home.

What are some things you have in your house that you absolutely could not live without?

How would this house stay warm?

Can you tell which parts of the house were added on? Fixed recently? Original?

Could you live here? Why or why not?

What did the homesteaders do with their free time?

Recreation - What do you think kids did for fun at this house? How much time was devoted to work, versus play? What chores do you think the kids were responsible for? Can you find

something the homesteaders may have used for entertainment?

THE TOOLSHED AND POTATO CELLAR

Agriculture and Farming

Why is a toolshed necessary?

What crops do you think grew here?

What is in your garage at home that your family could not live without?

What was the cellar used for? Why was it built into the side of the hill?

The Potato Cellar

Before refrigeration, cellars were used to store anything that needed to keep from spoiling in the summer or freezing in the winter. The great amounts of dirt around the cellar kept its contents at a fairly constant temperature year round. Root crops such as carrots, turnips, beets, parsnips, and potatoes would keep quite a while. Other fruits and vegetables such as apples, green beans, peas, cabbage, rhubarb, and choke cherries had to be dried, canned, or made into butter or jelly. Settlers may keep a freshly killed elk or deer in the corner until it was ready to be processed. Dairy products were stored in the house.

The Chicken House

The nearby chicken houses and rabbit hutches were also important to the family as a source of fresh meat and eggs. An older chicken house near the barn is now gone, but once kept 50 roosters and 50 hens.

Toolshed Scavenger Hunt

The items on this list are for discovery, not collection. Please don't move or remove anything!

A tool used to make repairs.

Something from nature which was valuable to homesteaders.

A work saving feature.

A tool or machine useful for a potato farmer.

Something modern which looks out of place.

Something that would be useful in taking care of the cows.

Something which shows that it was made by hand rather than machine.

A square nail.

Evidence of settlers helping their environment.

Evidence of settlers harming their environment.

A tool used to cut large chunks of ice.

A machine used to make apple cider.

A place used to store lettuce, potatoes, and other vegetables.

A tool used to build a house or shed.

A tool used to make shoes.

Something used to sharpen steel.
 Something you might use to weigh your produce before going to market.
 Something you may also find in your garage today.

THE BARN - Animals and Livestock

Greet students at the entrance to the barn and use the challenges and points of discussion.

Challenges:

1. You need to keep two work horses to help you in the field during planting and harvesting, for a total cost of \$50. In order to keep horses, figure out where they will stay, how you will feed them, and what kind of care they will require. Where will you store the hay, and how much extra work will be needed to harvest and store the hay?
2. You have a small calf which keeps going through the barbed wire fences. You can either add another strand of wire to the fence for \$15, or you can figure out another way of keeping the calf from going through the fence.
3. Take a closer look at how the barn may have originally looked before it collapsed. Notice some of its work saving features. The barn is built into the side of a hill with a road behind it, so that hay might be thrown down, instead of up. The trench in the floor of the milling area probably made it easier to clean the barn. Why is the outside fence built with a jog in it? Note where the well is and the slope of the ground - an automatic water system!
4. Farm equipment hangs on the wall. See if you can figure out what it is used for...

Points of discussion for the barn tour...

Ask students to brainstorm why farmers keep animals. On farms where people survive on the things that their farm produces, what things do animals provide for these farming families? Ask students to name some farm animals and the products they give to farm families.

Discuss how some animal products can be used directly (eggs, milk, etc) and some require processing. Define processing - using tools methods, or other ingredients to change the product into something that can be used in a different way. For example, brainstorm a list of things that milk can be turned into (butter, ice cream, cheese, yogurt...)

Be sure not to miss!

<p>Barn structure - (see challenge #3) -where hay was kept on the chicken wire above the candle</p>	<p>Tools - -cow weiners: a calf wearing this device would not be able to get milk from its mother (see</p>	<p>The view of the rest of the Homestead compound from the barn!</p>
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hanging area -the foundation made from the same material as the house, just not shaped as square.	challenge #2) -dehorner: used to remove the horns from yearling calves to prevent fighting	
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THE FIELD - Water, Soil, Technology

Challenges:

Your plow wears out completely. You can either buy a new one for \$22 or dig up your fields with shovels. If you decide to dig with shovels, get a shovel from the toolshed and dig up one square foot of ground. Would you like to reconsider your decision?

Take a close look at all the machinery in the field. Can you determine which step of the planting process each tool was made for?

Clearing the land - you need to cut down trees and remove large rocks. How will you do it?

Activities:

Rubbings - students visually inspect field implements for brand names, dates, etc. Take charcoal pencils with a blank sheet of paper and rub to get an 'original' work of art!

Plow v. Shovel - how hard was the work, really? See the 'plowing' section in farming technology.

Plow tag - call out the uses of certain machines in the fields. Students can find safe haven from whoever is "it" by touching the correct machine.

Things to inspect on the field tour:

Old windmill
Water spring
Plows
Wagons
Seeders

What do you consider modern technology?

What tools do farmers use today to grow crops?

How important is water to your everyday life?

Plowing - the plow created furrows when pulled by a horse. Farmers had to decide how furrows would be arranged, and how deep. What factors did the farmers consider? (soil compaction, strength of animals, wind, slope, source of water, uniformity)

Harrowing - breaking up the big chunks of earth after plowing. How would you do it?

Planting - small pieces of potatoes were planted, rather than seeds. Each year homesteaders would save part of the previous year's crop to plant the next year. Hay grows wild in these valleys, so was not planted.

Thinning and weeding - plants took a great deal of care to maintain. Who would do this work?

Water - Do you see any way to irrigate this field in the case of a dry season?

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Protection - What do you do about bugs? Erosion control? Birds, rabbits, and cows?

Harvest - Potatoes must be dug up and hay must be cut. Can you identify any machines that may assist the farmers in these tasks?

WRAP UP and Trip Back

Revisit the major themes and big historical points of the late 1800's to conclude the discovery group. These themes include: **hard work, dependence on family, self-sufficiency, the value of work-saving devices, living with and using nature to your advantage.** Use one of the activities/discussions below as closure for students.

Do you think you would have been a good homesteader?

How did the homesteaders take advantage of their natural surroundings for survival?

HOMESTEAD OF THE FUTURE

After finishing the various projects for the day at the homestead, gather the students to look at the homestead and analyze how we can create more energy-efficient structures in the future.

People design passive solar homes today (or even active solar homes, which collect the sun's energy and store it in large batteries) for a number of reasons. Some people want to help conserve the limited energy supplies on earth. These people may be concerned about pollution from conventional energy sources. Others may simply be interested in saving money.

Ask students to imagine the "green" homestead of the future. They can describe or draw their vision. In debriefing the imagination exercise, be sure to discuss wind power, solar power, rain collection, regional and global obstacles, and opportunities for unique earth-based building techniques.

The Homestead Act was repealed in 1976.

FAILURE OF HOMESTEADS

Although between 400,000 and 600,000 families moved West from 1862-1900, many of these families could not make a living. In the arid climate of the plains, their crops failed again and again. Insects, soil deficiencies, and harsh winds that blew away the little topsoil they had,

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all contributed to the failure of many homesteads. When the use of farm machinery became common, farms of only 160 acres could not compete. Many homesteaders sold their land to speculators and moved on. Some couldn't find buyers, and abandoned their land. Others couldn't pay taxes or loans, and their land was taken away.

HOMESTEADER ALL-DAY

The all-day group can use all of the materials presented in the half-day session. It is very likely you will want to spend more time on the Homestead tour than is possible in the half-day. In addition, students on the Homesteader all-day will have an opportunity to dip candles, make apple cider in a press, cook biscuits over a fire, and make butter. The students should remain in their family groups and rotate through these activities, allowing approximately 30 minutes for each. Emphasize for students how these hands-on activities illustrate the self-sufficiency of the homesteaders and their ability to make art with utilitarian products.

CANDLE-MAKING

In order to melt the wax, stoke up the stove in the outdoor part of the barn. After the fire is burning well. Place the can with the wax on the burner, just until it is completely melted. (Don't let the wax boil; it pops and could cause burning).

While the wax is melting, have each student select a piece of wick about a foot long. Tie one end of the wick around a stick and tie three or four knots in the other end. When the wax is melted, carefully remove it from the stove and set it on the ground next to a can of cold water.

To make the candles, the students dip the string into the wax and then into the water, repeating the process a number of times. Be sure to dip the string into the wax quickly. If you leave it in too long, it will melt the wax already accumulated. As the wax builds up begin to shape the candle. Press out any air bubbles that have formed and flatten the bottom. The completed candle should be about 1.5 inches in diameter.

If you wish to scent or decorate your candles, here are a few suggestions:

The water the candles dip in may be scented. Gather a bunch of the scent desired (pine needles and sage work well) and place them in a bucket with water. Bring the water to a boil, then take it from the fire and let it cool. This may have to be done in advance. After the water is cool, strain the matter out and use the water.

Another method is to place the scenting material in the wax. Gather pine needles and break them, to let the scent out. As you dip, place the pieces of pine needle into the warm wax. As the candle burns, the pieces will be heated and burned, allowing the scent to escape.

Tips for candle makers:

- maintain the wax temperature
- manage your candle making groups so no one is in danger of burning each other as they pass hot wax strings
- the wax may be colored with bits of crayons
- decorate the candles with leaves, flower petals, pine needles,

Why would the homesteaders need candles? (cheaper means of light than kerosene)

Where would you get the wax and wick for candles? (animal fat, fabric remnants)

What other items do we take for granted today which were homemade by homesteaders? More specifically: what items were NOT homemade by homesteaders?

How much time would it take to make all these things? How much time would be left over for relaxation and free time?

MAKING BISCUITS AND BUTTER

In order to make the biscuits, you will need to get a fire going in the firepit outside of the homestead. You will need biscuit mix, water, a mixing bowl, frying pan, salt, and jelly (optional). While you are managing the fire, everyone can join in on the mixing. After the group has created a decent mixture, students can cook the biscuits in a hot pan like pancakes or twist the mix onto a solid stick to roast the mix.

You will probably want to start making the butter as you finish lunch. Use a water bottle or clean peanut butter jar with a lid to start the process. Pour heavy cream with a little salt into the water bottle and begin to shake. The students enjoy shaking the butter, especially as it begins to thicken, which it will do after about 45 minutes to an hour. If you plan it right, it should be ready in time to use on your biscuits. It will give the students something to do while the biscuits cook.

What kind of work would be involved if you had to cook over a fire all the time?

What foods were not available to the homesteaders?

Would biscuits be a special treat?

How much time would the homesteaders spend cooking?

How could the kids help with the cooking?

Where would you get the ingredients?

Imagine your grocery store. Are there foods we consider common today which homesteaders almost never had? (fruit, seafood, peanut butter)

PRESSING APPLES FOR CIDER

The wooden cider press is located in the tool shed. The press is another example of how self-sufficient homesteaders were. To use the press, cut the apples up into quarters, core them, and then place them in the top of the press. You can now start to crank the press, but be sure you have a container at the bottom ready to catch the juice! As soon as the press crushes the apple you will begin to have cider. To purify the cider, boil it over the fire before students drink any. Take a gallon of store-bought cider to have a taste test or if you don't have time to boil the cider.

Do you think we could grow apples here?

How would you make sure none of the apples go to waste? (bottle cider, apple jelly, can apples, dry apples)

How much waste do we create? How could you reuse some of the items you normally throw away?

RESOURCES

Could you be a homesteader?

What time do you like to wake up?

What do you like to do best?

Rank your hygiene on a scale from 1-10.

How much time do you spend with your family?

What is your ideal house temperature?

What is your ideal job?

What is your ideal vacation?

How comfortable are you with wildlife?

The Story of Adeline Hornbek

Adeline Warfield was born in 1833 in Massachusetts. At the age of 25 she married Simon A. Harker, her brother's well-to-do business partner. Harker worked as an Indian trader and merchant in the Creek Territory in what is now part of the state of Oklahoma. In 1860 he developed a lingering illness. In the summer of 1861, the couple left the Creek Agency with their two young children and traveled by wagon to the Colorado Territory, an area known for its healthful climate.

The Harkers settled along the South Platte River, just northeast of the new mining supply town of Denver, where they farmed and raised cattle. In 1863, the year their third child was born, Simon Harker filed a claim under the Homestead Act on 160 acres of land on which the family was living. When Harker died in 1864, Adeline faced life as a widow with three young children. Despite her difficult circumstances, it appears that she managed well by earning money from her crops and livestock. Foodstuffs sold for high prices in Denver because most of the supplies needed by gold miners in the area had to be brought to the territory by wagon train. Nearby farmers could sell their produce for lower prices than the wagon train traders and still make a sizeable profit.

By July 1866, Adeline Hornbek was able to exercise the clause in the Homestead Act that allowed early purchase of a homestead. She bought 80 of those acres for \$100 in cash. Two months after she acquired ownership of the property, she married Elliott Hornbek, and in 1870, the couple had a son. Then, in 1875, Elliott Hornbek disappeared. There is an air of mystery surrounding him: his occupation, his reasons for leaving his family, and his ultimate fate are unknown. Once again Adeline Hornbek became the sole support for her family.

Hornbek left her Denver homestead after her husband's disappearance, but there is no record of why and no certain knowledge of where she spent the next three years. By early spring of 1878, she had accumulated enough money to build a ranch for her family in Colorado's Florissant Valley, a region that was becoming important as a supply center for gold and silver miners in the nearby mountains. Proximity to good transportation may have been an important factor in Hornbek's choice of this land because she knew it would be helpful for shipping out her agricultural products and bringing in goods she could not get locally.

Further research:

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