

Topic: Broad shoulders to carry the load: Life in Oak Ridge during World War II

Lesson plans for primary sources at the Tennessee State Library & Archives

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Grade Level: 2nd

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Introduction: Students will learn the function of the city of Oak Ridge in the context of World War II. Students will understand the series of events that occurred in Oak Ridge during World War II and interpret the perspective of someone living and working there.

Guiding Question(s):

- Why was the city of Oak Ridge built?
- What role did Oak Ridge play in ending World War II?
- What was it like to live in Oak Ridge?

Learning Objectives: In the course of the lesson, students will

- Understand how to make a timeline and interpret events in sequence
- Build knowledge of Oak Ridge history
- Connect with the lives of historic people and learn about other's perspectives
- Learn to analyze and interpret primary sources

Curriculum Standards:

2.35 -Select major events from texts to place sequentially on a timeline to show the sequence and main ideas of events in history.

2.36 -Explain the connection between a series of events in United States history. Teachers may choose any events. Some suggestions are as follows: Jamestown, Plymouth, Westward Expansion, Trail of Tears, Industrial Revolution, Ellis Island, Suffrage Movement, Great Depression, Dust Bowl, the Civil Rights Movement, and wars involving the United States.

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2.37- Narrate a perspective of an historical event in the United States using details to describe actions, thoughts, and feelings, using temporal words to signal event order and provide a sense of closure.

2.40-Analyze primary and secondary source maps, photographs, and artifacts for contradictions, supporting evidence, and historical details.

Materials Needed:

- All linked photos/documents with associated captions
- White board with tape or magnets
- Paper and pencils
- YouTube access and way to show video to class

Background:

[Secret City: The Oak Ridge Story](#) Source: East Tennessee PBS (This video is 1 hour and 27 minutes)

[Oak Ridge](#) Author: Charles W. Johnson

Source: [Tennessee Encyclopedia of History and Culture](#)



Lesson Activities:

Activity 1

Time Needed: 30 Minutes

Follow the hyperlinked captions below for primary sources related to the development of Oak Ridge. Print the photos, add the associated caption, and post them on class white board in random order.

1. Ask students to come to the board one at a time to place a picture with attached caption where they think it would go on the time line of Oak Ridge History.
2. Once all pictures have been placed in the suspected order, make any corrections and discuss why the events on the time line occurred in this order rather than another one.

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[Einstein writes Roosevelt](#)
[Groves is appointed head of the Oak Ridge project](#)
[Construction of Oak Ridge begins](#)
[Workers are sent to Oak Ridge](#)
[Workers and their families move in to neighborhoods built in Oak Ridge](#)
[People in Oak Ridge made to keep the town's purpose secret](#)
[Plutonium is produced in Oak Ridge](#)
[President Franklin Delano Roosevelt dies](#)
[Japan refuses to surrender to the U.S and Britain](#)
[Little Boy is dropped on Hiroshima](#)
[Fat Man is dropped on Nagasaki](#)
[World War II ends](#)
[Oak Ridge labs continue to do research](#)
[Oak Ridge is made a National Historical Park](#)

Activity 2

Time Needed: 30 Minutes

- Post photos linked below with attached descriptions on white board
- Explain who the person in each photo is and what they would have done during wartime in Oak Ridge.
- Ask children to write a paragraph from the perspective of one of the people in the photos. The paragraph can describe their daily life or their feelings about living in Oak Ridge and their responsibilities there.

[Leslie R. Groves](#): He was the general put in charge of Oak Ridge, therefore he knew all the secrets about the bomb. He was not happy about being assigned to the project of Oak Ridge. He would have rather fought on the front lines of the war. However, he was important to the success of the project and a great leader.

[A Physicist](#): They would have worked on the technical aspect of building the atomic bomb. They were very smart and came from all around the world to Oak Ridge to help end the war

[A Female Calutron Operator](#): These were high school graduates trained to operate the calutrons, which were machines that helped purify uranium (an element needed for the atomic bomb). These girls did not know what they were working to make with the machines, but they did their work well and quickly. Some believed the girls to be unqualified to operate the machines, but they proved them wrong.

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A Soldier: They were unaware of what the work they were doing in Oak Ridge, only knowing it was to benefit the war effort. It is possible that some may have rather been fighting overseas, but others probably appreciated the safety of Oak Ridge

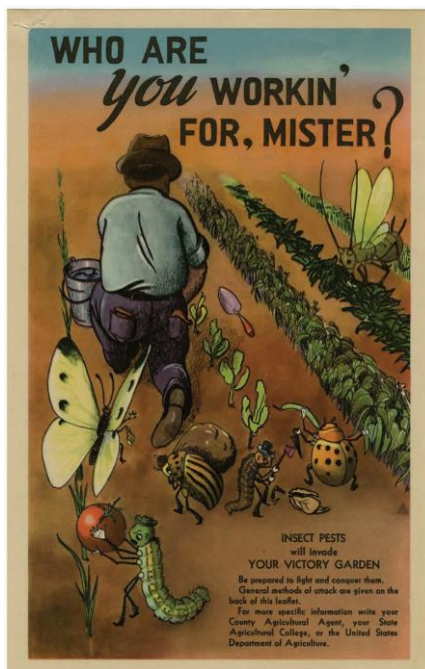
A Girl Scout: Daily life for a girl scout in Oak Ridge during the time of WWII would have been different than that of most girl scouts today. They of course could not talk about the secrets of Oak Ridge to girls in other troops and would have worked to help the soldiers overseas. They may have written soldiers letters or sent them care packages.

A WAC: This was a member of the female branch of the U.S. Army at the time, stationed in Oak Ridge to do secret work. They were not allowed to use weapons at this time so they would not have been able to participate in battle even if they had been stationed overseas.

A Guard: They would be in charge of not letting anyone into Oak Ridge who wasn't supposed to be there. They would have dealt with any security issues that threatened the secret project at Oak Ridge.

A Nurse : What do you think it would be like living and working as a nurse in the Oak Ridge community? Due the crowded living and working conditions in the town, sickness could have spread easily. Working as a nurse in Oak Ridge would have been different from working in other towns, since most Oak Ridge residents at the time were under the age of 40.

A Mother: Being a mother during World War II was especially difficult because many necessary food items were rationed. Many families had "victory gardens" where they grew a portion of their own food. The mother would have most likely been in charge of the family's garden.



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Activity 3: Planning A Victory Garden

Time Needed: 45 min

1. Evaluate the following primary sources

[“Plant A Victory Garden” poster](#)

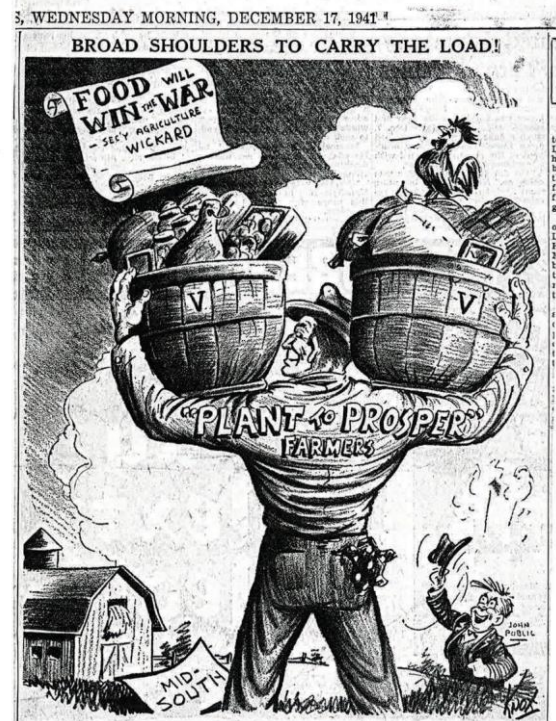
[“Broad shoulders to carry the load” cartoon](#)

[“Who Are You Workin’ for, Mister?” poster](#)

[Victory garden billboard in Oak Ridge](#)

[Man and woman work in Oak Ridge victory garden](#)

2. Discuss with students why the government encouraged citizens to plant victory gardens during World War II and how they helped the war effort. Ask students what kinds of fruits and vegetables they would want to grow for their family if they had their own victory garden.
3. Have students complete the “Oak Ridge Victory Garden” worksheet following this lesson plan.



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Extending the Lesson: Baking during World War II

1. Begin by discussing the primary sources below involving rationing during World War II with students. Ask them why they think rationing was important to the success of the war effort and what kind of adjustments they think families would have had to make. Explain to them that even citizens of Oak Ridge had to abide by the rationing system.

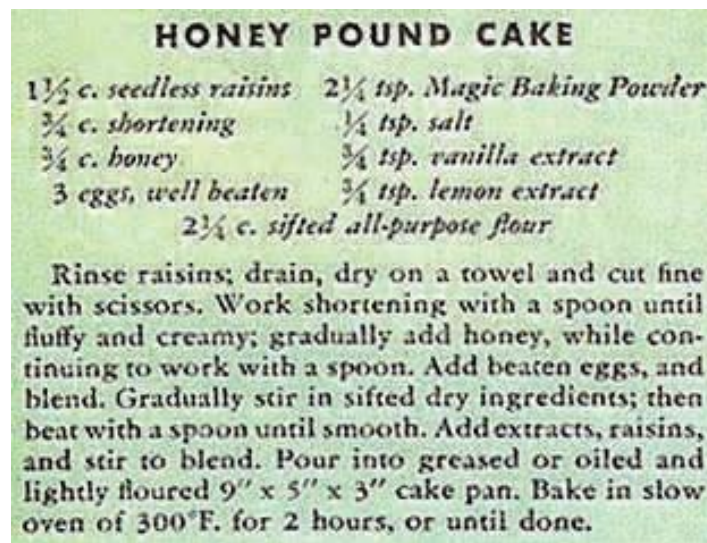
[Use it up- wear it out- make it do!](#)

[Rationing means a fair share for all of us](#)

[Dr. Seuss cartoon about tire rationing](#)

[War Ration Book No. 3](#)

2. Next, prepare the "Honey Pound Cake" recipe below. Make sure to explain that the cake contains corn syrup instead of white sugar because sugar was heavily rationed during World War II. By making a cake with no sugar, citizens of Oak Ridge during the war could enjoy a sweet dessert while also helping the war effort and respecting the rationing laws.



Recipe source: <http://pzrservices.typepad.com/a/6a00d83451ccbc69e2014e8bb60be5970d-pi>

Name: _____

Date: _____

Planting Your Victory Garden

Imagine you are a citizen of Oak Ridge during World War II. You need to plant a victory garden so that you and your family will have plenty of fruits and vegetables to eat. You only have \$10 to spend on seeds. Using the chart, put a check mark next to the types of seeds to plant in your garden. Remember not to spend over \$10!

Green Beans \$1.00

Peas \$2.00

Onion \$1.00

Watermelon \$1.00

Cucumber \$2.00

Carrot \$3.00

Tomato \$1.00

Potato \$2.00

Squash \$1.00

Broccoli \$3.00

Lettuce \$3.00

Okra \$1.00

Bell Pepper \$2.00

Corn \$1.00

Zucchini \$1.00

Sugar Snap \$3.00

Peas

Add up the total cost of all the seeds you decided to buy here:

In the box bellow, draw a picture of what you want your victory garden to look like. Remember to only draw the fruits and vegetables that would sprout from the seeds you bought!

