

# **1850-1874** Homestead Act Signed: The Challenges of The Plains

Created by Michael Young, former History Department Chair, Omaha Burke High School

# activities

		grade level	page
1	MAP ANALYSIS Great American Desert	4 8	3
2	PHOTO ANALYSIS Geographic Factors of Settlement	4 8	4
3	DISCUSSION Snakes and Sod Houses	4 8	5
4	PHOTO ANALYSIS Cow Chips	4 8	6
5	DISCUSSION & PHOTO ANALYSIS Pioneer Lunch	4 8 HS	7
6	WRITTEN DOCUMENT ANALYSIS Reminiscences	HS	8
7	MAP ANALYSIS Native American & European Views of Maps	HS	9
8	DISCUSSION & PHOTO ANALYSIS Geography & Sod Houses	HS	10
9	WRITTEN DOCUMENT ANALYSIS Compare Diaries	HS	11



# **1850-1874** Homestead Act Signed: The Challenges Of The Plains

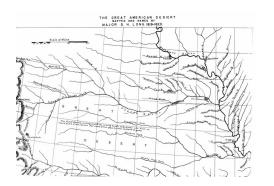
Created by Michael Young, former History Department Chair, Omaha Burke High School

		grade level	page
L1	LESSON PLAN Letters from the Plains by Joe Heckenlively, Kenesaw Public Schools	8	12
L2	LESSON PLAN Has the Look of Nebraska Changed from 1819 to the 21st Century? by Greg Hobza, Crete Middle School	8	16
L3	LESSON PLAN Watermelons By Lisa Krieser, Omaha & Ellen Kohtz, Albion	8	21
•	Resources		25
•	Nebraska Department of Education Content Area Standards		A1



## **1** Great American Desert





# activityMap Analysis

Have students view Long's map on the Great American Desert page in the Homestead Act Signed:

Challenges of the Plains section of the 1850-1874 timeline of Nebraska Studies. http://www.nebraskastudies.org/1850-1874/thechallenges-of-the-plains/

Have them discuss why families would want to live on the Great Plains.

More advanced students may want to use the National Archives Map Analysis Worksheet located in the Resources section at the end of this document to analyze the map.

You can also read, "Where Is Nebraska, Anyway?" from Nebraska History Magazine. Spring. 1999 https://history.nebraska.gov/publications/nebraska-historymagazine

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.2; SS 4.4.3; SS 4.4.4 | SS 8.1.1; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5

Language Arts: LA 4.1.6 Comprehension; LA 4.2.1 Writing Process; LA 4.2.2 Writing Modes; LA 4.4.1 Information Fluency | LA 8.1.6 Comprehension; LA 8.2.1 Writing Process Science: SC 5.3.3

Math: MA 4.4.3 | MA 8.4.1



## Geographic Factors of Settlement

Activity Grade Level



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

# activity Photo Analysis

What geographic factors would help or hinder settlement of the Great Plains? Have students examine the following two photographs on pages in the Homestead Act Signed: The Challenges of the Plains section of the 1850-1874 timeline of Nebraska Studies to help them answer that question:

1. The photograph of the men cutting sod in the field on the Searching for Shelter: Building a Sod House page http://www.nebraskastudies.org/1850-187 4/the-challenges-of-the-plains/building-asod-house/

2. The photograph of the John Curry sod house on The Challenges of the Plains page

http://www.nebraskastudies.org/1850-187 4/the-challenges-of-the-plains/=

Notice the birdhouse hanging in the doorway of the last photo. Why would settlers bring birdcages and birds to the frontier?

#### For More Advanced Students

Have students observe the photo "Nebraska Gothic, the John Curry sod house" indicated in the #2 above. Ask them to do an internet search for the painting entitled "American Gothic" by Grant Wood.

Students should come up with several similarities and some differences. The final product could be a Venn Diagram or a paragraph of comparison and one of contrast. The students should also observe the dates of the two works and note which one was first: the photo or the painting?

Have students observe two photos:

Mr. Davis on Clear Creek:

http://www.nebraskastudies.org/1850-1874/thechallenges-of-the-plains/searching-for-waterwells-windmills/

The Ball Family:

http://www.nebraskastudies.org/1850-1874/thechallenges-of-the-plains/weather-frontier-rainsnow-snakes/

The students should write down ten items present in each photo. Then write a statement of what items each family considered the most important to be included in their Solomon Butcher photo.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.2; SS 4.4.3; SS 4.4.4 | SS 8.1.1; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.4; SS 8.4.5

Language Arts: LA 4.1.6 Comprehension; LA 4.2.1 Writing Process; LA 4.2.2 Writing Modes; LA 4.4.1 Information Fluency | LA 8.1.6 Comprehension; LA 8.2.1 Writing Process

Science: SC 5.3.3 Math: MA 4.4.3 | MA 8.4.1



## 3 Snakes and Sod Houses

Activity Grade Level



# activity Discussion

Have students read the interview with Mr. H. S. Sample, that can be accessed the bottom of the Rain, Snow, Snakes, & the Roof Leaks page of the Homestead Act Signed: Challenges of the Plains section of the 1850-1874 timeline. http://www.nebraskastudies.org/1850-1874/the-challenges-ofthe-plains/weather-frontier-rain-snow-snakes/

Then either have the students make an eight-panel "storyboard" using a blank sheet of typing paper, or lead a discussion with the following questions:

• What does this story of rattlesnakes tell us about life in a sod house?

- Do you believe the stories about the snakes? Why or why not?
- What parts of the stories seem the most difficult to believe?
- This was part of the Library of Congress's project on preserving life stories and folklore. What is folklore? Is this story folklore or is it a life story? Explain.
- In what parts of Nebraska would one still find rattlesnakes?
- How would living in a sod house be different than living in the home you have today?

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.2; SS 4.4.3; SS 4.4.4 | SS 8.1.1; SS 8.4.1; SS 8.4.1; SS 8.4.3; SS 8.4.4; SS 8.4.5

Language Arts: LA 4.1.6 Comprehension; LA 4.2.1 Writing Process; LA 4.2.2 Writing Modes; LA 4.4.1 Information Fluency | LA 8.1.6 Comprehension; LA 8.2.1 Writing Process

Science: SC 5.3.3

Math: MA 4.4.3 | MA 8.4.1



# 4 Cow Chips





# activity Photo Analysis

Have students look at the photograph of a woman with a wheelbarrow full of chips on the Keeping Warm page of the Homestead Act Signed: Challenges of the Plains section of the 1850-1874 timeline.

http://www.nebraskastudies.org/1850-1874/thechallenges-of-the-plains/keeping-warm/

What did pioneer families do with cow and buffalo chips? More advanced students may want to use the National Archives Photo Analysis Worksheet located in the Resources section at the end of this document.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.2; SS 4.4.3; SS 4.4.4 | SS 8.1.1; SS 8.4.1; SS 8.4.1; SS 8.4.3; SS 8.4.4; SS 8.4.4; SS 8.4.5

Language Arts: LA 4.1.6 Comprehension; LA 4.2.1 Writing Process; LA 4.2.2 Writing Modes; LA 4.4.1 Information Fluency | LA 8.1.6 Comprehension; LA 8.2.1 Writing Process

Science: SC 5.3.3; SC 5.4.2



# 5 Pioneer Lunch





### activity

## **Discussion & Photo Analysis**

Have students read the section Lunch, Photographs and Watermelons! in the Homestead Act Signed: Challenges of the Plains section of the 1850-1874 timeline.

Lunch, Photographs and Watermelons! http://www.nebraskastudies.org/1850-1874/the-challenges-ofthe-plains/lunch-photographs-watermelons/

Then, lead discussions with the following questions:

• How would the contents of the lunch you take to school differ from the contents of lunch taken by pioneer children?

• Read the recipe on how to cook rabbit. Ask you parents if they have ever eaten rabbit. Why are people living in Nebraska less likely to eat rabbit today? Read the recipe for poverty cake. Why do you think it was given that label?

• Analyze the photographs of the sod houses of the Omar Madison Kem family and the Sylvester Rawding family. What types of food could you infer from the photographs were prepared and eaten by homesteaders?

More advanced students may want to use the National Archives Photo Analysis Worksheet located in the Resources section at the end of this document

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 4.3.1; SS 4.3.1; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.2; SS 4.4.3; SS 4.4.4 | SS 8.1.1; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 | SS HS.1.1; SS HS.2.1; SS HS.3.1; SS HS.3.2; SS HS.3.4; SS HS.3.5; SS HS.4.1; SS HS.4.2; SS HS.4.4; SS HS.4.5

Language Arts: LA 4.1.6 Comprehension; LA 4.2.1 Writing Process; LA 4.2.2 Writing Modes; LA 4.4.1 Information Fluency | LA 8.1.6 Comprehension; LA 8.2.1 Writing Process | LA 12.1.6 Comprehension; LA 12.2.1 Writing Process; LA 12.2.2 Writing Modes



# 6 Reminiscences

Activity Grade Level



## activity

## Written Document Analysis

Have students read the songs contained in the interview with Mrs. O. C. Bell, accessed from the Living in a Sod House page in the Homestead Act Signed: Challenges of the Plains section in the 1850-1874 timeline.

http://www.nebraskastudies.org/1850-1874/the-challenges-of-the-plains/living-in-a-sod-house/

As they read they should record answers to the following questions:

- Does Mrs. Bell give a positive or negative picture of living in Nebraska?
- What are three pieces of evidence to support your answer?
- Would you view the interview as history or folklore? Explain.
- Would you view the songs as history or folklore? Explain.

Students may wish to use the National Archives Written Document Analysis Worksheet located in the Resources section at the end of this document.

For an extended activity have the students read Mattie Oblinger's letter found on the same page and write a paragraph of comparison and a paragraph of contrast to Mrs. Bell's interview and songs.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS HS.1.1; SS HS.2.1; SS HS.3.1; SS HS.3.2; SS HS.3.4; SS HS.3.5; SS HS.4.1; SS HS.4.2; SS HS.4.4; SS HS.4.5

Language Arts: LA 12.1.6 Comprehension; LA 12.2.1 Writing Process; LA 12.2.2 Writing Modes





## 7 Native American & European Views of Maps

Activity Grade Level





## activity

## **Map Analysis**

Contrast and compare how Native Americans and Europeans viewed maps, such as the ones included on the Dividing the Land: How it was Divided page of the Homestead Act Signed: Challenges of the Plains section in the 1850-1874 timeline of Nebraska Studies. http://www.nebraskastudies.org/1850-1874/the-challengesof-the-plains/dividing-the-land-how-was-land-divided/

Students may wish to use the National Archives Map Analysis Worksheet located in the Resources section at the end of this document.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS HS.1.1; SS HS.2.1; SS HS.3.1; SS HS.3.2; SS HS.3.4; SS HS.3.5; SS HS.4.1; SS HS.4.2; SS HS.4.4; SS HS.4.5

Language Arts: LA 12.1.6 Comprehension; LA 12.2.1 Writing Process; LA 12.2.2 Writing Modes



## 8 Geography & Sod Houses

Activity Grade Level

## activity

## Discussion & Photo Analysis

Have students read the Building a Sod House page of the Homestead Act Signed: Challenges of the Plains section in the 1850-1874 timeline of Nebraska Studies. http://www.nebraskastudies.org/1850-1874/the-challenges-of-the-plains/building-a-sod-house/

Then have them discuss the following:

• Accept or reject the statement that geography dictates the type of house that was built on the frontier. Does the statement have more or less relevancy today?

• What were the advantages and disadvantages of living in a sod house? Review the photographs of the outside and inside of two sod houses for possible answers.

Then have the students do the following:

1. Make a list of the items mentioned that were often purchased to finish a sod house.

- 2. Place an asterisk by those items that were optional.
- 3. Make a list of advantages of living in a sod house.
- 4. Make a list of disadvantages of living in a sod house.
- 5. What made the Haumont House different from other sod houses? Why did it last so long?

6. What changes had to occur for settlers in Nebraska for them to be able to change to a wood frame house?

Students may wish to use the National Archives Photograph Analysis Worksheet located in the Resources section at the end of this document.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS HS.1.1; SS HS.2.1; SS HS.3.1; SS HS.3.2; SS HS.3.4; SS HS.3.5; SS HS.4.1; SS HS.4.2; SS HS.4.4; SS HS.4.5

Language Arts: LA 12.1.6 Comprehension; LA 12.2.1 Writing Process; LA 12.2.2 Writing Modes



# 9 Compare Diaries

Activity Grade Level



# activityWritten Document Analysis

Have students read the Weather on the Frontier page of the Homestead Act Signed: Challenges of the Plains section in the 1850-1874 timeline of Nebraska Studies.

http://www.nebraskastudies.org/1850-1874/the-challengesof-the-plains/weather-frontier-rain-snow-snakes/

• Have students compare and contrast the interview with Mrs. John Grosvenor and the John T. Gibson diary excerpts with reference to how weather affected life on the Great Plains. (Write sentences of comparison and sentences of contrast or construct a Venn diagram)

• Have students write about which of the two, interview or diary, are the more reliable and a statement of why one is more reliable than the other.

Students may wish to use the National Archives Written Document Analysis Worksheet located in the Resources section at the end of this document.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS HS.1.1; SS HS.2.1; SS HS.3.1; SS HS.3.2; SS HS.3.4; SS HS.3.5; SS HS.4.1; SS HS.4.2; SS HS.4.4; SS HS.4.5

Language Arts: LA 12.1.6 Comprehension; LA 12.2.1 Writing Process; LA 12.2.2 Writing Modes Science: SC 12.4.2



Activity Grade Level

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.



#### Lesson Objectives

- 1. Students will research and analyze original documents of Nebraska history.
- 2. Students will present information on Nebraska history in a role-playing scenario.

#### Introduction

Use a role-playing exercise to have students answer the question, "What did setters think of living conditions in Nebraska?"

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 8.1.1; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 Language Arts: LA 8.1.6 Comprehension; LA 8.2.1 Writing Process; LA 8.3.1 Speaking



Activity Grade Level

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Internet Resources**

Nebraska Studies 1850-1874. Homestead Act Signed section.

http://www.nebraskastudies.org/1850-1874/homestead-act-signed/

100 Milestone Documents, National Archives. http://www.ourdocuments.gov/content.php?flash=true&page=milestone

PBS. New Perspectives of the West. http://www.pbs.org/weta/thewest/program/

Prairie Settlement. Nebraska Photographs and Letters. [Butcher photographs and Oblinger letters] Library of Congress. American Memory Collection. http://memory.loc.gov/ammem/award98/nbhihtml/pshome.html Nebraska Dept. of Education Academic Standards. https://www.education.ne.gov/contentareastandards/

Nebraska Dept. of Education State Social Studies Standards. https://cdn.education.ne.gov/wp-content/uploads/2019/11/Nebraska-Social-Studies-Standards-Final-11-2019.pdf

Nebraska State Historical Society. http://nebraskahistory.org/oversite/research.htm

Nebraska State Historical Society: Nebraska History magazine https://history.nebraska.gov/publications/nebraska-history-magazine

Nebraska State Historical Society: Nebraska Trailblazer http://www.nebraskahistory.org/museum/teachers/material/trailist.htm

Rubrics: General Rubric http://www.socialstudieshelp.com/rubric.htm

The American Memory Collection. All Collections. http://memory.loc.gov/ammem/award98/nbhihtml/pshome.html

The American Memory Collection. Library of Congress. http://memory.loc.gov/ammem/award98/nbhihtml/pshome.html

The Library of Congress Learning Page: The Historians' Sources: Analysis of Primary Sources. "Questions for Analyzing Primary Sources." http://memory.loc.gov/ammem/ndlpedu/lessons/psources/analyze.html





Activity Grade Level

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **The Process**

1. Divide the class into triads to play the roles of an interviewer, Mr. Oblinger, and Mrs. Oblinger.

2. Assign roles for students to play.

3. Instruct students to access the Nebraska Studies Website and do a search for the Oblinger Letters for both "Primary Sources" and "Stories." Abel Foundation, and the Nebraska Humanities Council.

4. Direct students to read and analyze the letters. Ask them to use the information they have learned from reading the Oblinger letters as a basis for questions and answers they might use in the interview stage of the lesson.

5. Provide students with How to Conduct and Utilize Oral Interview Skills located in the Resources section at the end of this document.

6. Create a talk show format with students playing the role of the talk show host and the Oblingers. Instruct the talk show host that s/he will interview the Oblingers concerning their settlement experiences in Nebraska.





Activity Grade Level

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Learning Advice**

1. Review with students the teaching tool How to Conduct and Utilize Oral Interview Skills in the Resources section at the end of this document.

2. You could videotape the interviews conducted by the students and use it to assist you and the students in evaluating the success of the activity.

3. Review talk show programs on the radio and /or television for ideas on how to conduct an interview and what format is used for talk show programs.

4. Review the Nebraska State Historical website at http://www.nebraskahistory.org/ and familiarize students with the Nebraska History magazine located at: https://history.nebraska.gov/publications/nebraska-history-magazine

Teachers/students can order copies of the magazine from the NSHS or check with their local library to see if they have copies.

5. Review the contents of the Nebraska Department of Education Social Science Resource Home Page and review the links with students. https://www.education.ne.gov/socialstudies/

6. Have students access the following websites and review with them the contents of each website:

• Prairie Settlement Nebraska Photographs and Letters. [Butcher photographs and Oblinger letters] http://memory.loc.gov/ammem/award98/nbhihtml/pshome.html

• Teaching with Documents. The Homestead Act of 1862. National Archives. Digital Classroom. http://www.archives.gov/digital\_classroom/lessons/homestead\_act\_1862/homestead\_act.html

#### Conclusion

Review with students what life was like for settlers living in Nebraska in the mid to latter part of the 19th century.

#### **Evaluation Activity**

Use the Rubric located in the Resources section at the end of this document, or develop your own rubric to meet individual needs.



# L2

## LESSON PLAN Has the Look of Nebraska Changed from 1819 to the 21st Century?

Activity Grade Level

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.



#### **Lesson Objective**

Students will analyze and compare maps of early Nebraska.

#### Introduction

Show the students a physical map of Nebraska. Ask, "Have maps of Nebraska always looked like this one?" Have students use the information they gain from researching the Nebraska Studies website and other sources to compare and contrast maps of Nebraska from three different time periods.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 8.1.1; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 Language Arts: LA 8.1.6 Comprehension; LA 8.2.1 Writing Process; LA 8.3.1 Speaking





LESSON PLAN Has the Look of Nebraska Changed from 1819 to the 21st Century?



8

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Internet Resources**

Nebraska Studies 1850-1874. Homestead Act Signed: The Challenges of the Plains section.

http://www.nebraskastudies.org/1850-1874/homestead-act-signed/

A. E. Sheldon's History and Stories of Nebraska http://www.olden-times.com/oldtimenebraska/n-csnyder/nbstory/contents.html

Illustrations in A. E. Sheldon's History and Stories of Nebraska http://www.olden-times.com/oldtimenebraska/n-csnyder/nbstory/graphics.html

County Map of Nebraska in 1856 within A.E. Sheldon's History and Stories of Nebraska http://www.olden-times.com/oldtimenebraska/n-csnyder/nbstory/graphics/cnty1856.gif

Nebraska Department of Roads: Historical Maps http://dot.nebraska.gov/travel/map-library/

Nebraska Digital Map Library http://usgwarchives.net/maps/nebraska/

100 Milestone Documents, National Archives. http://www.ourdocuments.gov/content.php? lash=true&page=milestone

PBS. New Perspectives of the West. http://www.pbs.org/weta/thewest/program/

Prairie Settlement. Nebraska Photographs and Letters. [Butcher photographs and Oblinger letters] Library of Congress. American Memory Collection. http://memory.loc.gov/ammem/award98/nbhihtml/pshome.html Graphic Organizers http://www.graphic.org/venbas.html http://www.sdcoe.k12.ca.us/score/actbank/torganiz.htm

Nebraska Dept. of Education Academic Standards. https://www.education.ne.gov/contentareastandards/

Nebraska Dept. of Education State Social Studies/History Standards. https://cdn.education.ne.gov/wp-content/uploads/2019/11/Nebraska-Social-Studies-Standards-Final-11-2019.pdf

Nebraska State Historical Society. http://nebraskahistory.org/oversite/research.htm

Nebraska State Historical Society: Nebraska History magazine https://history.nebraska.gov/publications/nebraska-history-magazine

Nebraska State Historical Society: Nebraska Trailblazer http://www.nebraskahistory.org/museum/teachers/material/trailist.htm





## LESSON PLAN Has the Look of Nebraska Changed from 1819 to the 21st Century?



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Internet Resources**

Rubrics: General Rubric http://www.socialstudieshelp.com/rubric.htm

The Library of Congress Learning Page: The Historians' Sources: Analysis of Primary Sources. "Questions for Analyzing Primary Sources." http://memory.loc.gov/ammem/ndlpedu/lessons/ psources/analyze.html





L2

## LESSON PLAN Has the Look of Nebraska Changed from 1819 to the 21st Century?



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### The Process

1. Have students read the Homestead Act Signed section of the 1850-1874 timeline on Nebraska Studies.

http://www.nebraskastudies.org/1850-1874/homestead-act-signed/

2. Instruct students to search the Nebraska Studies website, or other Internet resources, for maps of Nebraska. Have them compare and contrast the maps. Encourage students to review:

Long's map on the page The Challenges of the Plains
 http://www.nebraskastudies.org/1850-1874/the-challenges-of-the-plains/

• the Kansas and Nebraska territories on the page The Kansas-Nebraska Act http://www.nebraskastudies.org/1850-1874/the-kansas-nebraska-act/

3. Ask students to locate maps of Nebraska from three different time periods, and have them use the National Archives Map Analysis Worksheet located in the Resources section at the end of this document as a basis for evaluating each map. This is a good activity to help them learn how to analyze maps.

4. Have students write an essay discussing the reasons for the changes in the boundary lines of the Nebraska map.

5. Alternative activities:

- a. Have students draw the outline of present day Nebraska on Long's Map.
- b. Ask students to read Long's account of Nebraska:

• Why did he consider Nebraska "The Great American Desert"? • What were some of the reasons he listed? c. Have students locate today's ten most heavily populated cities on three maps you have selected. Ask them to indicate if they notice a pattern of where these cities are located and why.

c. Instruct students to compare and contrast maps of Nebraska you have selected.



# L2

## LESSON PLAN Has the Look of Nebraska Changed from 1819 to the 21st Century?



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Learning Advice**

Have students reproduce various maps of Nebraska on transparencies. This will help students better visualize the changes in the Nebraska landscape over the last two hundred years.

#### Conclusion

Review various maps of Nebraska with students to indicate why there were changes made in the boundary lines.

#### **Evaluation Activity**

Use the Rubric located in the Resources section at the end of this document, or develop your own rubric to meet individual needs.





## L3 LESSON PLAN Watermelons!

Activity Grade Level

This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.



#### **Lesson Objectives**

1. Students will understand the origins and different uses made of watermelons by pioneer children and children today.

2. Students will conduct an Internet search for photographs of watermelons.

3. Students will plan a community activity, contacting a local watermelon vendor for watermelon information or inviting family members to class to participate in a student-led watermelon presentation.

#### Introduction

Present the scenario to the students that one of their parents has purchased a watermelon from a roadside vendor. Students become curious about why watermelons are grown in Nebraska and decide to see if the Internet will help them discover the answer to the mystery of how watermelons came to Nebraska.

#### Nebraska Department of Education Content Area Standards

Social Studies: SS 8.1.1; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 Language Arts: LA 8.1.6 Comprehension; LA 8.2.1 Writing Process; LA 8.3.1 Speaking



## LESSON PLAN Watermelons!



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Internet Resources**

Nebraska Studies 1850-1874. Homestead Act Signed: The Challenges of the Plains section. http://www.nebraskastudies.org/1850-1874/homestead-act-signed/

National Watermelon Promotion Board http://watermelon.org

The Online Advice and Shoppers Information System: Selecting, Preparing and Using Vegetables and Fruits : https://www.choosemyplate.gov/ten-tips-smart-shopping

The Food Timeline http://www.foodtimeline.org/

100 Milestone Documents, National Archives. http://www.ourdocuments.gov/content.php? lash=true&page=milestone

PBS. New Perspectives of the West. http://www.pbs.org/weta/thewest/program/

Prairie Settlement. Nebraska Photographs and Letters. [Butcher photographs and Oblinger letters] Library of Congress. American Memory Collection. http://memory.loc.gov/ammem/award98/nbhihtml/pshome.html

**Graphic Organizers** 

http://www.graphic.org/venbas.html http://www.sdcoe.k12.ca.us/score/actbank/torganiz.htm

Nebraska Dept. of Education Academic Standards. https://www.education.ne.gov/contentareastandards/

Nebraska Dept. of Education State Social Studies Standards. https://cdn.education.ne.gov/wp-content/uploads/2019/11/Nebraska-Social-Studies-Standards-Final-11-2019.pdf

Nebraska State Historical Society. http://nebraskahistory.org/oversite/research.htm

Nebraska State Historical Society: Nebraska History magazine https://history.nebraska.gov/publications/nebraska-history-magazine

Nebraska State Historical Society: Nebraska Trailblazer http://www.nebraskahistory.org/ museum/teachers/material/trailist.htm

Rubrics: General Rubric http://www.socialstudieshelp.com/rubric.htm

The Library of Congress Learning Page: The Historians' Sources: Analysis of Primary Sources. "Questions for Analyzing Primary Sources." http://www.loc.gov/teachers/index.html





## LESSON PLAN Watermelons!



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **The Process**

1. Have students read the Homestead Act Signed section of the 1850-1874 timeline on Nebraska Studies, paying special attention to the following pages: Pioneer Children

http://www.nebraskastudies.org/1850-1874/who-were-the-settlers-who-was-daniel-freeman/pioneer-children-school-games-toys-recreation/

Lunch, Photographs and Watermelons! http://www.nebraskastudies.org/1850-1874/the-challenges-of-the-plains/lunch-photographswatermelons/

2. Students can look at the pictures in detail by clicking on each thumbnail on the site. Tell students to be prepared to discuss what these pictures have in common.

3. Make copies for each student of the National Archives Photograph Analysis Worksheet located in the Resources section at the end of this document. Tell the students to use the worksheet as a basis for analyzing one or more of the photographs.

4. Indicate to students that they can conduct further watermelon research by giving them a list of the additional websites located in the Internet Resources on the previous page.

5. Have students list ten new facts they have learned about watermelons.

6. Tell students to write a letter of inquiry to a local watermelon vendor and/or a local grocery store asking questions about watermelon production and availability in Nebraska. Invite the vendor or grocery store owner to class to conduct a discussion about watermelons:

- pounds produced
- if they are perishable
- location of farm or supplier, etc. Invite other students, family, and friends to listen to these presentations.

7. Tell students to be prepared to do an oral classroom presentation utilizing the information they have learned about watermelons. Encourage students to invite their family members to the presentation.

8. Have students write a summary paragraph in which you compare and contrast the values placed on watermelons by their modern culture and by the pioneer culture.

#### **Extended Activity**

Have students use the Venn Diagram located in the Resources section of this document to compare and contrast the values placed on watermelons by their modern culture and by the pioneer culture.



## LESSON PLAN Watermelons!



This lesson plan was funded in part by the Cooper Foundation, Abel Foundation, and the Nebraska Humanities Council.

#### **Learning Advice**

• You may wish to conduct a small group discussion on the reasons why watermelons are grown in Nebraska and their relationship to pioneers. A key question to ask is, "Who taught pioneers on the Plains how to grow watermelons?"

• You may want to view watermelon pictures with the students and teach them how to analyze photographs. Point out to the students that other fruits and vegetables appear in some of the photographs, i.e. pumpkins. You could search for additional information on the food timeline source listed in the Internet Resources on the previous page.

• Have students compare how watermelons were used in pioneer times to how watermelons are used now. • Encourage the students to ask their grandparents for "watermelon memories" to share with the class.

#### Conclusion

Students will have learned how watermelons came to Nebraska and why they are important today.

They will also have discovered the importance of watermelons to pioneer families. They will have had the opportunity to communicate with a local vendor or grocery store owner about watermelon production and sales.

#### **Evaluation Activity**

1. Student will list ten new facts about watermelons they did not know before.

2. Use the National Archives Photograph Analysis Worksheet in the Resources section at the end of this document as a guide for evaluating student understanding.

3. Evaluate the form and construction of student letters to vendors and grocery store owners.

4. Students will write a summary paragraph in which they compare and contrast the values placed on watermelons by their culture and by the pioneer culture.

5. Use the Rubric located in the Resources section at the end of this document, or develop your own rubric to meet individual needs.texttexttexttext





# **1850-1874** Homestead Act Signed: The Challenges of The Plains

# resources

	1.0
National Archives: Map Analysis Worksheet	27
National Archives: Photograph Analysis Worksheet	28
How to Conduct an Oral Interview	29
National Archives: Written Document Analysis Worksheet	32
Venn Diagram	33
Rubric for Lesson Plan 1: Letters from the Plains	34
Rubric for Lesson Plan 2: Has the Look of Nebraska Changed from 1819 to the 21st Century	35
Rubric for Lesson Plan 3: Watermelons!	36

Nebraska Department of Education Academic Standards https://www.education.ne.gov/contentareastandards/

Nebraska Department of Education Social Studies Standards https://cdn.education.ne.gov/wp-content/uploads/2019/11/Nebraska-Social-Studies-Standards-Final-11-2019.pdf

National Archives http://www.archives.gov/index.html

Library of Congress Learning Page Lesson Plans http://www.loc.gov/teachers/index.html





page

## National Archives: Map Analysis Worksheet

1. TYPE OF MAP (check one)	2. PHYSICAL QUALITIES OF THE MAP	3. DATE OF MAP	
<ul> <li> Raised relief map</li> <li> Topographic map</li> <li> Political map</li> <li> Contour-line map</li> <li> Natural resource map</li> <li> Military map</li> <li> Bird's-eye view</li> <li> Artifact map</li> <li> Satellite photograph/mosaic</li> <li> Pictograph</li> <li> Weather map</li> <li> Other ( )</li> </ul>	(check one or more) Compass Handwritten Date Notations Scale Name of mapmaker Title Legend (key) Other	4. CREATOR OF MAP 5. WHERE WAS THE MAP PRODUCED?	
6. MAP INFORMATION			
A. List three things in this map that you thin	k are important:		
1			
2			
3			
B. Why do you think this map was drawn?			
C. What evidence in the map suggests why	it was drawn?		
D. What information does the map add to th	e textbook's account of this event?		
E. Does the information in this map support	or contradict information that you h	nave read about this event? Explain.	

Write a question to the mapmaker that is left unanswered by this map.

Designed and developed by the Education Staff • National Archives and Records Administration, Washington, DC 20408 • http://www.archives.gov



## National Archives: Photograph Analysis Worksheet

#### **STEP 1. OBSERVATION**

A. Study the photograph for 2 minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

B. Use the chart below to list people, objects, and activities in the photograph.

PEOPLE	OBJECTS	ACTIVITIES

#### **STEP 2. INFERENCE**

Based on what you have observed above, list three things you might infer from this photograph.

STEP 3. QUESTIONS A. What questions does this photograph raise in your mind?

#### B. Where could you find answers to them?

Designed and developed by the Education Staff • National Archives and Records Administration, Washington, DC 20408 • http://www.archives.gov



## How to Conduct and Utilize Oral Interviews

By Michael Young, former History Department Chair, Omaha Burke High School

Oral history is the process of collecting an individual's spoken memories of his or her life, of the people he or she has known, and the events which he or she witnessed or participated in. Oral history is another primary source technique historians use to help them interpret the past. Oral histories can be used to supplement written records, complement secondary sources (what has been written by historical scholars), and to provide information that would exist in no other form.

But, using oral histories as a source can also pose problems. Interviewees are human. They can forget things. Their memories can play tricks on them. You have to be very careful as a historian when you use oral history as a source.

Teachers need to explore activities that help students strengthen their abilities to develop good interviewing techniques. The teacher might conduct a personal interview with a person representative of whomever the students will be interviewing (an elderly person, etc.) in the classroom.

Students could then practice interviewing one another in the classroom as part of a paired activity. The practice interviews can help students develop awareness of key techniques that will help them when they conduct an actual interview. The teacher and/or students can offer suggestions on what the characteristics of a good interview are. The teacher may also want to review passages from actual transcripts of interviews to illustrate key attributes of successful interviews.

Caution students that oral history (conducting interviews) is not a substitute for basic research. Students should research printed and electronic resources for background information and historical accounts of the issue, event, or personality being studied.

Consider the following suggestions on how to how to conduct and utilize oral interviews.

#### Preparing

**1. Decide which individuals would be most appropriate to interview.** There are many ways to find someone to interview. Ask your family members. Contact veterans' organizations, church groups, civic organizations etc. Put a request in your local newspaper. It's a good idea when you find someone to have them complete a brief preliminary questionnaire to give you some background on the person.

**2. Schedule the interview as soon as possible and by telephone if possible.** Confirm the meeting time and date a day before conducting the Interview.

**3.** Learn as much as possible about the topic of your interview before conducting the interview. Contact the local media reporters for suggestions on related topics, sources, etc. Carefully read the person<sup>1</sup>s completed questionnaire. Make up a list of questions from things on the questionnaire. Do enough preliminary research so that you are able to ask intelligent questions. Prepare a brief outline of questions you will be asking.

**4. Make sure you are familiar with your recorder.** Make sure any equipment you will be using is working properly (camcorder, tape recorder, etc.) and secure the interviewee's permission to record the interview. Practice to make sure you can operate. Have an extra tape in case the interview is longer, or in case the tape would break.

5. When selecting the location for the interview, ask the interviewee where he or she would be most comfortable. Choose a place that is quiet, where there won<sup>1</sup>t be a lot of distractions.





## How to Conduct and Utilize Oral Interviews

By Michael Young, former History Department Chair, Omaha Burke High School

#### **Conducting the Interview**

1. Dress appropriately and create a good impression.

2. When you get to the interview, chat briefly with your interviewee to get him or her feeling relaxed and comfortable with you. Explain, again, to the interviewee your purpose for the interview. Do not begin the interview abruptly. Introduce yourself, make the interviewee as comfortable as possible, and review the interview process you will be using. Be sure to let them know how much you appreciate getting the chance to talk with them.

**3. During the interview, keep things moving.** Express an interest in what the interviewee is saying and listen carefully. Make a conscious effort to be unbiased and try not to influence how the interviewee will answer your questions. Have your questions ready, but do not rely totally on them. By listening carefully to what the person is speaking about, you can come up with additional questions. Avoid too many open-ended questions that require long complicated answers.

**4. Use a tape recorder or camcorder to more accurately record the interview.** In addition, take notes and accurately record the correct spelling of name, places, etc. Silence can be productive. Do not rush the narrator to respond.

5. You may need to have the interviewee sign a legal release form enabling you to use any **information gained through the interview for research purposes.** 

**6. Know the physical limitations of the person you are interviewing.** If the person has a hard time hearing, make sure you speak up loudly and clearly. Don't let an interview drag on endlessly. If you still have areas to cover, you might want to take a short break.

7. Have a good closing question that helps the interviewee summarize his/her statements and helps bring closure to the interview.

8. Be sensitive. Indicate to the interviewee that his/her answers will be reported anonymously if requested. Some subjects may provoke an emotional response. If a person starts to cry, you might turn off the tape recorder for a few minutes.

**9.** After the interview, send a thank you note to the person being interviewed within one week of the interview. If you transcribe the tape, send your interviewee a copy of the tape, or if you don't transcribe the entire tape, send them the paper you wrote.

## How to Conduct and Utilize Oral Interviews

By Michael Young, former History Department Chair, Omaha Burke High School

#### Examining

1. Prepare a written summary, note cards, and/or outline of the key points discussed in the interview that are relevant to your topic.

2. What perspective did the interviewee give you about the topic? 3. What did the interviewee tell you about the lifestyles, culture, political atmosphere, economic issues, education, etc. of the time period being studied?

4. Is the interviewee a dependable source of information? Did the interviewee have a difficult time remembering dates, places, and events?

5. Compare/Contrast the information given to you by the interviewee with the factual information you have learned from researching other primary and secondary sources.

#### **Determine Its Usefulness**

1. What information from this interviewee is useful for the development of your topic?

2. What does this information contribute to the development or analysis of your topic? How can incorrect information or biased viewpoints be used?

3. How can the information gained from your interview be most effectively used in your research project?

4. Oral history can be used to validate other data, to collect opinions reflecting different points of view, to acquire background or perspective, and to collect "up-to-date" data.

5. In summary, oral history can also demonstrate cause and effect, objectivity versus subjectivity, reality versus abstraction, fact versus opinion, and attitudes then and now.

#### Bibliography

American Memory. Life History Manuscripts from the Folklore Project. WPA. Federal Writer's Project 1936-1940. Summary of Resources. U.S. History Content. http://lcweb2.loc.gov/wpaintro/wpahome.html

Lanman, Barry A. and Mehaffy, George L. Oral History in the 5econdary Classroom. Oral History Association, 1988. "Pointers How to Prepare for and Use an Oral Interview". Indiana History Day. Indiana: Historical Bureau, 1989. Located in Magazine of History. Summer 1990. p. 54.

1850-1874 Homestead Act Signed: The Challenges of the Plains				
		sheet		
Report Advertisement Congressional record Census report Other	2. UNIQUE PHYSICAL QU DOCUMENT (Check one Interesting letterhead Handwritten Typed Seals	or more): Notations RECEIVED stamp Other		
UDIENCE WAS THE DOCUMENT WR	RITTEN?			
is the author said that you think are imp	portant:			
ink this document was written?				
e in the document helps you know why	it was written? Quote from the	document.		
the document tells you about life in the	e United States at the time it wa	as written:		
on to the author that is left unanswered	by the document			
	National Archives Written Documen         CUMENT(Check one)         Report         Advertisement         Congressional record         Census report         Other         OCCUMENT:         CREATOR) OF THE DOCUMENT:         CREATOR) OF THE DOCUMENT         UDIENCE WAS THE DOCUMENT WF         NFORMATION (There are many possigs the author said that you think are implication of the second that you the seco	National Archives: Written Document Analysis Works         CUMENT(Check one)         Report         Advertisement         Congressional record         Census report         Other         Other         Seals		

Designed and developed by the Education Staff • National Archives and Records Administration, Washington, DC 20408 • http://www.archives.gov

nebraskastudies.org

raska's 🔊 PBS & NPR' Str

## 1850-1874 Homestead Act Signed: The Challenges of the Plains

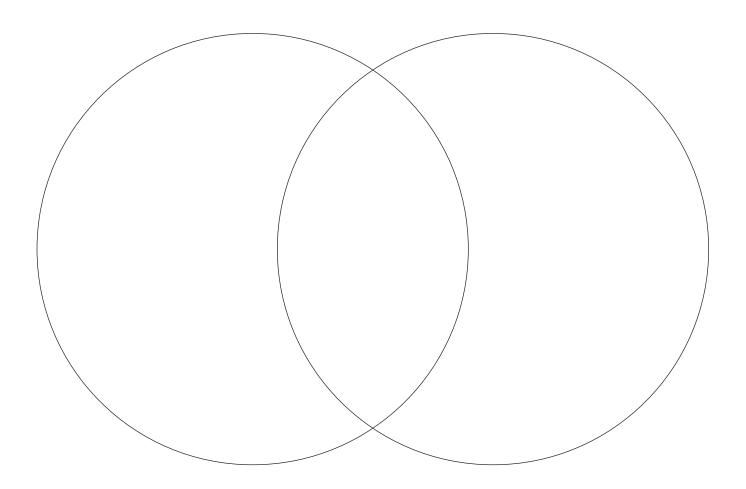
resources

Venn Diagram

This is a Venn Diagram. You can use it to write down factors that are unique to one item in the left hand sector. Then plot those factors that are unique to another item in the right hand sector. Then look for factors that are present in both and plot those in the middle.

The Venn Diagram is made up of two or more overlapping circles. It is often used in mathematics to show relationships between sets. In language arts instruction, Venn Diagrams are useful for examining similarities and differences in characters, stories, poems, etc.

It is frequently used as a prewriting activity to enable students to organize thoughts or textual quotations prior to writing a compare/contrast essay. This activity enables students to organize similarities and differences visually.



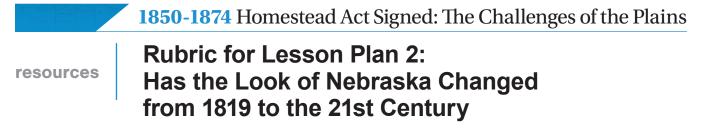


## Rubric for Lesson Plan 1: Letters from the Plains

Student: ..... Date: .....

	Excellent	Satisfactory	Needs Improvement
Oral Discussion			
Analyzing Documents			
Role-playing and Interviewing Skills			





	Excellent	Satisfactory	Needs Improvement
Discussion of the similarities and differences of the Nebraska maps			
Map Analysis Worksheet			
Map Essay			





## Rubric for Lesson Plan 3: Watermelons!

Student: ...... Date: .....

	Excellent	Satisfactory	Needs Improvement
List ten new facts			
Complete Photo Analysis Worksheet			
Student Letter			
Summary Paragraph			
Oral Presentation			





appendix

### Nebraska Department of Education Content Area Standards

#### Social Studies Standards



SS 4.3.1 Explore where (spatial) and why people, places, and environments are organized in the state and around the world.

**SS 4.3.2** Compare the characteristics of places and regions and their impact on human decisions.

**SS 4.3.3** Explain how human and natural forces have modified different environments in Nebraska and how humans have adapted.

**SS 4.3.4** Compare and contrast the characteristics of culture statewide.

SS 4.3.5 Use geographic skills to make connections to issues and events.

**SS 4.4.2** Analyze and explain multiple perspectives of events in Nebraska, including historically marginalized and underrepresented groups.

SS 4.4.3 Analyze past and current events throughout Nebraska history.

**SS 4.4.4** Develop historical inquiry and research skills.



**SS 8.1.1** Investigate and analyze the foundation, structure, and functions of the United States government.

**SS 8.4.1** Analyze patterns of continuity and change over time in the United States history.

SS 8.4.2 Use multiple perspectives to evaluate the historical, social, and cultural context of past and current events.

**SS 8.4.3** Examine historical events from the perspectives of marginalized and underrepresented groups.

**SS 8.4.4** Evaluate and interpret sources for perspective and historical context.

SS 8.4.5 Apply the inquiry process to construct and answer historical questions



**SS 12.1.1** Students will analyze and evaluate the foundation, structures, and functions of the United States government as well as local, state, and international governments.

SS 12.2.1 Students will assess how market forces guide the owners of land, labor, and capital and determine the allocation of wealth in the economy.

**SS 12.3.1** Students will analyze where (spatial) and why people, places, and environments are organized on the Earth's surface.

**SS 12.3.2** Students will examine how regions form and change over time.

**SS 12.3.4** Students will analyze and interpret patterns of culture around the world.

**SS 12.3.6** Students will analyze issues and/or events using the geographic knowledge and skills to make informed decisions.

SS 12.4.1 (US) Students will analyze how major past and current US events are chronologically connected, and evaluate their impact(s) upon one another.

**SS 12.4.2** (US) Students will analyze and evaluate the impact of people, events, ideas, and symbols upon US history using multiple types of sources.

**SS 12.4.4** (US) Students will identify and evaluate the effects of past, current, and potential future events, issues, and problems.

SS 12.4.5 (US) Students will develop historical research skills.



appendix

## Nebraska Department of Education Content Area Standards

#### Language Arts Standards



LA 4.1.5 Vocabulary: Students will build and use conversational, academic, and content-specific gradelevel vocabulary; LA 4.1.5.b Apply context clues (e.g., word, phrase, and sentence, and paragraph clues) and text features to infer meaning of unknown words.

LA 4.1.6 Comprehension: Students will construct meaning by using prior knowledge and text information while reading grade-level literary and informational text.

LA 4.2.1 Writing Process: Students will apply the writing process to plan, draft, revise, edit, and publish writing using correct spelling, grammar, punctuation, and other conventions of standard English appropriate for grade-level.

LA 4.2.2 Writing Modes: Students will write in multiple modes for a variety of purposes and audiences across disciplines.

LA 4.3.1 Speaking: Students will develop, apply, and refine speaking skills and strategies to communicate key ideas in a variety of situations.

LA 4.3.2 Listening: Students will develop and demonstrate active listening skills across a variety of situations.

LA 4.3.3 Reciprocal Communication: Students will develop, apply, and adapt reciprocal communication skills.

LA 4.4.1 Information Fluency: Students will evaluate, create, and communicate information in a variety of media and formats (textual, visual, and digital).



LA 8.1.6 Comprehension: Students will construct meaning by applying prior knowledge, using text information, and monitoring comprehension while reading increasingly complex grade-level literary and informational text.

LA 8.2.1 Writing Process: Students will apply the writing process to plan, draft, revise, edit, and publish writing using correct spelling, grammar, punctuation, and other conventions of standard English appropriate for grade-level.

LA 8.3.1 Speaking: Students will develop, apply, and refine speaking skills and strategies to communicate key ideas in a variety of situations.

LA 8.3.2 Listening: Students will develop and demonstrate active listening skills across a variety of situations.



LA 12.1.6 Comprehension: Students will construct meaning by applying prior knowledge, using text information, and monitoring comprehension while reading increasingly complex gradelevel literary and informational text.

LA 12.2.1 Writing Process: Students will apply the writing process to plan, draft, revise, edit, and publish writing using correct spelling, grammar, punctuation, and other conventions of standard English appropriate for grade-level.

LA 12.3.1 Speaking: Students will develop, apply, and refine speaking skills and strategies to communicate key ideas in a variety of situations.



appendix

### Nebraska Department of Education Content Area Standards

#### Science Standards



**4.1.2** Develop an understanding of evidence, models, and explanation.

**4.1.4** Develop an understanding of form and function.

**4.2.1** Develop the abilities needed to do scientific inquiry.

**4.4.1** Develop an understanding of the characteristics of living things.

**4.4.2** Develop an understanding of the life cycles of living things.

**4.4.3** Develop an understanding of living things and environments.

**4.5.1** Develop an understanding of the characteristics of earth materials.

**4.5.3** Develop an understanding of the changes in the earth and sky.

**4.6.1** Develop an understanding of technological design.

**4.6.2** Develop an understanding of science and technology.

**4.6.3** Develop an understanding of the abilities to distinguish between natural objects and objects made by humans.

**4.7.2** Develop an understanding of the types of resources.

**4.7.3** Develop an understanding of environmental changes.

**4.8.1** Develop an understanding of science as a human endeavor.

8

**8.1.2** Develop an understanding of evidence, models, and explanation.

**8.1.3** Develop an understanding of change, constancy, and measurement.

**8.1.4** Develop an understanding of form and function.

**8.2.1** Develop the abilities needed to do scientific inquiry.

8.4.3 Develop an understanding of regulation and behavior.

**8.4.4** Develop an understanding of populations and ecosystems.

**8.6.1** Develop an understanding of technological design.

**8.7.2** Develop an understanding of relationships among populations, resources, and environments.

**8.7.3** Develop an understanding of natural hazards.

**8.7.4** Develop an understanding of risks and benefits.

8.7.5 Develop an understanding of science and technology in society.

**8.8.1** Develop an understanding of science as a human endeavor.

**8.8.2** Develop an understanding of the nature of science



**12.2.1** Develop the abilities needed to do scientific inquiry.

**12.4.4** Develop an understanding of the interdependence of organisms.

**12.4.5** Develop an understanding of matter, energy, and organization in living systems.

**12.4.6** Develop an understanding of the behavior of organisms.

**12.5.3** Develop a scientific understanding of the origin of the earth system.

**12.6.1** Develop an understanding of technological design.

**12.7.2** Develop an understanding of the effects of population change.

**12.7.3** Develop an understanding of natural resources.

**12.7.4** Develop an understanding of environmental quality.

**12.7.5** Develop an understanding of natural and human-induced hazards.

**12.7.6** Develop an understanding of the role of science and technology in local, national, and global challenges.

**12.8.2** Develop an understanding of the nature of scientific knowledge.

**12.8.3** Develop an understanding of the history of science.

