



Pre-1500 A Geologic Sense of Time

activities

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1 | Scientists

Activity Grade Level

8 HS



■ activity Discussion

Have students read the page A Sense of Geologic Time in the Pre-1500 timeline of Nebraska Studies, and particularly read the selection at the bottom of the page called Glossary: Those Who Study the Past.

<http://nebraskastudies.org/pre-1500/a-sense-of-geologic-time/>

Then ask students:

- Which two of the scientific occupations are the most alike? Why?
- Which of the two of the scientific occupations are the most different? Why?
- Which of the scientific occupations are the most interesting? Why?
- Why might each one of these scientists be interested in the same digging site?
- Why should history be considered a science?
- In what ways is history not a science?

■ Nebraska Department of Education Content Area Standards

Social Studies Standards: SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 | SS HS.3.2; SS HS.4.1; SS HS.4.3; SS HS.4.4

Language Arts Standards: LA 8.1.6 Comprehension; LA 8.4.1 Information Fluency | LA 12.1.6 Comprehension; LA 12.2.2 Writing Modes; LA 12.4.1 Information Fluency

Science: SC 8.1.1 | SC 12.3.1; SC 12.3.3

2 | Prehistoric Animals

Activity Grade Level

8 HS



■ activity

Photograph Analysis

Have students read the following webpages on the Pre-1500 timeline of Nebraska Studies:

<http://nebraskastudies.org/pre-1500/a-sense-of-geologic-time/>

<http://nebraskastudies.org/pre-1500/ashfall/>

Then, have them use the Photograph Analysis Worksheet (Page 8 in Resources) to analyze one or more of the pictures of bones, prehistoric animals, and scientists found on these pages.

■ Nebraska Department of Education Content Area Standards

Social Studies Standards: SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 | SS HS.3.2; SS HS.4.1; SS HS.4.3; SS HS.4.4

Language Arts Standards: LA 8.1.6 Comprehension; LA 8.2.1 Writing Process; LA 8.4.1 Information Fluency | LA 12.1.6 Comprehension; LA 12.2.2 Writing Modes; LA 12.3.1 Speaking; LA 12.4.1 Information Fluency

Science: SC 8.1.1 | SC 12.1.1; SC 12.1.2; SC 12.3.3

3 | Nebraska's Miocene Park

Activity Grade Level

8 HS



■ activity

Discussion

Have students read the following webpages in the Pre-1500 timeline of Nebraska Studies:

<http://nebraskastudies.org/pre-1500/a-sense-of-geologic-time/>

<http://nebraskastudies.org/pre-1500/ashfall/>

<http://nebraskastudies.org/pre-1500/the-ice-age/>

Have students review the images and video. Then, lead a discussion or have students write on the following questions:

- If scientists could bring one of the animals back to life, which would you most like to see? Use this animal for the rest of these questions.
- How has the geography and climate changed since your animal was last alive in Nebraska?
- Why did these prehistoric Nebraska-area animals disappear?
- Would your animal have to be placed in a zoo? If so, what special accommodations would the zookeepers have to take to keep the animal healthy and to keep visitors and other animals safe?

■ Nebraska Department of Education Content Area Standards

Social Studies Standards: SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.3; SS 8.4.4; SS 8.4.5 | SS HS.3.2; SS HS.4.1; SS HS.4.3; SS HS.4.4

Language Arts Standards: LA 8.1.6 Comprehension; LA 8.2.1 Writing Process; LA 8.4.1 Information Fluency | LA 12.1.6 Comprehension; LA 12.2.2 Writing Modes; LA 12.3.1 Speaking; LA 12.4.1 Information Fluency

Science: SC 8.1.1 | SC 12.1.1; SC 12.1.2; SC 12.3.3



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resources

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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>

R

Resources: Time Terms

Activity Grade Level

8 HS

Time Terms

NAME _____ PERIOD _____

anthropology _____

archaeology _____

geology _____

paleontology _____

artifact _____

fossil _____

glacier _____

Ice Age _____

mammoth _____

migration _____

Paleo-Indian _____

prehistory _____

R

Resources: Time Terms

Activity Grade Level

8 HS

Time Terms Definitions

(from Merriam-Webster)

anthropology	the science of human beings ; <i>especially</i> : the study of human beings and their ancestors through time and space and in relation to physical character, environmental and social relations, and culture
archeology	the scientific study of material remains (fossil relics, artifacts, monuments, etc.) of past human life and activities
geology	a science that deals with the history of the earth and its life, especially as recorded in rocks
paleontology	a science dealing with the life of past geological periods as known from fossil remains
artifact	something created by humans usually for a practical purpose
fossil	preserved from a past geologic age
glacier	a large body of ice moving slowly down a slope or valley or spreading outward on a land surface
Ice Age	a time of widespread glaciation
mammoth	any of a genus (<i>Mammuthus</i>) of extinct Pleistocene mammals of the elephant family distinguished from recent elephants by highly ridged molars, usually large size, very long tusks that curve upward, and well-developed body hair
migration	to pass usually periodically from one region or climate to another for feeding or breeding
Paleo-Indian	one of the early American hunting people of Asian origin extant in the late Pleistocene
prehistory	times before written history

Analyze a Photograph

Meet the photo.

Quickly scan the photo. What do you notice first?

Type of photo (check all that apply):

- Portrait Landscape Aerial/Satellite Action Architectural
 Event Family Panoramic Posed Candid
 Documentary Selfie Other

Is there a caption? yes no

Observe its parts.

List the people, objects and activities you see.

PEOPLE	OBJECTS	ACTIVITIES

Write one sentence summarizing this photo.

Try to make sense of it.

Answer as best you can. The caption, if available, may help.

Who took this photo?

Where is it from?

When is it from?

What was happening at the time in history this photo was taken?

Why was it taken? List evidence from the photo or your knowledge about the photographer that led you to your conclusion.

Use it as historical evidence.

What did you find out from this photo that you might not learn anywhere else?

What other documents, photos, or historical evidence are you going to use to help you understand this event or topic?



Nebraska Department of Education Content Area Standards

■ Social Studies Standards

8

SS 8.3.2 Examine how regions form and change over time.

SS 8.3.3 Determine how the natural environment is changed by natural and human forces and how humans adapt to their surroundings.

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.

HS

SS HS.3.2 Evaluate how regions change and form over time.

SS HS.4.1 Analyze and evaluate patterns of continuity and change over time in history.

SS HS.4.3 Examine historical events from the perspectives of marginalized and underrepresented groups.

SS HS.4.4 Evaluate sources for perspective, limitations, accuracy, and historical content.

Nebraska Department of Education Content Area Standards

■ Language Arts Standards

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

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LA 12.1.6 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 12.2.2 Writing Modes: Students will write in multiple modes for a variety of purposes and audiences across disciplines.

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

LA 12.4.1 Information Fluency: Students will evaluate, create, and communicate information in a variety of media and formats (textual, visual, and digital).

Nebraska Department of Education Content Area Standards

■ Science Standards

8

SC 8.1.1 Students will design and conduct investigations that will lead to descriptions of relationships between evidence and explanations.

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SC 12.1.1 Students will design and conduct investigations that lead to the use of logic and evidence in the formulation of scientific explanations and models.

SC 12.1.2 Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.

SC 12.3.1 Students will investigate and describe the chemical basis of the growth, development, and maintenance of cells.

SC 12.3.3 Students will describe, on a molecular level, the cycling of matter and the flow of energy between organisms and their environment.

**Nebraska Department of Education
Content Area Standards**

■ **Math Standards**

8

MA 8.4.1 Representations: Students will create displays that represent data.