



Pre-1500 Ashfall

activities

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1 Ashfall

Activity Grade Level

8



■ activity

Reading & Comprehension

Have students read the four webpages about Ashfall ("Ashfall," "Animals in the Dust," Michael Voorhies' Discovery," and "Ashfall Today"). Watch the video clips that accompany "Animals in the Dust" (5:28) and "Michael Voorhies' Discovery" (6:36).

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

<http://nebraskastudies.org/pre-1500/ashfall/animals-in-the-dust/>

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

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

Advanced:

Students should look for cause/effect relationships as they read/view the content. Possible examples:

volcano erupted in Idaho --> volcanic ash covered Nebraska in a layer 1-2ft thick, and drifted up to 10 feet deep.

animals in Nebraska breathed in ash --> the smallest animals suffocated, followed by the larger ones.

wind blew more ash on top of the animals' bodies --> the bodies were buried for millions of years

fossils needed protection from the weather --> the "Rhino Barn" was built.

■ Nebraska Department of Education Content Area Standards

Social Studies Standards: **SS 8.3.3; SS 8.4.2; SS 8.4.4; 8.4.5**

Language Arts Standards: **LA 8.3.1 Speaking; LA 8.4.1 Information Fluency**

Science: **SC 8.1.1; SC 8.1.2**

■ activity

Research & Writing

The following information provides support for the content found in "Ashfall Today." It might serve as an introduction to Ashfall. Then students can go back to the website to see how it all began. (<http://nebraskastudies.org/pre-1500/ashfall/>)

Go to <http://ashfall.unl.edu/index.html> and play the video (1:41) to prepare students for their note-taking. What did they learn from this brief clip?

Go to <http://ashfall.unl.edu/visit.html> and watch the video (3:17) for an overview of the Ashfall Fossil Beds State Historical Park and the Hubbard Rhino Barn.

Have students take notes about the unique characteristics of Ashfall. Plan to play the video several times so students can record their notes or have them raise their hands when they hear an important fact that should be recorded. Pause the video and allow writing time.

After gathering information, assign a writing piece for students to compile what they learned.

Suggestions:

Write a letter (or other expository piece) to someone from another state explaining how Ashfall became an important site, who and what they can expect to see, and when is the best time to visit.

Write a persuasive piece convincing a visitor to come to Ashfall, or convince your principal to fund a virtual or live visit for your class. Why should they?

Teachers might go to <http://ashfall.unl.edu/educators.html> to find activity sheets, a brochure, and a skeleton map to supplement content.

■ Nebraska Department of Education Content Area Standards

Social Studies Standards: [SS 4.3.3](#); [SS 4.3.5](#); [SS 4.4.2](#); [SS 4.4.3](#); [SS 4.4.4](#) | [SS 8.3.3](#); [SS 8.4.2](#); [SS 8.4.4](#); [SS 8.4.5](#)

Language Arts Standards: [LA 4.1.5 Vocabulary](#); [LA 4.1.6 Comprehension](#) | [LA 8.1.6 Comprehension](#); [LA 8.2.2 Writing Modes](#)

Science: [SC 5.1.2](#); [SC 5.3.3](#) | [SC 8.1.2](#); [SC 8.3.1](#)

3 | Dr. Voorhies Biography

Activity Grade Level

4 8



■ activity Writing

Have students read the Dr. Michael Voorhies' Discovery page in the Ashfall section in the Pre-1500 timeline of Nebraska Studies. They may also explore the Mike Voorhies page on NET's Paleosleuths site.

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

http://www.paleosleuths.org/mike_voorhies.html

Then have them write a biographic article about Dr. Michael Voorhies, paleontologist at the University of Nebraska State Museum. Students may use information from the pages above, including the video stories, or use the University of Nebraska State Museum Ashfall site.

<http://ashfall.unl.edu>

■ Nebraska Department of Education Content Area Standards

Social Studies Standards: [SS 4.3.3](#); [SS 4.3.5](#); [SS 4.4.2](#); [SS 4.4.3](#) | [SS 8.3.3](#); [SS 8.4.2](#); [SS 8.4.4](#); [SS 8.4.5](#)

Language Arts Standards: [LA 4.1.6 Comprehension](#); [LA 4.2.1 Writing Process](#); [LA 4.4.1 Information Fluency](#) | [LA 8.1.6 Comprehension](#); [LA 8.2.1 Writing Process](#); [LA 8.4.1 Information Fluency](#)

Science: [SC 5.1.1](#); [SC 5.1.2](#) | [SC 8.1.1](#); [SC 8.1.2](#)

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Ashfall Resources

Activity Grade Level

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Internet Resources

Ashfall, University of Nebraska State Museum

<http://ashfall.unl.edu/>

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>

Nebraska Department of Education Content Area Standards

■ Social Studies Standards

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

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.

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

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

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.

Nebraska Department of Education Content Area Standards

■ Language Arts Standards

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LA 4.1.5 Vocabulary: Students will build and use conversational, academic, and content-specific grade-level vocabulary.

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

LA 4.4.1 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 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 8.2.2 Writing Modes: Students will write in multiple modes for a variety of purposes and audiences across disciplines.

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 8.4.1 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

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

SC 8.1.2 Students will apply the nature of science to their own investigations.

SC 8.3.1 Students will investigate and describe the structure and function of living organisms.

Nebraska Department of Education Content Area Standards

■ Math Standards

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