

# Critterpages Denali National Park Quarter

#### Denali National Park Quarter Grades Seven and Eight



#### **OBJECTIVES**

Students will identify the basic needs of organisms that must be met in order to carry out life processes. The students will classify organisms found in local ecosystems as producers or first-, second-, or third-order consumers. The students will identify ways organisms adapt to factors in an ecosystem. The students will identify ways human interaction can directly alter habitats.



#### **MATERIALS**

- 1 overhead projector (optional)
- 1 overhead transparency or electronic version of:
  - "Denali Quarter Reverse" page
  - "Critterpages Template" worksheet
  - "Critterpages Page Rubric: Dall Sheep"
- Copies of the following:
  - "Critterpages Template"
  - "Critterpages Page Rubric: Dall Sheep"
  - "3-2-1 Peer Evaluation" worksheet
- 1 class map of the United States with Alaska in the proper location
- Copies of age-appropriate texts that contain information on Alaska and Dall sheep, such as:
  - Alaska by Shelley Gill
  - Denali National Park and Reserve by David Aretha
  - Alaska by Joyce Johnston
  - Unique Animals of Alaska by Tanya Lee Stone
- Chart paper
- Age-appropriate materials that provide information about Alaska and the Dall sheep such as Internet sites, videos, textbooks, reference materials, and other texts.
- Computers with Internet access



#### **PREPARATIONS**

- Make an overhead transparency or electronic version of each of the following:
  - "Denali National Park Quarter Reverse" page
  - "Critterpages Template" worksheet
  - "Critterpages Page Rubric: Dall sheep"



- Make copies of each of the following:
  - "Critterpages Template" worksheet (1 per student)
  - "Critterpages Page Rubric: Dall Sheep" worksheet (1 per student)
  - "3-2-1 Peer Evaluation" worksheet (3 per student)
- Gather age-appropriate texts that contain information on Alaska and Dall sheep (see examples under "Materials").
- Arrange to use the school computer lab for four sessions.
- Locate materials for partner research that provide additional information about Alaska and the Dall sheep (see examples under "Materials").
- Bookmark Internet sites that contain information about Alaska and the Dall sheep.
- Make a three column chart labeled "Sheep," "Mountain," and "Alaska."



#### **GROUPINGS**

- Whole group
- Small group
- Individual work



#### CLASS TIME

Four 45- to 60-minute sessions



#### SUBJECT AREA CONNECTIONS

- Science
- Language Arts



#### TERMS AND CONCEPTS

- Ouarter
- Obverse (front)
- Reverse (back)
- Climate
- Dall Sheep
- Denali National Park





#### **BACKGROUND KNOWLEDGE**

Students should have a basic knowledge of:

- Writing process
- Social Network
- Habitat
- Producers
- Consumers
- Predator/Prey
- Niche
- Community
- Terrain
- Adaptations
- Citing Sources



#### **STFPS**

#### Session 1

- 1. Display the "Denali Quarter Reverse" overhead transparency or photocopy. Locate this site on a class map. As background information, explain to the students that the United States Mint began to issue the quarters in the America the Beautiful Quarters® Program in 2010. By the time the program ends in 2021, there will be a total of 56 designs on the back of the coin. Each design will focus on a different national site—one from each state, territory, and the District of Columbia.
- 2. With the students, examine the coin design. Have the students identify the images and the writing included in this design. Focus specifically on the sheep, the mountain, and the word Alaska. Ask the students for information on any of the three. Display the 3 column chart labeled "Sheep," "Mountain," and "Alaska." Write down any prior knowledge the students have of the three words.
- 3. Locate Alaska on a classroom map. Note its position in relation to your school's location. Locate Mount McKinley on the map of Alaska.
- 4. Explain to the students that they will be finding answers for the following four questions about the design on the coin.
  - What type of sheep is pictured on the coin and what are three facts about this particular sheep?
  - What mountain is pictured on the coin and what is its claim to fame?
  - When was Alaska admitted to the Union and what climate is found there?
  - Why was the Denali National Park originally established and by whom?



- 5. Divide the students into groups of four and have one student in each group research one of the questions. The students can look in the printed materials provided or search preselected sites on the Internet.
- 6. When students have finished their research, have them share answers within their groups.
- 7. Have groups share with the class and fill in the three column chart.
- 8. Reinforce the concept that the park was originally established as a preserve for the Dall sheep.

#### Sessions 2 and 3

- 1. Review the chart from the previous session. Remind the students that Denali National Park was initially established to preserve the habitat of the Dall sheep. This is one way to protect animals. Another way is to inform people about the particular animal and how it lives and survives. The more information we know about a particular animal, the easier it is to protect it.
- 2. Explain to the students that there are many web sites that give information about pets and animals. Explain to the students that they will be creating a fictional web page on a fictional web site called Critterpages to tell about the Dall sheep.
- 3. Display the "Critterpages Template" overhead transparency and review the template with the students. Explain to the students that they are researching the answers to the questions listed on the template. The students will then use their answers to create the page. Review the parts of the page and the questions with the students. Distribute the "Critterpages Template" to the students.
- 4. Distribute the "Critterpages Page Rubric: Dall Sheep." Display the rubric and review it with the students. Review with the students information relating to copyright and plagiarism. Review with the students how to cite sources.
- 5. Have the students use the printed texts or take the students to the computer lab to complete their research.
- 6. Allow the students time to write their sections, emphasizing the use of the writing process.

#### Session 4

- 1. Review the charts and the rubric from the previous sessions.
- 2. Allow the students time to complete their sections emphasizing the use of the writing process.
- 3. When students have finished their pages, set up a publishing center for the final drafts. Distribute the "3-2-1Peer Evaluation" worksheet and review the directions with the students.



4. Have the students read three other students' pages and complete an evaluation sheet for each one they read.



#### **ASSESSMENTS**

- Take anecdotal notes about the students' participation in class discussions.
- Use the rubric to evaluate the students' worksheets and projects for understanding of the lesson objectives.



#### **ENRICHMENTS/EXTENSIONS**

- Have the students create pages on the other animals found in the Denali National Park.
- Post students' pages on the school or class webpage if available.
- Have the students write positive comments on each other's pages.



#### DIFFERENTIATED LEARNING OPTIONS

- Allow students to work in pairs or small groups on the actual page.
- Simplify the questions on the template.
- Provide a sample page on another animal from Denali National Park.



#### CONNECTION TO WWW.USMINT.GOV/KIDS

- Have students learn more about Alaska with "The Coin and the Fable" lesson plan based on the Alaska state quarter at http://www.usmint.gov/kids/teachers/lessonPlans/50sq/2008/0406-4.pdf.
- Have the students learn more about adaptations with the Denali Quarter 4 through 6 lesson plan.



## Critterpages Template

**Directions:** Use this page as a template for your Critterpages page on the Dall sheep.



#### PICTURE OF COIN REVERSE; PICTURES OF DALL SHEEP

#### **Dall Sheep**

## OVERVIEW AND DESCRIPTION

What are three major facts about this sheep? Where is this sheep found? Why was the Denali National Park originally established? What mountain is located in Denali National Park and what is its claim to fame? What type of climate do you find in the sheep's habitat? What type of terrain is found there?

#### LIFE PROCESSES

How does the Dall sheep obtain the materials that they need to survive in their habitat? Describe their habitat. What effect would an increase in the number of sheep have on the available food supply, especially during the winter months? Comments:

#### **ADAPTATIONS**

What adaptations, which include structures, behaviors, or physiology enhance the survival and reproductive success of the Dall Sheep?

Comments:

#### **FOOD WEB**

Is the Dall sheep classified as producers or first-, second-, or third-order consumers? Why? Describe a model of the food web for the Dall sheep.

#### **NICHES**

Describe one of the predator-prey relationships the Dall sheep is part of. What specific role or niche does the Dall sheep have in its community? Comments:

#### INFLUENCE OF MAN

How can human interaction alter the habitat of the Dall sheep? Have past interactions been positive or negative or both?

#### **SOURCES**

Where did you find the information for your page?

#### YOU AND ANIMALS

What is your opinion on the Dall sheep?

#### **LINKS**

**POPULAR PLACES** 



Name \_\_\_\_\_\_\_
Student Your Are Evaluating \_\_\_\_\_\_

## 3-2-1 Peer Evaluation

**Directions:** You will be evaluating three others students' pages altogether. Follow the directions below, remembering to be positive. Remember: your page is also being evaluated.



3: Write down three facts or information you found interesting on the page.
2: Write down two questions you would like to ask the student who wrote the page.
<ol> <li>Write down one suggestion for this person on how to improve their page.</li> </ol>



Name
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# Critterpages Page Rubric

CATEGORY	4	3	2	1	SELF	TEACHER
Plagiarism	All answers are in the words of the student and not copied.	Most answers are in the words of the student but one or two were copied.	Some answers are in the words of the student but some are copied.	Few answers are in the words of the student and most are copied.		
Spelling and Grammar	No errors in spelling, punctuation, or grammar.	1 or 2 errors in spelling, punctuation, or grammar.	3 to 5 errors in spelling, punctuation, or grammar.	More than 5 errors in spelling, punctuation, or grammar.		
Work Ethic	Always uses classroom project time well.	Usually uses classroom project time well.	Occasionally distracts others.	Does not use classroom project time well.		
Content Accuracy	All information is accurate and all the requirements met.	Most information is accurate and all requirements met.	Most information is accurate and most requirements met.	Many inaccuracies OR many requirements not met.		
Interest	Exceptional attempt to make the content interesting.	Good attempt to make the content interesting.	Much information but little evidence of effort to make content interesting.	Little information or evidence of effort to make it interesting.		
Student's Learning	Exceptional understanding of the material.	Good understanding of the material.	Fair understanding of the material.	Little understanding of the material is evident.		
Images	All images are related to the content.	Most images are related to the content.	Some of the images are related to the content.	Few of the images are related to the content.		
Answers the questions	All questions are answered completely.	Most questions are answered completely.	Some questions are answered completely.	Few questions are answered completely.		
Additional						
TOTALS						



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