

# The Wildlife and Features of Yellowstone National Park

# Lesson Plan

**Grade Level:** K-8

**Curriculum Focus:** Ecosystems

**Lesson Duration:** 1–2 class periods

# **Student Objectives**

- Describe the natural features of Yellowstone National Park.
- Identify the wildlife found in Yellowstone National Park.
- Create a travel journal using written entries and photos to document a three-day trip to Yellowstone National Park.

# **Materials**

• Video on *unitedstreaming*: *National Parks*: *Yellowstone National Park*Search for this video by using the video title (or a portion of it) as the keyword.

Selected clips that support this lesson plan:

- Yellowstone Park Today
- Hydrothermal Features of Yellowstone
- The Wildlife of Yellowstone
- Pencils and erasers
- Paper
- Glue or tape
- Scissors
- Encyclopedias, magazines, travel brochures, park brochures, and other texts with information and images from Yellowstone National Park
- Computer with Internet access (optional)

# **Procedures**

1. Introduce Yellowstone National Park to the class by having your students watch *Yellowstone Today*. After watching the program, discuss some of the environmental features and natural resources found in the park. Talk about the history and geology of the park.

- 2. Tell students to imagine that they have just returned from a three-day trip to Yellowstone National Park. Instruct students that they are going to write a travel journal entry for each day of their trip.
- 3. Explain that student journals should be creative but also include facts about the park. Each student journal needs to be at least three pages in length and should include at least six images of the park, complete with captions detailing each image.
- 4. To create their journal entries students must address the following:
  - What part of the park were you in each day? Where did you sleep at night?
  - What kinds of animals did you encounter there? What did they look like? What were they doing when you saw them? How did they react to you?
  - What kinds of ecosystems did you travel through? What was the natural terrain like? What sorts of plants, trees, and other features did you see?
  - What was the geology of the park like? What sorts of natural resources or hydrothermal features did you come across? What were they like?
  - What sorts of safety precautions did you use on your trip?
  - What kinds of activities did you participate in?
  - Describe at least two additional interesting facts about what you saw each day.
- 5. Give students time in class and as a homework assignment to research and create their journals. In addition to any print resources you may have, the following Web sites have good information on Yellowstone National Park:
  - http://www.nps.gov/yell/
  - http://www.yellowstone.net/index.html
  - http://gorp.away.com/gorp/resource/us\_national\_park/wy\_yello.htm
  - http://www.yellowstone-natl-park.com/
- 6. When students have completed their work, have volunteers read parts of their journals to the class. Divide the class into groups of 3–5 and have each student share their journal entries and photos with the rest of their group.

# Assessment

Use the following three-point rubric to evaluate students' work during this lesson.

- **3 points:** Students were highly engaged in class and group discussions; wrote creative, coherent, and informative journals that met all the established criteria; including at least six images with informative captions.
- **2 points:** Students somewhat participated in class and group discussions; wrote somewhat creative, coherent, and informative journals that met most of the established criteria; and included some images with informative captions.

• **1 point:** Students minimally participated in class and group discussions; wrote incomplete or incoherent journals that met little to none of the established criteria; and few or no images with informative captions.

# Vocabulary

# ecosystem

Definition: A biological community of interacting organisms and their environment Context: From bison and bears to the microscopic organisms that live in the hot springs, all parts of the Yellowstone ecosystem are linked together.

# geyser

*Definition:* A fountain of superheated water and steam that erupts periodically from Earth's surface

*Context:* There are spouting geysers and bubbling mud pots throughout Yellowstone National Park.

# hydrothermal

Definition: Relating to the action of heated water in the Earth's crust

*Context:* Yellowstone preserves the world's greatest collection of hydrothermal features.

#### roam

*Definition:* The act of wandering or rambling; a leisurely walk *Context:* Bison, elk, and deer roam freely.

#### natural resource

*Definition:* A material found naturally in the environment e.g., water, trees, animals, etc. *Context:* It is important to preserve the park's natural resources for future generations.

#### sanctuary

*Definition*: A place of refuge or protection; free from harm *Context*: Yellowstone is an enormous wildlife sanctuary where animals roam freely in their natural habitat.

# Academic Standards

# **National Academy of Sciences**

The National Science Education Standards provide guidelines for teaching science as well as a coherent vision of what it means to be scientifically literate for students in grades K–12. To view the standards, visit this Web site:

http://books.nap.edu/html/nses/html/overview.html#content.

This lesson plan addresses the following national standards



- Physical Science: Properties of objects and materials; Properties and changes of properties in matter
- Life Science: Organisms and environments; Populations and ecosystems
- Earth and Space Science: Properties of earth materials; Structure of the earth system
- Science in Personal and Social Perspectives: Types of resources; Changes in environments;
  Populations, resources, and environments

# Mid-continent Research for Education and Learning (McREL)

McREL's Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education addresses 14 content areas. To view the standards and benchmarks, visit <a href="http://www.mcrel.org/compendium/browse.asp">http://www.mcrel.org/compendium/browse.asp</a>.

This lesson plan addresses the following national standards:

- Science: Physical Sciences—Understands the structure of properties of matter
- Science: Earth and Space Sciences—Understands Earth's composition and structure
- Geography: Physical Systems Knows the physical processes that shape patterns on Earth's surface; Understands the characteristics of ecosystems on Earth's surface
- Geography: Environment and Society Understands how human actions modify the physical environment; Understands how physical systems affect human systems

# The National Council for the Social Studies (NCSS)

NCSS has developed national guidelines for teaching social studies. To become a member of NCSS, or to view the standards online, go to <a href="http://www.socialstudies.org/standards/strands/">http://www.socialstudies.org/standards/strands/</a>.

This lesson plan addresses the following thematic standards:

- Time, Continuity, and Change
- People, Places, and Environments

# **Support Materials**

Develop custom worksheets, educational puzzles, online quizzes, and more with the free teaching tools offered on the Discoveryschool.com Web site. Create and print support materials, or save them to a Custom Classroom account for future use. To learn more, visit

http://school.discovery.com/teachingtools/teachingtools.html