

Why Were They Built? Dams in Arizona

Author
Grade Level
Duration

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3
1 class period

National Standards

GEOGRAPHY

Element 5: Environment and Society

14. How human actions modify the physical environment.
16. The changes that occur in the meaning, use, distribution, and importance of resources

Element 6: The Uses of Geography

17. How to apply geography to interpret the past
18. How to apply geography to interpret the present and plan for the future

AZ Standards

ELA

Reading

Key Ideas and Details

3.RI.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

Language

Conventions of Standard English

3.L.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
i. Produce simple, compound, and complex sentences.

Arizona Social Science Standards

GEOGRAPHY

The use of geographic representations and tools helps individuals understand their world.

3.G1.1 Use and construct maps and graphs to represent changes in Arizona over time. Key concepts include but are not limited to locating physical features including the Grand Canyon, Mogollon Rim, Colorado River, Salt River, Gila River. Key concepts include but are not limited to locating human features including major cities, counties, Hoover Dam, Roosevelt Dam, and state capital. Key concepts include but are not limited to distinct physical and cultural characteristics of Arizona including landforms, the 5C's, climate zones, elevations, plants, animals, Arizona's 22 Indian Nations, diverse ethnic, racial, and religious cultures

Human-environment interactions are essential aspects of human life in all societies.

3.G2.1 Explain how people modify and adapt to the Arizona environment. Key concepts include but are not limited to modification and adaptation of the environment by Paleo-Indians, Prehistoric-Indians, explorers, settlers, farmers, immigrants, migrants, and the 22 Arizona Indian Nations, and the use of Arizona's natural resources.

Global interconnections and spatial patterns are a necessary part of geographical reasoning.

3.G4.1 Describe how Arizona has changed over time. Key concepts include but are not limited to Paleo-Indians, explorers, settlers, farmers, immigrants, migrants, the 22 Arizona Indian Nations, plants, land use, and animals.

Overview

An important way in which people have modified natural resources is by building dams. Many dams have been built on Arizona rivers. Students should know why people have built dams and will see that Arizona has a long history of dam building.

Purpose

In this lesson students will gain a better understanding of how people modify a natural resource in their environment by building dams.

Materials

- Projection device
- Highlighters
- Important Dams in Arizona map
- Dams in Arizona reading
- Arizona Dams Worksheet and answer key

Why Were They Built? Dams in Arizona

- Arizona Dams PowerPoint
- Colored pencils, 4 different colors per student

Objectives

Students will be able to:

1. Explain the purpose of dam building.
2. Locate dams on an Arizona map.

Procedures

1. Introduce the subject of dams. Have students share their ideas about why dams are built and if they know of any dams near where they live. Have they ever played in the water and built a dam? Show the Arizona Dams PowerPoint.
2. Distribute and read aloud Dams in Arizona. Project the reading as well. Identify the reasons why people build dams. Model highlighting the main ideas for students and have them highlight their copies.
3. Distribute a copy of the Important Dams in Arizona map to the students and project the map.
4. Point out and have students locate the Colorado, Gila, Verde and Salt Rivers on their map. Have students color these four rivers using four different colors. Then have students identify the dams built on the 4 rivers by using a pencil line across the river where a dam is located.
5. Explain that the dates listed are the dates of construction and explain that the numbers 1, 2, and 3 in the key identify dams on the Salt River.

6. Give the worksheet for students to complete.
7. Conclude the lesson by having students review the reasons for building dams in Arizona and how they still benefit people today.

Assessment

ELA and Geography

The student worksheet can be used for assessment purposes. It is a combination of short answer and multiple-choice questions. Items 1 - 3 can be used to assess ELA objectives. All items can be used to assess geography objectives. A score of 80% or higher is considered mastery for each.

Extensions

Have students locate the dam that is nearest to their hometown. Research this dam to find the purpose of the dam and any benefits their town receives from it.

Sources

The following website gives more information about dams: www.pbs.org/wgbh/buildingbig/dam/
It includes dam basics, games, and wonders.