

Oregon or Bust: The Journey West Along the Oregon Trail

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Grade Level	5
Duration	1 class period

National Standards

GEOGRAPHY

Element 4: Human Systems

9. The characteristics, distribution, and migration of human populations on Earth's surface.

Element 6: The Uses of Geography

17. How to apply geography to interpret the past.

AZ Standards

MATHEMATICS

Number and Operations in Base Ten

5.NBT.B.5 Fluently multiply multi-digit whole numbers using the standard algorithm.

5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, connecting objects or drawings to strategies based on place value, properties of operations, and/or the relationship between operations. Relate the strategy to a written form

Measurement and Data

5.MD.C.5 Relate volume to the operations of multiplication and addition and solve mathematical problems and problems in real-world contexts involving volume.

a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes (e.g., to represent the associative property of multiplication).

b. Understand and use the formulas $V = l \times w \times h$ and $V = B \times h$, where in this case B is the area of the base ($B = l \times w$), for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths to solve mathematical problems and problems in real-world contexts.

c. Understand volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms, applying this technique to solve mathematical problems and problems in real-world contexts.

Standards for Mathematical Practice

Arizona Social Science Standards

GEOGRAPHY

Examining human population and movement helps individuals understand past, present, and future conditions on Earth's surface.

5.G3.1 Use key historical events with geographic tools to analyze the causes and effects of environmental and technological events on human settlements and migration.

Key concepts include but are not limited to consequences of territorial expansion on American Indians, the institution of slavery, the positive and negative impact of new technologies on the environment and the growth of cities, and the impact of transportation and infrastructure on settlement and migration

DISCIPLINARY SKILLS AND PROCESSES

Thinking within the discipline involves the ability to analyze relationships among causes and effects and to create and support arguments using relevant evidence.

5.SP4.1 Explain probable causes and effects of events and developments in United States history from the revolutionary period to the rise of industry and urbanization. Events include but are not limited to the American Revolution, Constitutional Convention, Civil War, Reconstruction, westward expansion, industrialism, and urbanization

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5.MP.2. Reason abstractly and quantitatively.

Overview

Between 1840 and 1860, 300,000 to 600,000 emigrants embarked upon the 2200-mile journey along the Oregon Trail from Independence, Missouri to Oregon City, Oregon. The varied terrain and weather conditions along the trail influenced the events and conditions of travel the emigrants experienced.

Purpose

In this lesson students will learn about the terrain, weather, and traveling conditions along the Oregon Trail. Students will practice multiplying with a decimal and finding the volume of a space.

Materials

- Oregon or Bust reading
- The Oregon Trail map
- Assessment Worksheet and Answer Key

Objectives

The student will be able to:

1. Identify cause/effect relationships of the environments encountered along the Oregon Trail.
2. Multiply with a decimal and find the volume of a space.

Procedures

Prerequisite Reading Skill: Understanding of cause-effect relationships.

1. Assess students' current knowledge level regarding the Oregon Trail. Write their ideas on the whiteboard.
2. Project the Oregon Trail map. Have students identify the current states and landforms the trail included.
3. Distribute the Oregon or Bust reading. As they are reading, have them refer to the map of the Oregon Trail locating the different reference points along the trail.
4. Lead a class discussion of the information. Mention that as the settlers *prepared* for their journey, their knowledge of the terrain of the places and weather conditions of the environments they would encounter influenced

their preparations. How so? Elicit specific cause/effect relationships.

- *Terrain:* Wagons were 3 feet high to cross streams, tar buckets were brought to waterproof the wagons, extra wheels and axles were brought to replace ones that would break, rope was brought to lower wagons on steep hills.
 - *Weather conditions:* Wagon canopies were oiled to keep out the rain; sturdy shoes were brought for varying weather conditions.
5. Discuss how the settlers' knowledge of the trail affected their decisions as they made the journey. As they made their journey, the terrain of the places and weather conditions of the environments they encountered influenced the events and conditions of their journey. How so? Elicit specific cause-effect relationships.
 - *Terrain:* The tall grassy plains caused men to stand on the backs of horses to see. The Platte River provided no wood for fires, so settlers used buffalo dung. The steep canyon ledges caused settlers to take apart wagons and haul them up the canyon. The slippery trails made settlers tie logs on the back of the wagons to act as brakes.
 - *Weather conditions:* If settlers left early in the year, there would not be enough grass for animal grazing. If they left later in the year, they could get trapped in snow banks. They encountered windy thunderstorms, which caused them to chain the wagons together to keep them from blowing away.
 6. Model the sample mathematics problem with the students. Students should complete assessment worksheet to test for comprehension of geography knowledge as well as math skills.

Assessment

Assessment Worksheet items 1-5 assess geography knowledge while items 6-10 assess knowledge of mathematics. Geography mastery is considered 4/5 or 80%. Mathematical mastery is considered 4/5 or 80%.

Extensions

Students can plan a move across country or overseas. They need to research the terrain and weather conditions they will encounter on their move. Using what they have learned about the

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cause/effect relationship of the terrain and weather conditions during travel, they can make their plans accordingly.

Students can complete the lesson created by Jane Chambers and produced by the Arizona Geographic Alliance on the Oregon Trail: **Westward Ho: The Difficulties of Emigrants Moving West.**

Sources

Thompson, Gare. *Our Journey West*. 2002, National Geographic Society: Washington, D.C.
ISBN 0-7922-8676-6

Fisher, Leonard Everett. *The Oregon Trail*. 1990, Holiday House: New York. (Actual photographs from the time) ISBN 0823408337