Oregon or Bust:
The Journey West Along the Oregon Trail

Students learn of the influence of places and environments on the events and conditions settlers experienced on their journey along the Oregon Trail. These influences can be compared mathematically using percentages.

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Grade Level: 7
Duration: 2 class periods

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 and the weather conditions along the Oregon Trail and how they influenced the events and conditions the settlers experienced along the journey. Students will also learn to compare data using the percentage formula and convert decimal values to percent values.

National Geography Standards

ELEMENT TWO: PLACES & REGIONS
1. The physical and human characteristics of places.

Arizona Geography Strand 4
Concept 2 Places and Regions
GRADE 7
PO 1 Describe the human and physical characteristics of places and regions.
PO 4 Describe how a place changes over time.

Concept 4 Human Systems
GRADE 7
PO 3 Describe the effects of human migration in the U.S. and regions of the world.
PO 5 Analyze the effects of settlement on places.

Concept 6 Geographic Applications
GRADE 7
PO 1 Describe ways geographic features and conditions influence history.

Arizona Math Standard

STRAND 1 Number Sense and Operations
CONCEPT 2 Numerical Operations
GRADE 7
PO10 Calculate the percent of a given number
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Materials
- Reading titled “Oregon or Bust”
- The Oregon Trail map
- Paper, pencil
- Assessment Worksheet and answer key
- Calculators

Objectives
The student will be able to:

1. Identify cause/effect relationships of the environments encountered along the Oregon Trail.

2. Calculate the percent of a given number.

Procedures
Prerequisite Reading Skill: Understanding of cause-effect relationships.
Prerequisite Math Skill: Knowledge of setting up and computing percentage problems.

SESSION ONE
1. Have students use the map "Oregon Trail” to find the route emigrants traveled. Point out the current states and landforms the trail included.

2. Brainstorm to assess students’ current knowledge level regarding the Oregon Trail. Be sure to discuss dates and numbers of people traveling. Discuss what the travelers had to prepare for on their journey: the terrain along the Oregon Trail and how it influenced the events and conditions of travel and the weather conditions along the Oregon Trail and how they influenced the events and conditions of travel.

3. Have students read the selection entitled “Oregon or Bust”. As they are reading, have them refer to their map of the Oregon Trail locating the different reference points along the trail.

4. After students have completed the reading, 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 from students 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 from students 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
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chain the wagons together to keep them from blowing away.

SESSION TWO
1. Review with students how to compare quantities using percentages by modeling the following calculations:
When solving a percentage problem, always consider the following: % is converting numbers to be part of 100. So, 100% is always the whole. Therefore the equation for converting to percentages is to divide the part by the whole, which will result in a decimal quotient. Move the decimal in the quotient two places to the right (to the hundredths place) to convert the decimal into a percent. (Be sure to put a % sign after the decimal is moved two places.)

Example 1: Use the figure 300,000 for the total number of emigrants traveling the Oregon Trail from 1840-1860. If 50,000 people traveled during the years 1840-1850, what percentage of the total traveled during those years?
Part = 50,000
Whole = 300,000
50,000 divided by 300,000 = 0.16666666.
0.16666666 move the decimal two places to the right = 16.6% of the people traveled during the years 1840-1850.

Example 2: emigrants traveled about 9 hours a day out of 24 hours. What percentage of the day was spent traveling?
Part = 9
Whole = 24
9 divided by 24 = .375
.375 move the decimal two places to the right = 37.5 % of the day was spent traveling.

Example 3: The food supplies carried by the emigrants weighed approximately 390 pounds. The bacon accounted for about 150 pounds of the total weight. What percentage of the food was bacon?
Part = 150
Whole = 390
150 divided by 390 = 0.384
0.384 move the decimal two places to the right = 38.4 % of the total food weight was bacon.

Example 4: The food supplies carried by the emigrants weighed approximately 390 pounds. The coffee accounted for about 10 pounds of the total weight. What percentage of the food was coffee?
Part = 10
Whole = 390
10 divided by 390 = 0.025
0.025 move the decimal place two places to the right = 2.5 % of the total food weight was coffee.

Example 5: The food supplies carried by the emigrants weighed approximately 390 pounds. The bacon accounted for about 150 pounds, flour 200 pounds, coffee 10 pounds, salt 10 pounds, and sugar 20 pounds of the total weight. All the food except flour accounts for what percentage of the total weight of the food?
Part = 200 (lbs of flour)
Whole = 390 (total weight of all the food)
200 divided by 390 = 0.512
0.512 move the decimal two places to the right = 51.2 % of the total food weight was flour
100% - 51.2% = 49.8% of the total food weight was not flour

2. 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 percentage knowledge of mathematics.
Geography mastery is considered 4/5 or 80%.
Mathematical percentage 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 cause-effect relationship of the terrain and weather conditions during travel, they can make their plans accordingly.

A lesson on the GeoLiteracy CD Rom created by Jane Chambers and produced by the Arizona Geographic Alliance focuses on the Oregon Trail: *Westward Ho: The Difficulties of Emigrants Moving West*. For information on how to purchase the GeoLiteracy CD please contact the Arizona Geographic Alliance at 480-965-5361 or see the website at http://alliance.la.asu.edu/azga/

**Sources**
