

A Geographic Profile: The Health of Nations

*Adapted from a lesson by Lyn Malone, Rhode Island

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Grade Levels	6-7
Duration	1 class period

National Standards

GEOGRAPHY

Element 1: The World in Spatial Terms

1. How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

2. How to use mental maps (a person's internalized picture of a part of Earth's surface) to organize information about people places, and environments in a spatial context

3. How to analyze the spatial organization of people places, and environments on Earth's surface

Element 2: Places and Regions

4. The physical and human characteristics of places

Element 6 The Uses of Geography

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

AZ Standards

MATHEMATICS

Statistics and Probability

6.SP.A.2. Understand that a set of data collected to answer a statistical question has a distribution that can be described by its center, spread, and overall shape.

6.SP.A.3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

6.SP.B.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

7.SP.B.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.

Standards for Mathematical Practice

6.MP.2. and 7.MP.2. Reason abstractly and quantitatively.
6.MP.4. and 7.MP.4. Model with mathematics.

ELA

Writing

Production and Distribution of Writing

6.W.4 and 7.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Arizona Social Science Standards

GEOGRAPHY

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

6.G1.1 Use and construct maps, graphs, and other representations to explain relationships between locations of places and regions.

7.G1.1 Use and construct maps and other geographic representations to explain the spatial patterns of cultural and environmental characteristics.

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

6.G3.1 Analyze how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas.

7.G3.4 Evaluate human population and movement may cause conflict or promote cooperation.

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

6.G4.2 Describe how natural and human-made catastrophic events and economic activities in one place affect people living in nearby and distant places.

7.G4.1 Analyze cultural and environmental characteristics among various places and regions of the world.

7.G4.4 Explain an issue in terms of its scale (local, regional, state, national, or global)

Overview

Becoming aware of the demographics of the world's nations provides a worthwhile perspective to those of us living in the US. By using the provided data resources, students have the opportunity to study and develop meaningful conclusions concerning the state of health care in numerous countries around the world, while making thoughtful comparisons and connections to home.

Purpose

In this lesson, students will use math to analyze demographics of a nation with the eventual goal of creating a span of nations reflecting their world health status.

Materials

- World Health Rating Scale worksheet
- World Health Rating Scale Example (Afghanistan)
- Internet Access/Electronic devices
- Note cards (cards with the names of enough countries written on them to have at least one per student)
- Markers
- Whiteboard

Objectives

The student will be able to:

1. Read and interpret data from a demographic profile and then draw relevant conclusions.
2. Gather data from a website.
3. Determine the average from a set of data.

Procedures

Prior to the Lesson: Prepare notecards with a variety of world nations written on them—enough for each student to have at least one. Place a scale of 1-10 on a wall or whiteboard.

Background Knowledge: Students know how to round numbers to nearest whole number.

1. Ask: How can we compare countries? Solicit responses from students. The responses might include size of country, population, value of exports, etc. Then introduce the lesson using the Overview and Purpose above.
2. Distribute the World Health Rating Scale worksheet. Clarify the vocabulary being used (life expectancy, use of / to mean "per," infant mortality,

- Physician, GDP (Gross Domestic Product), etc.
3. Have students access the CIA World FactBook website and show them the dropdown menu for countries. Practice analyzing the health factors, using Afghanistan as an example. Remind students on how to round numbers to the nearest whole number. Then model how to average the numbers to get a score of 3 for Afghanistan.
 4. Then write under the number 3 on the wall or whiteboard, Afghanistan.
 5. Allow time for students to work independently. If students finish early, give them an additional country to gather data for.
 6. When all students have completed the task of rating their country and writing its name on the board, it is time for explanations and discussion. They should think-pair-share what they think it signifies for their particular country.
 7. Now have students observe patterns and trends. Traditionally poor nations tend to be rated 5 or below, while higher standards of living are usually rated from 8-10. Discussion questions should include: a) which continents have certain tendencies? b) Where are the exceptions? c) What other factors, according to the profile, also influence the health of a nation? (include economy, education, government, resources, population, gender, human rights, and customs).
 8. Assign as homework or journal writing: Is world health a state, national, or global problem or all of these? Support your opinion with plausible evidence.

Assessment

Mathematics

The World Health Rating Scale worksheet can be graded for completeness and accuracy. Mastery would be considered 80% or higher.

Geography

The essay question can be graded for Content and Ideas using the Six Trait Writing Rubric. Mastery will be considered a 4 or higher.

Extensions

Have the students research one of the given countries. Look for photos of life, especially concerning health care in this nation. Have the students create a graphic illustration of health care in the country. This graphic illustration could be done on poster board or it could be computer generated.

Have students research world health organizations (WHO, UNICEF, Doctors Without Borders, etc).

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Sources

The ideas for this lesson were borrowed from Lyn Malone from the Rhode Island Geography Education Alliance.

CIA Factbook

<https://www.cia.gov/library/publications/the-world-factbook/index.html>