

Globally Aware: We're All Part of the Same Village

Author Grade Level Duration Cheryl Wiens
7
1-2 class periods

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 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 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

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

AZ Standards

MATHEMATICS Ratios of Proportional Relationships

7.RP.A.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.

7.RP.A.3. Use proportional relationships to solve multistep ratio and percent problems.

The Number System

7.NS.B.3. Solve real-world and mathematical problems involving the four operations with rational numbers. (Computations with rational numbers extend the rules for manipulating fractions to complex fractions.)

Standards for Mathematical Practice

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

Arizona Social Science Standards

GEOGRAPHY

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

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

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

7.G2.1 Explain how cultural demographic patterns, economic decisions, and human adaptations shape the identity of nearby and distant places.

7.G2.2 Analyze cultural and environmental characteristics that make places both similar and different.

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

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

Overview

We began the Twentieth Century with a population of less than 2 billion people, and we ended it with more than 6 billion. This increase put enormous pressure on the environment, and projected increases will cause even more stress. Earth is home to us all; we are all part of a global village. We need to ensure that future generations in all corners of our global village will have the resources to meet their basic needs and to live in a healthy environment.

Purpose

Around the world, some of the natural resources (water, land, and air) on which life depends are increasingly becoming depleted or compromised. In some parts of the world, basic sanitation (running water, toilets, and safe water) are not universal. In this lesson students will use statistics to examine human-environmental stresses.

Materials



Globally Aware: We're all Part of the Same Village

- YouTube video If the World Were a Village (3.52 min).
 - https://www.youtube.com/watch?v=aLjIFo0TJIY
- Projection device and computer
- World Population and the Environment Fact Sheet (Selected Countries)
- Tasks1-4 worksheet and Answer Kev
- Calculators

Objectives

The student will be able to:

- 1. Solve mathematical problems to determine percentage of change.
- 2. Analyze data to determine where the largest population growth will occur and the impacts of low and high population growth rates.
- 3. Analyze data to determine where basic sanitation is and is not available and the impacts of not having basic sanitation.

Procedures

Prerequisite Skills for Math: Students should have experience in using calculators to compute decimals and percentage change.

Note: Preview the YouTube video. It is a message about Becoming Your Best Self with a look at updated figures from the book If the World Were a Village. There are other videos available but make sure they use updated statistics from the original book published in 2001. 2nd ed published in 2011.

SESSION ONE

- 1. Begin the lesson by showing the YouTube video *If the World Were a Village (3.52 min)*. https://www.youtube.com/watch?v=aLjIFo0TJIY If time, show it twice.
- 2. Ask students what surprised them in terms of the data presented in the video.
- Distribute the World Population and the Environment Fact Sheet (Selected Countries). Explain the headings for the columns and that the countries selected are in various parts of the world and show a spectrum of high to low in the qualities being measured.
- 4. Distribute calculators and Tasks 1-4 worksheets. Explain the directions for each of the tasks and allow students to work in small groups or partners.
- 5. Worksheets not completed can be homework.

SESSION TWO

1. Check for understanding by going over the correct/possible answers to the questions.

Assessment

Geography and Mathematics

The Tasks 1-4 worksheet can be graded. Mastery will be considered a score of 75% or higher.

Extensions

Have students locate these "selected countries" on a world map. They could pick one category of statistics to color code and make a choropleth map. For example: They could select 2017 GNI and divide the selected countries into 3 divisions (high, medium, low GNI) based on the figures given. Then create a key and color code the countries.

Have students complete a GeoInquiry by picking one of the topics in the categories of statistics to research and present a visual (graph, PPT, infographic, etc.) to the class—selecting more countries and researching details about the subject.

Sources

- If the World Were a Village 2nd Edition_by David J. Smith, Kids Can Press, Tonawanda, NY, 2011. ISBN 9781554535958
- 100 People: A World Portrait <u>https://www.100people.org/statistics_100stats.p</u> hp
- "Population and the Environment. ZPG, the Population Connection. http://www.populationconnection.org
- The Population Reference Bureau website http://www.prb.org has many lesson plans and resource guides for educators.
- If the World Were a Village (3.52 min). https://www.youtube.com/watch?v=aLjIFo0TJIY
- CIA World Factbook <u>https://www.cia.gov/library/publications/the-world-factbook/</u>

