

I'm Hungry!

Students learn important lessons about the distribution of food around the world and the resources available.

Author	Gail Gorry
Grade Level	1-2
Duration	2 class periods

National Geography Standards

ELEMENT FIVE: ENVIRONMENT AND SOCIETY

16. The changes that occur in the meaning, use, distribution, and importance of resources.

Arizona Geography Strand

CONCEPT 5 Environment and Society Grade 1

PO 1. Identify ways (e.g., clothing, housing, crops) humans adapt to their environment.

GRADE 2

PO 1 Identify ways in which humans depend upon, adapt to, and impact the earth.

Other Arizona Standards

Mathematics Common Core Standards Number and Operations in Base Ten

1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Standards for Mathematical Practice

1.MP.2. and 2.MP.2. Reason abstractly and quantitatively.

Overview

Humans depend on the physical environment and its natural resources to create the food needed for survival. When looking at the distribution of the world's food resources, we can see that people go hungry. By encountering a similar problem of not enough food in the classroom, students participate in actively finding distribution solutions.

Purpose

In this lesson, students use $<$, $>$, and $=$ when discussing the problem in the food distribution within the classroom exercise, as well as looking at maps depicting the limited world food resources.

Materials

- Overhead transparency of the Continents of the World map and paper copies for one per student
- Overhead transparency of Map of World Hunger map
- Pencil, Crayons, Bags of food (crackers, fruit, snacks as described in lesson)
- Student Activity Page
- Student Activity Page Answer Key
- Student Assessment Page
- Student Assessment Answer Key
- *Feeding the World* by Peter Winkler

Objectives

The student will be able to:

I'm Hungry!

Compare groups within the classroom where food was not evenly distributed and then transfer this knowledge to looking at places in the world where food resources are limited.

Procedures

Prerequisite Knowledge: Students should have experience in locating the seven continents of the world. This lesson should be considered a practice in using less than, greater than, and equal to compare amounts.

Prior to the lesson: Decide what food item you want to use (oranges, small candies, graham crackers, fish crackers, etc.) and have more than enough pieces to allow one or more per person. Place these in varying amounts into reclosable snack bags. Make certain some amounts are very small.

SESSION ONE

1. Discuss how we use natural resources to produce items we need every day. What resources do we have and use in Arizona? Then state, there is enough food produced in the world to feed every person, but there are people who go hungry every day. The following activity will demonstrate how there is enough food, yet not everyone has enough to eat.
2. Divide the class into five groups. It does not matter if a group has no people – the invisible group will still receive a baggie of food.
3. Have students sit in these new groupings and begin to complete the worksheet. Next distribute the bags of food for each group. Have them count how many items are inside and see if there is enough for each person in their group to have one. Let each group present their information. Continue to complete the worksheet. Does everyone have enough to eat? Is this fair? How can we fix this situation?

4. Discuss how the world has enough resources to feed all people, but sometimes these resources are not available. In fact, every country has people who go hungry. If the groups we made today represent the world, how could we solve the hunger problem? Let them explain their ideas and see if it works. Give time to rearrange resources. Food can be moved, however, people need to stay in their own groups. Write solutions on the student handout.

SESSION TWO

1. Show them the map of world hunger, which can be downloaded and printed from www.feedingminds.org. Distribute a blank world map of continents. (The hunger information for the map has been simplified in data numbers for ease in math calculations and condensed into continents instead of countries for ease in coloring.) Color, label, and write the following information for each continent. North America = blue 75, South America = red 83, Europe = green 27, Africa = purple 508, Australia = yellow 40, Antarctica = white 0, and Asia = pink 385. (These numbers indicate the thousands of people in each continent who do not have enough food.)
2. Using an overhead transparency of the world map, lead students in coloring their maps to match the key listed above.
3. Distribute I'm Hungry Student Assessment page. Read the directions and have students complete the page.

Assessment

The assessment is a single page fill-in-the-blank test. It uses math numeration as well as an AIMS formatted writing portion. Geography is assessed in labeling continents and in problems #1-5. Math is assessed in #1-5 and in the

I'm Hungry!

written portion. Total points possible include: 7 points for labeling each continent, 5 points for answering #1-5 and 3 points for the writing section. Mastery is 11 out of 15 possible.

Extensions

Discuss in more detail the resources that are found in Arizona. Have students graph information they gain from surveying their home for these Arizona grown items. Compare and contrast the amounts graphed.

Read the book *Feeding the World* by Peter Winkler, from National Geographic Reading Expeditions. Create word problems based on the facts shown in the story that allow for students to practice $<$, $>$, and $=$. This book can also be used to introduce this lesson.

Sources

Information for tables provided by www.centerforfoodsafety.org

A world hunger map is available at www.feedingminds.org free of charge for teacher/classroom use. More lessons can be downloaded from this site on world hunger issues. (Numbers used in this lesson were adapted from the world hunger map from this site.)

National Geographic Reading Expeditions book, *Feeding the World* by Peter Winkler contains much information about using the world's resources wisely. ISBN 0-7922-8871-6