

Supermarket Sweeps

Author Sara Jenkins
Grade 5
Duration 2 class periods

National Standards

GEOGRAPHY

Element 2: Places and Regions

5. People create regions to interpret Earth's complexity.

Element 4: Human Systems

11. The patterns and networks of economic interdependence on earth's surface.

Element 5: Environment and Society

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

AZ Standards

MATHEMATICS

Number and Operations in Base Ten

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.

Number and Operations—Fractions

5.NF.B.6 Solve problems in real-world contexts involving multiplication of fractions, including mixed numbers, by using a variety of representations including equations and models.

Standards for Mathematical Practice

5.MP.1. Make sense of problems and persevere in solving them.

Arizona Social Science Standards

GEOGRAPHY

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

5.G1.1 Use and construct maps and graphs to represent changes in the United States.

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

5.G4.1 Describe how economic activities, natural phenomena, and human-made events in one place or region are impacted by interactions with nearby and distant places or regions.

ECONOMICS

The domestic economy is shaped by interactions between government, institutions, and the private sector.

5.E4.2 Analyze how agriculture, new industries, innovative technologies, changes in transportation, and labor impacted the national economy including productivity, supply and demand, and price during the time-period being studied

Overview

Regions of the United States are known for special agricultural, meat, and seafood products. Through an understanding of the various regions in the United States, students will come to know the origin of many foods.

Purpose

In this lesson students will gain a better understanding from where food products originate throughout regions of the United States. Students will then use their math skills to shop for grocery products from the various regions.

Materials

- Readings
 - The Economy of the West
 - The Economy of the Southwest
 - The Economy of the Midwest
 - The Economy of the Southeast
 - The Economy of the Northeast
- Grocery flyers (same one for each group is preferred instead of a random sample)
- Scissors
- Glue
- Colored pencils/markers/highlighters
- Construction paper
- Supermarket Sweeps Assessment and Answer Key
- Projection device

Supermarket Sweeps

- Regions of the United States map
https://geoalliance.asu.edu/sites/default/files/maps/US_Regions_blank.pdf
- Regions of the United States map (Regions colored)
https://geoalliance.asu.edu/sites/default/files/maps/US_Regions_Teacher_Key.pdf

Objectives

The student will be able to:

1. Identify food products commonly produced in the five regions of the United States.
2. Determine costs for products by multiplying fractions and decimals.

Procedures

Prior to this lesson, look at Where Did My Lunch Come From? A U.S. Regional Tour
<https://geoalliance.asu.edu/lunch> This lesson teaches the Economy of the Regions by planning a lunch menu based on foods from the 5 U.S. regions. This lesson would then apply math skills to the same content learning about the foods from the 5 regions.

SESSION ONE

1. Introduce the lesson by having students share with a partner a favorite food. Seek responses from the class by having students identify a favorite food and then asking who else gave the same response. Then ask: Do you know where _____ comes from? Then explain that today they will be learning about foods that are produced in the U.S.
2. Divide the class into five groups: The West, Southwest, Northeast, Southeast, and Midwest. Distribute a Regions of the U.S. map to each student. Project the color version of the map and have students color the map and finish the legend.
3. Distribute the appropriate reading to each group. Allow time for the group to read the information and highlight the foods produced in the region.
4. While the groups are reading, put the 5 regions on the whiteboard or chart paper. As groups finish reading, have them list the foods that were named in their reading on the whiteboard/paper.
5. Conclude the day by having each group share their regional foods with the class. If desired, have students write 5-6 of the foods on their maps either in the region or in the margin near the region as the different groups report their foods.

SESSION TWO

1. Divide students into pairs. Distribute grocery flyers, construction paper, and art supplies to each group. Instruct students to find examples of food products from their region. They should cut them out, including the price, and glue them on their construction paper. On the reverse side of the construction paper, they will create at least 5 multiplication problems that involve decimals or fractions. Model some examples such as beef steak sells for 5.99 a pound. What would 6 pounds of beef steak cost? If a customer a pound and a half of steak, what would that cost?
2. Have groups exchange their construction papers and solve the word problems.
3. Give the Supermarket Sweeps Assessment.

Assessment

Mathematics

The assessment includes five math problems. A score of 80% or higher is considered mastery of math skills.

Geography

The assessment includes 3 foods that need to be correctly linked to each region. A score of 80% or higher is considered mastery of geography concepts.

Extensions

Make a whole class bulletin board with each student cutting out a picture or drawing a picture of food products from the various regions.

Solve the word problems using money.

Sources

See readings for Sources.