



# A LOT OF THIS FOR A LITTLE OF THAT

**GRADE LEVEL:** 6-8

**SUBJECT:** Economics

**NATIONAL STANDARD(S):**

(6-8) ECO: 1.1, 1.2, 3.1, 3.2, 3.4, 3.5, 3.6, 3.7

**THEME:** Supply/Demand

**FOOD AND FIBER TOPIC:** IV A, B, C, D

## LEARNER OBJECTIVES

The student will describe the import and export of agricultural products and will gain an understanding of the concept of supply and demand.

## VOCABULARY

**balance of trade**—The difference in value between the total exports and imports of a nation.

**demand**—The quantity of a product or service buyers are willing to purchase from the market at a given price.

**equilibrium**—The point at which the market stabilizes.

**export**—To send abroad for trade or sale.

**feed grains**—Corn, grain sorghum and other grains used for livestock feed.

**import**—To bring in from a foreign country for trade or sale.

**per capita**—Per person.

**supply**—The quantity of a product or service sellers are willing to provide to the market at a given price.

## BACKGROUND

Trade and marketing are vital to American agriculture. The U.S. exports agricultural products around the world to countries that can't grow crops and livestock as efficiently as American farmers or can't grow them at all due to their climate restrictions. The U.S. also imports products, some agricultural, from other countries that produce different, less expensive, or better quality goods.

Agriculture is also an important contributor to the U.S. balance of trade. In 1995, the U.S. exported \$576 billion of products. Of that, \$56.4 billion was for agricultural products. At the same time, The U.S. imported \$749 billion of products, and only \$29.3 billion of those were agricultural products. The large amount of grains, meat, packaged foods, equipment and other agricultural products exported by the U.S. help make it possible to import Japanese electronics, German cars and many other products.

The concept of supply and demand is heavily applied in agriculture. If the supply of a commodity goes up (for example, a bountiful wheat harvest around the world), demand will remain steady (and U.S. wheat prices will drop). If the demand for a commodity goes up (for example, oat bran needs), prices will increase (the price of oats will go up). The laws of supply and demand are continually in effect on individual, local, national and international levels.

The law of supply maintains that when prices are high, sellers usually want to sell more of their products. When prices are low, sellers often try to sell a smaller quantity, saving some products for a later time when they think the prices will be higher. In contrast the law of demand states that when prices are lower, buyers usually purchase smaller quantities. For example, when a restaurant has a cheeseburger special, more customers buy cheeseburgers. This illustrates the law of demand. Another example of the law of demand is when the price of turkeys in the grocery store go up around Thanksgiving time, after Thanksgiving when the demand for turkeys goes down the price for turkeys also goes down. This is due to the law of supply. When another restaurant opens next door, more cheeseburgers are available to the same group of customers. The price will probably go down temporarily. This illustrates the law of supply.

Supply and demand greatly affects agriculture. In production agriculture, world supply and demand for products largely determine the price farmers receive for their commodities. If good weather improved farming practices and profitable prices increase wheat production in the major wheat-growing regions of the world like Russia, China and the U.S., the wheat supply increases; however, people around the world still eat the same amount of wheat. Thus, the supply of wheat exceeds demand and prices for wheat are lower.

Conversely, if drought, insect infestations, transportation problems or other difficulties lead to a poor wheat crop, the wheat supply decreases. Thus, demand exceeds supply and prices for wheat rise.

## STEP-BY-STEP INSTRUCTIONS

### Agricultural Exports and Imports Worksheet

1. Discuss exports and imports. Why does the U.S. trade with other countries?
2. Have a large world map in the front of the classroom or a small one available to each student. Have them identify the countries marked on the worksheet.
3. Provide World Almanacs or Encyclopedias for the students to look up the countries on the worksheet and find out the country's GNP and balance of trade.
4. Have the students draw a line from the product that the United States exports to the foreign country. Also, have students draw a line from the product that the United States imports from that country.
5. Discuss with students why they think the U.S. exports or imports these products. Mention climate, labor costs and consumer demands.

#### Answer Key:

<u>Country</u>	<u>U.S. Exports</u>	<u>U.S. Imports</u>
Bahamas .....	Lamb .....	Tropical Fruit
Brazil.....	Dairy Products.....	Coffee
Canada.....	Meat.....	Timber
Germany .....	Soybeans .....	Automobiles
Japan .....	Citrus Fruit .....	Electronics (and Automobiles)
Mexico .....	Feed Grains .....	Fruits and Vegetables
Russia.....	Wheat.....	Fertilizer
South Korea ..	Hides and Skins .....	Clothing

### Supply and Demand Worksheet

1. Introduce the concepts of supply and demand.

Review the vocabulary words.

2. Have students complete the worksheet to apply what they've learned about supply and demand.

**Answer Key:**

1. b, increase
2. b, increase
3. b, more canola
4. c, lower
5. a, more than other kinds of seed.

## RELATED ACTIVITIES

1. World Trade Conference - Divide the class into teams of three to five students. Assign each team to represent a country. The students should study their country to learn what products they have available to export. Have a trade conference where each team tries to export their excess products and import what they need. Consider equivalent values and alternate suppliers.
2. Export Label Designs - Have students design labels for U.S. food products that would encourage foreign buyers to purchase them. Of course, these labels can be written in English, though a U.S. company must have knowledge of a country's language, needs and customs to export its products. Compare this to television commercials encouraging us to buy Japanese or German automobiles.
3. Commodity Prices - Teach students about agricultural marketing and how to graph figures by charting commodity prices. The class may select one commodity, each student may select one commodity or teams may be assigned to commodities. Bring a daily newspaper to class that publishes cash or futures prices to class. You need to explain the marketing technique to them if you select futures prices for advanced students.

On the first day of this activity, find the price of the commodity in the newspaper. For what unit is the price given? Bushels, hundredweights (cwt), tons, or metric tons? Design a graph that allows price increases and decreases. Each day, have students chart the price of their commodity on the graphs. Develop math problems to go with the prices. Discuss how price changes affect agricultural income and why prices might have increased or decreased. Continue the activity for a month to see market trends.

Advanced students might hypothetically "buy" and "sell" contracts on the commodity markets. Keep track of profits and losses to see if students make or lose money playing the markets.

## RESOURCES

### *Student Books*

- Adams, B. J. (1992). The Go-Around Dollar. Macmillan.
- Brittain, B. (1979). All the Money in the World. Harper Collins.
- Byers, P. & Preston, J. (1983). The Kids' Money Book. Liberty.
- Cook, J. & Bond, S. (1988). Where Food Comes From. EDC.
- Elkin, B. (1983). Money. Children's Press.
- Horowitz, J. (1986). Night Markets: Bring Food to the City. Harper Collins.

### ***Teacher Resources***

“Food for America,” National FFA Supply Service, 5632 Mt. Vernon Memorial Highway, Alexandria, VA 22309. (teaching guide with activities, \$7.50 per kit).

### ***Related Internet Websites***

The United States Department of Agriculture website will provide information on all commodities, and livestock produced by, exported to, or imported into the United States: <http://www.usda.gov>

The National Agricultural Statistics Service website can be used to find most production statistics for livestock and crops produced in the United States: <http://www.usda.gov/nass>

The Chicago Mercantile Exchange website: <http://www.cme.com/>

National Center for Policy Analysis—the site provides descriptions and explanations of current U.S. agricultural policies. <http://www.public-policy.org/~ncpa/pd/ag/ag.html>

### **EVALUATION**

Answer keys are provided for each student activity sheet.

### **ACKNOWLEDGMENT**

This lesson adapted from National FFA Food For America, 5632 Mt. Vernon Memorial Highway, P.O. Box 15160, Alexandria, VA 22309-0160.

# Agricultural Exports and Imports

Draw a line from the country to the export product supplied by the United States. Then draw a line from the country to the import product that the United States buys from that country.

## U.S. Exports



Bahamas



Brazil



Canada



Germany



Japan



Mexico



Russia



South Korea

## U.S. Imports

Automobiles

Clothing

Coffee

Electronics

Fertilizer

Fruits and Vegetables

Timber

Tropical Fruit

Citrus Fruit

Dairy Products

Feed Grains

Hides and Skins

Lamb

Poultry

Soybeans

Wheat



Adapted from National FFA Food for America

# Supply and Demand

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*Circle the letter of the response you think best answers each question.*

1. A heavy January frost freezes many of Florida's oranges on the trees shortly before harvest. Supplies of oranges for juice drop. The price of orange juice will:

- a. stay the same.
- b. increase (go up).
- c. decrease (go down).

2. When a new report said oat bran may help keep your heart healthy, many people wanted to buy oat bran. The demand for oat bran:

- a. stayed the same.
- b. increased
- c. decreased

3. Another health report said canola oil is a heart-healthy oil, so more consumers started buying canola oil. American farmers are now planting:

- a. less canola.
- b. more canola.
- c. about the same amount of canola.

4. More farmers around the world are now growing wheat to feed their people and to export. Since supply is greater than demand, the price of wheat is:

- a. about the same.
- b. higher.
- c. lower.

5. A new variety of hybrid corn seed produces at least 10 bushels per acre more than other corn seeds. This hybrid seed is in big demand from the farmers. However, the seed company could only produce a limited amount of it this year. The new hybrid corn seed is priced:

- a. more than other kinds of corn seed.
- b. less than other kinds of corn seed.
- c. about the same as other kinds of corn seed.



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