



\* Social Studies

# Where are the Carrots?

Farmers' supply and consumers' demand keep market shelves stocked with carrots and other produce. Prices rise and fall, money is spent and money is made, but only when there are carrots to buy. So, it is best that Farmer McGregor makes all efforts to keep Peter out of his garden.

## Kentucky Social Studies

### **Economics (2.18) Grades 4-6**

2.18 Students understand economic principles and are able to make economic decisions that have consequences in daily living.

## Ohio Social Studies Standards: Economics

### **Benchmark(s) Grades 4-5**

C. Explain how competition affects producers and consumers in a market economy and why specialization facilitates trade.

### **Grade 6**

B. Explain why trade occurs and how historical patterns of trade have contributed to global interdependence.

## Objective

Students will:

- Recognize the relationship between supply and demand on Farmer McGregor's Farm.

## Assessment

Students will be able to:

- Explain the general relationship between supply, demand, and price in a competitive market.

Sample selected response items to gauge student understanding.

1. Fill in the blank.
  - a. When demand is high, supply is \_\_\_\_\_.
  - b. When supply is high, demand is \_\_\_\_\_.

*Answer: a. low, b. low*
2. Define the term "supply."

*Answer: The amount of a good or service offered at a given price or available for meeting a demand.*
3. The term "demand" refers to the potential amount of certain goods that will be purchased at a given time for a given price. True or False.

*Answer: True*

## Vocabulary

- Supply
- Demand
- Yield

- Surplus
- scarcity

### **Materials**

- Counters
- Electronic spreadsheet program to make a graph of Farmer McGregor's income and outcome.

### **Activity**

#### **Rabbits and Carrots**

##### **Teacher will:**

1. Engage students through recall of their attendance at The Children's Theatre of Cincinnati's production of *The Rockin' Adventures of Peter Rabbit*. Re-emphasize the importance of Farmer McGregor's garden as a main setting in the play where multiple events occurred.
2. Emphasize that Farmer McGregor grew vegetables on his farm in order to earn a living. Pass out 25 counters to students to arrange in a "garden" on their desks.
3. Explain that each counter represents one carrot plant. Each carrot plant yields one carrot, so Farmer McGregor has twenty-five carrots to sell (his supply). Instruct students to determine the cost.
4. Formulate a list of Farmer McGregor's expenses to be paid by earnings from sale of the carrots. Estimate the cost of his living expenses.
5. Portray Peter Rabbit by coming by to "eat" some of the counters/carrots for lunch. Have students recalculate their supply of carrots, and determine how much money will be made selling the remaining ones for the same price as before. Question prompt, "Will Farmer McGregor be able pay his bills if he makes less?"
6. Explain there are now less carrots (supply is low) and demand for the carrots is still the same. Question prompt, "What will Farmer McGregor have to do with the price of his carrots?"
7. Introduce/review the "supply and demand" principle.
8. Challenge students with a new problem. Farmer McGregor goes to sell his carrots and finds that Farmer Smith has brought fifty carrots of his own to sell.
9. Have students determine if the supply is now high or low. The supply of carrots is high (surplus). Ask students to determine if the demand is high or low (low).
10. Facilitate student discussion to address what will happen to the price of carrots. Emphasize the factor of competition between producers/sellers and between consumers/buyers.
11. Challenge students to problem-solve the condition of the carrot market in the following scenarios.
  - a. All carrot crops in the Midwest are ruined by drought. Farmer McGregor has the only carrots to sell. The demand for his carrots is high due to scarcity. Carrots become a rare vegetable. What is the affect on price?

- b. Trade becomes necessary to fulfill the demand for carrots. What is the affect on price?
  - c. The market decides to sell only a certain specialized carrot to overseas consumers, causing demand to be scarce for U.S. consumers. What is the affect on price?
  - d. Price for fertilizer needed to feed carrot crops has increased by 50%, a higher cost for farmers. What is the affect on price?
12. Conclude the lesson by having students provide opinion on whether Farmer McGregor was correct in his efforts to keep Peter out of his garden and from eating his carrot supply. Question prompt, "What was, or would be the affect of Peter's actions on Farmer McGregor's livelihood?"