

# Understanding The Food System

Grades K-10

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## TIME

45 min- 1 ½ hr

## MATERIALS NEEDED

Part I: Script cards (*see attached*); one ripe strawberry or a red ball; bag of 20 nickels; one dollar bill

Part II: Assorted produce items from around the world (see suggestions below)

Part III: Local and non-local strawberries, tomatoes, or other popular produce item for a taste test

## OBJECTIVE

By examining the many steps food goes through from the farm to the table students will better understand the impact of food choices and the benefits of purchasing local foods.

## PROCEDURE

- **READ & DISCUSS**
  - Grades K-1: first read & discuss the book *From Peanut to Peanut Butter* by Robin Nelson
  - Grades 1-3: first read & discuss the book *Bananas from Manola to Margie* by George Ancon
  - Grades 4-12: begin with activity, follow-up by watching *Food, Inc.* directed by Robert Kenner (94 min)
  
- **PART I: The Tale of Two Strawberries**
  - Print, cut and fold script cards (*see attached*) ahead of time.  
*\*Check that the numbers on the back correspond with the order, if you print double-sided.*
  - Ask participants to sit in a circle. Pass out the cards in order 1-14.
  - Take a red ball, or use a ripe strawberry. Pass the ball to the first student and ask them to stand up and read their card aloud: "I am a farmer in California who just picked this strawberry."
  - Following the script below, have the participants pass the "strawberry" around the circle with each student representing a different person who handled, inspected, trucked etc. the strawberry along its way from California to the local grocery store.
  - The script below provides rolls for 14 people. Additional rolls can be made up or removed depending on the number of students in the workshop. Students can read aloud their roles or act it out silently while the class guesses what their card says. If you do the charades version, be sure to have the student read their card aloud after the group has guessed.
    - "I am a farmer who picks this strawberry in California"

- “I washed the strawberry at the farm in California”
  - “I inspected the strawberry for packaging”
  - “I packaged the strawberries for shipping”
  - “I loaded the packaged strawberries onto the farm’s truck to take it to the warehouse”
  - “I work at the warehouse and unloaded the cases of strawberries”
  - “I put the cases of strawberries on the Stop & Shop truck at the warehouse (use the name of a grocery store near you)”
  - “I trucked the strawberries all the way to the central Stop & Shop plant for the eastern U.S.”
  - “I re-inspected the strawberries at the central warehouse and sent them to the store in Northampton (use your local community)”
  - “I trucked the strawberries to the local store”
  - “I am the manager of the local store and put the strawberries out on display”
  - “I am the worker at the store who prices the strawberries with price stickers”
  - “I rang the strawberries up at the cash register for the customer”
  - “I bought the strawberries and bring them home to eat!”
- The last person in the circle represents someone purchasing strawberries at a grocery store. Once the “strawberry” has made it around the circle, hand the last person a bag of 20 nickels and ask them to ‘pay’ for their strawberries, by passing the bag of nickels to the next to last person (cashier).
  - Ask the student now holding the bag of nickels to take out one nickel for his/her work and pass the bag to the next student. The money should be passed back along the circle (in the reverse direction) with each student taking out a nickel for his/her role in transporting or handling the strawberry until the remaining few nickels end up at the beginning of the circle for the farmer in California.
  - Ask the “farmer” to count how much they got for their strawberries. Explain that on average, only about 10 cents of every dollar we spend on produce goes back to the farmer who grew that food.
  - NEXT: Give the ball or strawberry back to the “farmer.” This time say, “you are a farmer right here in Western Massachusetts who just picked the strawberry.”
  - Give the last person (the purchaser) a dollar bill. Ask the purchaser to walk up to the farmer and say “this time, you buy the strawberry at the farmers market.” Have the “farmer” pass her the ball directly and have her pay the farmer the dollar in return.
  - Ask participants what surprised them and what they learned from the activity that they hadn’t thought about before.
  - Have students list advantages of purchasing food locally. Encourage them to think about quality and freshness of food, environmental benefits and economic benefits for the local community.

- **PART II: Where Does Your Food Come From?**
  - Prior to the workshop go to the supermarket and purchase a variety of produce items that come from different locations around the world. Some widely available possibilities are:
    - Apples from New Zealand
    - Bananas from Costa Rica
    - Mangoes from Mexico
    - Tomatoes or citrus fruit from Florida
    - Fruit from California, Michigan, New Jersey etc.
  - Bring a bag with the produce to the workshop. Begin by asking participants if they think they know where their food comes from and find out what they think.
  - Next, pull out items from the bag one at a time and ask kids to guess where the food was grown. After a few they may realize how little they are aware of where the things they eat every day came from. Go through the entire bag to show the diversity of where supermarkets get food and the great distances most of our food travels.
  - Ask participants to list foods that they know can grow in their local area. Probably many of the things that the supermarket carries could have been grown locally but are not. Why would this be?
  - Are there many places in your community where local foods are sold? Ask participants to list places that they know of to buy local food such as farmers markets and farm stands, local markets and restaurants. Remind students that it isn't just produce that is grown locally, but also eggs, dairy products and meat. Encourage them to look for locally grown items next time they are at the supermarket and see what they can find.
- **PART III: Local vs. Non-local Taste-test**
  - If it is a month when berries, tomatoes or other popular produce items are in season, finish the workshop with a tasting of locally grown produce or test local varieties against non-local ones. This is a fun way for kids to see some of the great food that is growing in their own communities!

## MA DOE STANDARDS FOR UNDERSTANDING THE FOOD SYSTEM

### ENGLISH LANGUAGE ARTS

#### Anchor Standards

2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

### COMPREHENSIVE HEALTH

#### Nutrition

- 3.5 Identify the connection between food served in the home with regional food production
- 3.7 Describe how food choices are influenced by availability, individual and family preferences, media, and background, and identify healthy foods with various social groups

#### Interpersonal Relations

- 7.5 Apply attentive listening, feedback, and assertiveness skills to enhance positive interpersonal communication

#### Community and Public Health

- 14.2 Identify ways the physical environment is related to individual and community health

### HISTORY & SOCIAL SCIENCE

#### History

- (Grade 2) 5. Read globes and maps and follow narrative accounts using them
- (Grade 8-12) 6. Distinguish between long-term and short-term cause and effect relationships.

#### Economics

- (Grade 3) 4. Use cardinal directions, map scales, legends, and titles to locate places on contemporary maps of New England, Massachusetts, and the local community.
- (Grade 8-12) 19. Describe the role of buyers and sellers in determining the equilibrium price, and use supply and demand to explain and predict changes in quantity and price.

## SCIENCE & TECH/ENGINEERING

### Earth Science

(Pre K-2) 3. Describe weather changes from day to day and over the seasons

(Grades 3-5) 5. Recognize and discuss the different properties of soil, including color, texture, the ability to retain water, and the ability to support the growth of plants.

(Grades 6-8) 11. Explain how the tilt of the earth and its revolution around the sun results in an uneven heating of the earth, which in turn causes the seasons.

(Grades 9-12) 2.2 Describe the effects on the environment and on the carbon cycle of using both renewable and nonrenewable sources of energy.

I am a farmer who  
picked this  
strawberry in  
California

I washed the  
strawberry at the  
farm in California

I inspected the  
strawberry for  
packaging

I packaged the  
strawberry for  
shipping

I loaded the  
strawberry onto the  
farmer's truck to take  
it to the warehouse

I work at the  
warehouse and  
unloaded the cases  
of strawberries

**2**

**1**

**4**

**3**

**6**

**5**

I put the cases of strawberries on the \_\_\_\_\_ truck at the warehouse

I trucked the strawberries all the way to the central \_\_\_\_\_ plant in the eastern U.S.

I re-inspected the strawberries at the central warehouse and sent them to the store in \_\_\_\_\_.

I trucked the strawberries to the local store.

I am the manager at the local store and put the strawberries out on display.

I am the worker at the store who prices the strawberries with stickers.

**8**

**7**

**10**

**9**

**12**

**11**

I ring this strawberry  
up at the cash  
register for the  
customer.

I bought the  
strawberry and bring  
it home to eat!

**14**

**13**