

The Traveling Tomato

Lesson Summary: This lesson will give students an understanding of how their personal food choices have a global, environmental and personal impact. Students will be shown that many of the foods that we consume travel thousands of miles to get from the field to our plate.

Objectives:

Students will be able to:

- Describe the journey of a tomato grown in Mexico to our plates here in WNY.
- Describe the journey of a locally grown tomato.
- Understand and discuss the benefits of “eating locally”.

Time Required:

25-30 minutes

Background Information:

The food we buy in our grocery stores travels an average of 1,300 miles from the farm to our table. Shipping foods long distances burns a large amount of fossil fuels, requires many hours of transportation and elaborate packaging. Foods are picked before they are ripe, which leads them to have less nutritional value and lower quality.

How can we help? Buy Local! That's the key, which means supporting local growers. It's much better for the environment to grow and buy organic, but what if that organic product has come from, say Chile? That's a long haul journey for your apples to go! It's better to go down the road (on a bicycle) and buy from your local farmer, or grower.

Beware though, even some foods that may appear to be from local suppliers that you purchase in supermarkets, have probably toured the country before arriving in the grocery store. Why not walk or get the bus to the store? This all helps to reduce the "food mileage" effect. Composting packaging, where possible, is another way of reducing the environmental effects of our food. This reduces the amount of waste that needs to be taken to the landfill sites and again helps to cut pollution.

Materials:

- Traveling Tomato Game cards
- Pictures of tomatoes (one green tomato, one red tomato, tomatoes in a grocery store, tomatoes at a farm stand) OR plush stuffed tomatoes
- Map of the World
- Fruit and Vegetable Source Sheet (see the end of the lesson plan)
- Chart paper or black board, markers, chalk

The Traveling Tomato

Procedures:

1. Today we are going to talk about the journey that our food makes from the farms where they are grown to our plate. Our grocery stores are filled with colorful fruits and vegetables, breads made from many different grains and meats and seafood from around the world. Did you ever think about how long some of these items had to travel to get to us?
 - a. Ask class to name some of their favorite fruits and vegetables. (Write down on blackboard/whiteboard/ paper).
 - b. Use Fruits and Vegetable Source Sheet to tell the class where some of these items are commonly sourced from.
 - c. Some fruits and vegetables (like oranges and bananas) do not grow in our climate here in WNY, but many of them are grown by local farmers.
 - d. Grown locally: apples, pears, peaches, grapes, corn, strawberries, raspberries, blueberries, cucumbers, lettuces, squash, pumpkins, tomatoes, etc.
2. We are now going to play a game about the journey of two tomatoes: one from Mexico and one from a local farmer here in Niagara County. Show Mexico on the Map and then show current city to illustrate the distance. It's approximately 2,500 miles from Niagara County to Mexico.
 - a. Keep class seated at their desks. Pass out the first three role cards to three students at the front of the class (*Mexican Farmer, Company Owner, and Truck Driver*). Give the last three role cards (*Warehouse owner, Grocery Store owner, Consumer*) to 3 students at the back of the class. All students in the middle will be transporters/truck drivers.
 - b. The student with the *Mexican Farmer* card is the first person in the tomato journey. This person gets the green tomato (picture or a fake one), and follows the directions on the card and reads the script.
 - c. The *Mexican Farmer* will pass the tomato to the holder of card #2, the *Company Owner*. After following the steps on the card, they will pass the tomato to the holder of card #3, the *Truck Driver*.
 - d. The *Truck Driver* gets the tomato and begins passing the tomato to the student next to them. Make it known to the class that each time the tomato is passed from *Truck Driver* to *Truck Driver*, students with the tomato should say "the tomato has traveled 100 miles, the tomato has traveled 200 miles, and the tomato has traveled 300 miles, and so on, until the tomato reaches the *Warehouse Owner* at 2,500 miles. The truck drivers can get the tomato as many times as they need to in order to reach 2,500 miles.

The Traveling Tomato

- e. The *Warehouse Owner* will read their card and afterwards will take the tomato, to you (the teacher). This is when the green tomato will be exchanged for a red one. The red tomato is then passed to the *Grocery Store Owner*.
 - f. The *Grocery Store Owner* reads their card and passes the tomato to the *Consumer*. The *Consumer* reads their card.
 - g. Ask students how many miles total the tomato travel in this activity. Ask if it was surprising or if there are any questions or comments.
 - h. Say, "Now we are going to see the distance traveled for a locally grown, organic tomato."
 - i. Collect all cards. Hand out 2 new cards, *Local Organic Farmer* and *Consumer* instead of the other cards. Replay the game. Collect cards.
3. Discussion.
- a. Ask the class which of the two production systems is healthier for the environment.
 - i. Discuss pollution, over-use of land, energy waste
 - b. Which is better for our health? Why?
 - i. Fruit that has to be transported from far away has to be picked before it is ripened. Food that has ripened on the vine is better nutritionally.
 - ii. Local foods are often grown without harmful pesticides and chemicals.
 - c. Which tomato production system costs less?
 - i. Local farmers often charge less for their goods and the money stays in the community.
 - ii. When products are brought in from far away, there is a lot of money spent on gas, transportation, storage, packaging and cleaning.
4. Ask the class if they have been to a local farmer's market. What kinds of foods have they purchased there? Explain that if they were to buy (or encourage their families to buy) local/organic produce it would only have to travel around 50-100 miles, and the exchange would happen between the local farmer and the consumer.
5. Wrap up- It is important to buy locally. It helps support our local community and fresh food is delicious and nutritious.

Assessment:

Class Discussion

Supporting Materials:

www.agclassroom.org/ok

References/Resources:

The Traveling Tomato

www.FoodMiles.com

<http://openagricola.nal.usda.gov/Record/CAT10701932>

Video of Traveling Tomato Activity- <https://www.youtube.com/watch?v=xm2I4CH1gHI>

The Traveling Tomato

<p>#1 Mexican Farmer</p> <p>“Look at all these green tomatoes I have to pick today. They’re not ripe yet, but I have to pick them anyway. But first I have to spray them with pesticides to keep the bugs away”</p> <p style="text-align: center;">PASS THE TOMATO</p>	<p>#2 Company Owner</p> <p>“Thank you for the tomatoes! Keep working hard, we have lots of deliveries to make. These tomatoes need to be in New York by next week.”</p> <p style="text-align: center;">PASS THE TOMATO</p>
<p>#3 Truck Driver</p> <p>“It’s a long drive to New York. These tomatoes have thousands of miles to travel.”</p> <p>Pass tomato to students with no cards- they are other truck drivers.</p>	<p>#4 Warehouse Owner</p> <p>“These tomatoes are still green. Before I can deliver them I need to treat them for 24 hours to help them ripen”</p> <p>BRING GREEN TOMATO TO TEACHER. PASS RED TOMATO TO GROCERY STORE OWNER.</p>
<p>#5 Grocery Store Owner</p> <p>“Wow! These tomatoes have traveled more than I have! It seems strange to buy a product from far away that we could have grown in our own country.”</p> <p style="text-align: center;">PASS THE TOMATO</p>	<p>#6 Consumer</p> <p style="text-align: center;">“Here I am in the grocery store. I need to buy some tomatoes to make spaghetti sauce. Here’s one... it’s kind of hard and from far away... but it’s the only tomato they have.”</p> <p style="text-align: center;">END</p>
<p>#1 Local Organic Farmer</p> <p>“I’ve been taking care of this tomato since I planted it in the spring. Now it’s red and ripe to pick. Tomorrow I’ll take it to the local market and sell it to someone from the community.”</p> <p style="text-align: center;">PASS THE TOMATO</p>	<p>#2 Consumer</p> <p>“I love coming to the farmer’s market... look at all this beautiful produce! I also get to see friends and meet new people from the community. Your tomatoes look great, farmer! I think I will buy some for lunch.”</p> <p style="text-align: center;">END</p>

The Traveling Tomato

Sources for Common Fruits and Vegetables

Apples- Washington, New York, Michigan, California, Virginia, New Zealand

Bananas- Costa Rica, Brazil, Bolivia

Cantaloupe- California, Arizona, Texas, Mexico

Grapes- California, Arizona, Chile, Mexico

Oranges- California, Florida, Texas, Arizona, Mexico

Peaches- California, South Carolina, Georgia, Arkansas

Strawberries- California, Florida, Oregon, Washington, Mexico

Broccoli- California, Arizona

Carrots- California, Texas, Mexico

Cucumbers- Georgia, Florida, Mexico

Lettuce- Florida, Arizona, California

Sweet Corn- Florida

Spinach- California, Florida, Georgia

Squash- Texas, Arizona, California, Mexico

Bell Peppers- California, Florida, Mexico

Potatoes- California, Idaho, Colorado, North Dakota, Oregon

Tomatoes- Florida, California, Mexico