

GROW YOUR PALS PROGRAM GUIDE



THE NATIONAL FFA MENTORING PROGRAM

Sponsored by



LESSON 13

The Journey of Food, from Field to Fork

Unit:
AGRICULTURAL AWARENESS

PRECEPTS

- G. Physical Growth
 - G1. Practice healthy eating habits



Lesson Type:
Large Group

NATIONAL STANDARDS

- NL-ENG.K-12.2 Reading for Understanding
- NL-ENG.K-12.6 Applying Knowledge

STUDENT LEARNING OBJECTIVES

As a result of this lesson, the student will ...

1. Explain how transportation makes it possible for agricultural products to move from the farm to consumers.
2. Describe how one snack food—popcorn—moves from the farm to the movie theater.





TIME

Instruction time for this lesson: **45 minutes.**



RESOURCES

National FFA Organization, Food for America Educational Materials
The Popcorn Board, Popcorn: From seed to snack, <http://www.popcorn.org>
National FFA Organization, Essential Learnings, 2003



TOOLS, EQUIPMENT AND SUPPLIES

- ✓ public writing surface
- ✓ writing utensil
- ✓ PALS.13.AS.A – 1 per student
- ✓ PALS.13.AS.B – 1 per student
- ✓ PALS.13.AS.C – 1 per student
- ✓ popcorn popper
- ✓ popcorn kernels
- ✓ napkins
- ✓ plates
- ✓ PALS.13.Assess.A – 1 per student

KEY TERMS



The following term is presented in this lesson and appears in ***bold italics***:
None

INTEREST APPROACH



How did you get to school this morning? *Wait for responses.*

Raise your hand if you rode in a car? *Wait for response.*

Great! Put your hands down. If you rode the school bus this morning, please stand up. *Wait for response.*

Wonderful! Now take a seat. It looks like the bus is a popular mode of transportation. If you flew to school this morning on a plane put both hand up in the air. *Wait for response, but be prepared that no one's hands will be raised.*



No matter which way you traveled this morning to get to school, the important part is that you got here safely.

We rely on transportation to move us from place to place. Do you think the same is true about our food?

Ask the following questions and capture the students' answers on a public writing surface.



How does food move?
Does it have to move?
Where does food start out?
Where does it end up?

These are some very important questions that we just have to answer. Let's focus our minds today and see if our answers to these questions are correct.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

OBJECTIVE 1. | Explain how transportation makes it possible for agricultural products to move from the farm to consumers.



Use the Go-Get-It Moment to have the students collect various modes of transportation that are utilized in the agricultural industry. Cut out the “Modes of Transportation” located on PALS.13.AS.A and place the cards around the room. Make sure that you have one card per student. It is perfectly fine to have more than one student with the same card.



The food and many other products that we use on a daily basis get their start on a farm and then get to our homes using various transportation methods. Each agricultural product travels differently. In a moment when I say GO, you will have 60 seconds to find one transportation card that is hidden in this room. Once you have found a card, please quietly return to your seat. What questions are there?

GO!

As the students are locating the hidden cards, place the PALS.13.AS.B worksheets facedown at each student's station.



And five, four, three, two, one... Freeze! Great! It looks like we all have our very own transportation card. On your desk you will notice that you have a worksheet.

Please turn the worksheet over. *Allow an opportunity for the student to turn over the sheet.*

Use the Me-You-Us Moment to have students record their transportation card for the agricultural products that it relates to.



The worksheet contains various agricultural products that all use special transportation to help them move from the farm or the plant to the grocery store. When I say WRITE, capture your mode of transportation next to the agricultural product that uses that type of transportation to move around. If you do not know the answer it is OK to take a guess. Any questions? WRITE!

Great job! I saw a lot of you capturing your answers on your worksheet. When I say PARTNER, turn to your neighbor and share your mode of transportation and what agricultural product you assigned it to. If your partners have a different mode of transportation than you and you agree with their answers, capture their answers on your paper. What questions do you have?

PARTNER!

Allow the students 90 seconds to capture their answers, while you walk around the room and help students who seem to be struggling with the assignment.



On the count of three say THANKS, PARTNER! One. Two. Three. Thanks, Partner! Great, I heard a lot of wonderful conversations about the different types of transportation that are used to move the various agricultural products. Let's review and see if the answers that we have so far are correct. If you do not have an answer or your answer was incorrect, please correct it as we review the worksheet.

Spend time reviewing the worksheet with the students. You can have the students call out the answers as the agricultural product is mentioned, or you may wish to call out the mode of transportation and ask them to identify its correlating agricultural product. Answers are listed below:

Tomatoes: Refrigerator Truck
 Flowers: Airplane
 Milk: Sterilized Refrigerated Tankers
 Soybeans: Tractor Trailer
 Wheat: Tractor Trailer
 Fish: Airplane

Orange Juice: Sterilized Refrigerated Tankers

Cattle: Tractor Trailer

Potatoes: Tractor Trailer



Which of these methods of transportation do you think is the fastest? (*Answer: airplane*). It's also the most expensive. That's why it's usually used only for products that would spoil quickly, like fresh flowers and fresh fish. Transportation is a small part of the food dollar. Less than 5 cents of every dollar spent on food goes to transportation; yet, a supermarket is filled with foods from around the world.

You may wish to further explain how transportation makes it possible for agricultural products to move from the farm to consumers.

OBJECTIVE 2. | Describe how one snack food—popcorn—moves from the farm to the movie theater.



So now that we know that food can be transported via various means, let's take a look at the journey of a specific food item. How many of you enjoy going to the movie theater ? *Allow responses*. It is great to see that we have a lot of avid movie watchers! I also enjoy going to the movies, but what I really enjoy is eating that warm, buttery popcorn. Raise your hand if you also like to eat popcorn while watching a movie?

So what kind of journey do you think a popcorn kernel must take to get to the point that we can eat it at the movie theater? Let's travel with *Jonny the Popcorn Kernel* as he travels from the farm to our movie popcorn bucket. We are going to read a story that will help us better understand *Jonny the Popcorn Kernel* and his multiple moves from place to place.

Make copies and pass out PALS.13.AS.C for the students to follow along. Read the story with some enthusiasm. Pretend it is the most important dramatic performance of your life.



After reading the story, use this time to discuss the story with the students, ask the students questions about the journey that Jonny took. Also relate how Jonny can be a nutritious treat and discuss other snacks that can be considered when making healthy choices for afterschool snacks.



REVIEW / SUMMARY / EVALUATION ANSWERS

As a review, have the students draw the journey that Jonny took from the farm to the theater. While the students are working on their pictures, pop some popcorn and pass it out to the students to enjoy.



Today we have discovered that agricultural products have to travel a long way and go through many processes to make it from the farm fields to our tables. We learned that there are various modes of transportation that are used to move food, and we also discovered the journey of our friend *Jonny the Popcorn Kernel*. Let's retrace the steps that Jonny took from the farm to the movie theater. Let's turn over our story page and draw a picture that maps the route that Jonny the Popcorn Kernel took on his journey.

APPLICATION



Small Group Suggestion: *Bring in a pizza and lead a discussion regarding the agricultural products that were used to make the pizza. Make sure to include in the conversation the modes of transportation used to move those various agricultural products. Remember to talk about items such as wheat, which was used for the crust, tomatoes, which were used for the sauce and milk that helped make the cheese, as well as other items that topped the pizza.*



One-on-one suggestion: *Work with your mentees and have them share with you their favorite food items. Discuss the different agricultural products that go into making that food, and then develop a map to outline the journey those food items take--including the type of transportation used to move the agricultural products.*



EVALUATION

Use the assessment PALS.13.Assess.A to evaluate the students' learning.



ANSWERS TO EVALUATION:

- 3___ Ear of corn forms on the plant.
- 8___ The kernels are sorted and dried.
- 7___ The kernels are transported to the factory by a truck.
- 4___ The farmer checks the ears' moisture.
- 1___ The popcorn seed gets planted in the field.
- 5___ The corn is harvested with a combine.
- 10___ The popcorn is transported to the store for people to buy.
- 2___ The popcorn plant grows to 8 feet tall.
- 9___ The kernels are polished and packaged.
- 6___ The popcorn kernels are removed from the ears.

PALS.13. AS.A

Modes of Transportation

Airplane	Tractor Trailer
Refrigerator Truck	Sterilized Refrigerated Tankers

PALS.13.AS.B

Agricultural Products' Transportation

Match the mode of transportation (on your card) with the agricultural products it moves.

<Insert Pictures>

Tomatoes:

Flowers:

Milk:

Soybeans:

Wheat:

Fish:

Orange Juice:

Cattle:

Potatoes:

PALS.13.AS.C

Jonny the Popcorn Kernel's Big Adventure

<Insert Pictures>

Hi, my name is Jonny, and you might recognize me as one of your favorite snacks, Popcorn! I bet you're wondering how I got here at the movie theater and ready for you to eat. Well, let me tell you the story about how I grew up. I did not start out looking like I do today. In fact, I started out as a small seed that was chosen for my ability to pop. Being able to pop is a special talent that only corn like me is able to do. We've been specially made to be the right color and have a tasty popped kernel.

Popcorn seeds like me grow really well in areas of the United States known as the Corn Belt. Farms in these states get the right amount of rain and nutrients that are needed in order to grow into popcorn you can enjoy. Just like you, I grow fast and quickly become an 8-foot-tall plant. Once I get tall, healthy ears of corn will form, which contain hundreds of popcorn kernels just like me. Farmers know exactly when to harvest us popcorn kernels by making sure we have the right amount of moisture in us.

A big machine called a combine removes our ears and collects all of us popcorn kernels in a large bin. We then get loaded on a large truck that takes us to a factory where we get sorted and dried. Before getting packaged for stores and for people to pop, we get a nice polishing that makes us nice and shiny. This ensures that we are clean and ready to eat. Once we are packaged, it's time for another truck ride to the stores or, in my case, to the movie theater.

Wow, all I need is a little heat and I am ready to POP! Yum. Not only do I taste good, but moms and dads like me because I am nutritious. That's why people just like you all across the world keep farmers busy growing lots of popcorn. Grab another handful of my friends the next time you go to the theater.

PALS.13.ASSESS.A

Rank the order in which Jonny the Popcorn Kernel traveled along his route from the farm to the movie theater.

- _____ Ear of corn forms on the plant.
- _____ The kernels are sorted and dried.
- _____ The kernels are transported to the factory by a truck.
- _____ The farmer checks the ears' moisture.
- _____ The popcorn seed gets planted in the field.
- _____ The corn is harvested with a combine.
- _____ The popcorn is transported to the store for people to buy.
- _____ The popcorn plant grows to 8 feet tall.
- _____ The kernels are polished and packaged.
- _____ The popcorn kernels are removed from the ears.