



# **Farmer's Share Curriculum**

## **Grades K-2**

## Lesson 1

**Objective:** Students will learn that the food they see in grocery stores comes from farms.

**Background:** If you ask children where their food comes from, the most frequent answers you will hear are “the refrigerator” or “the grocery store”. The food sourced from farms may not start out the way children are used to seeing it in the grocery store. In this lesson, children will learn to think beyond the grocery store and develop a better awareness that the food they eat is grown somewhere, by someone, before it makes its way to the store.

This lesson provides a perfect opportunity for a farmer to visit with the students. Consider reaching out to a local farmer or rancher in your area to invite them to talk to the students after this lesson.

### **Materials Needed:**

- Whiteboard or flipchart
- Paper cutouts or plastic toy versions of the following: noodles, can of tomato sauce, ground beef, wheat, tomatoes, cow, burger buns, cheese, lettuce, ketchup.  
*If you are using a whiteboard in your classroom, having these be magnetic with the ability to move around on the whiteboard is suggested.*

### **Lesson Plan:**

1. Begin this lesson with a class discussion on food. Ask students **"where does food come from?"** and write each answer down on a whiteboard or flipchart. If the answers are leaning towards ‘grocery store’, have students consider the question **"where does the grocery store get its food?"**. Eventually, you will want students to identify farms or gardens as their place of origin. If students understand gardens more so than farms, consider offering the explanation that farms are like gardens, except farms are much bigger and the crops that farmers grow usually need to be made (or processed) into food we buy at the store.
2. Now ask students what their favorite meal is. Write answers down on the whiteboard/flipchart.
3. Choose a few examples of meals and ask the students **"what food goes into this?"** This exercise is easier with meals with fewer or more straightforward ingredients, like spaghetti (noodles, tomato sauce, beef) or cheeseburgers (buns, beef, tomato, lettuce, cheese, etc.) Write down answers on the whiteboard/flipchart in the style of a “family tree”, i.e. spaghetti at the top and noodles, tomato sauce, and beef underneath.

4. Reiterate that all the ingredients to the students' favorite meals come from farms. Some of the ingredients can go straight from the farm to the store, but other things, like noodles, have to be made, or processed. To help students picture this, ask them silly, engaging questions like "have you ever seen a noodle tree?" (hopefully they say no!) Then ask them what the difference between noodles and tomatoes is, guiding them to the answer that tomatoes grow on bushes and are ready to be eaten, but noodles must be made from ingredients like wheat.
5. Once students grasp the difference between ready-to-eat products and those that must be processed, they will now work to match the crop to the food using plastic toys or cutouts. This can be done in group settings, or together as a classroom. Tell students they are now spaghetti farmers, and they need to grow all the things that go into spaghetti. Ask them what they would need to grow. If their answers gravitate towards the processed foods (noodles, tomato sauce, and beef), remind them that those are not what farmers actually grow on their farms; rather, those are the products that are made from what farmers grow. What are noodles made of? What is tomato sauce made of? Where does beef come from? Eventually students will identify wheat, tomatoes, and cows as the products their farm needs to produce.
6. Repeat this exercise, but now students are cheeseburger farmers. Cheeseburgers contain both ready-to-eat produce and processed food. If students identify ketchup, buns, beef, or cheese, challenge them to consider what they would need to have on their cheeseburger farm to make those products.
7. Reflect on the lesson with the students. What did they learn? Were they surprised by anything? And, lastly, **"where does food come from?"**
8. *Optional: invite a local farmer or rancher to come speak to the class about what kind of food and meals they can make with the food that comes from their farm!*

## Lesson 2

**Objective:** Students will become farmers for a day to gain a deeper understanding of what goes into farming.

**Background:** In Lesson 1, students were challenged to think about where their food comes from before it finds its way to their grocery stores and refrigerators. They learned that food comes from farms – but most food from farms doesn't start out looking like the food we buy in grocery stores. By becoming a farmer for a day, students will “visit” a tabletop farm to learn what a farmer does to plant, grow, and harvest a crop, and what happens to the crop between the farm and a grocery store. Students will simulate wheat farmers: they will plant wheat, harvest the crop, haul the crop to the mill, take the flour to the bakery, and then truck the bread to the store and use it to make toast.

### **Materials Needed:**

- Toys of the following:
  - Barn
  - Tractor
  - Combine
  - Truck
- 1 bag of flour
- 1 small ziplock bag of flour
- 1 loaf of bread
- 1 grocery bag
- Yellow and/or brown markers
- Photo of wheat kernels (if you can source actual wheat kernels, a ziplock bag of kernels would be preferable)
- Optional
  - Flashlight
  - cup of water
  - Toaster & bread toppings (peanut butter, butter, jelly, etc.)

### **Lesson Plan:**

1. Begin by setting up the tabletop farm.
  - a. Tape down a 6-foot piece of paper (butcher or other) over a table for this activity.
  - b. Leave a three-foot space at one end of the paper to simulate the field. Place the toy barn and truck next to the edge of the field, and place the combine and tractor in the field. Using a marker, draw several lines in the field to represent rows.

- c. At the other end of the table place items in the following order:
    - i. a small bag of flour
    - ii. A loaf of bread
    - iii. A grocery bag
    - iv. If near an outlet, you can place the toaster here too, or elsewhere in the classroom.
2. Ask students “have you ever visited a farm?” For those who may live on a farm, ask them “do you know what your parents do on the farm?” Have a short discussion, and then tell students they will be farmers for a day, and their job is to grow wheat for bread.
3. Gather around the tabletop farm and introduce the farm to students, pointing to the field at one end and asking students to identify the machinery.
4. The first activity is to plant the field. Ask students what is needed to plant a crop, drawing them to engage with the tractor. By your selection or by volunteer, one student will run the tractor back and forth along the rows in the field to simulate seeding. Encourage other children to make tractor noises during this activity, allowing them to be active participants. .
5. Engage in discussion: ask students what seeds need in order to grow (sun, rain). *Optional: you can simulate this by providing instructing one student to use a flashlight over the farm to simulate the sun, and another student sprinkling drops of water over the farm to simulate rain.*
6. It is now time for the wheat to grow. Instruct students to take yellow and/or brown markers and color in the wheat field.
7. After students have finished coloring, ask them what farmers use to harvest the wheat. If necessary, explain to students what it means ‘to harvest’ something, and explain that this is what a combine does. By your selection or by volunteer, allow a student to harvest the wheat by running the combine across the field.
8. Now that the wheat has been harvested, show students wheat kernels (either a photo of them or a ziplock bag of actual kernels). Explain that these are what make the bread we eat, and that the next step is for the farmer to take the kernels to the flour mill so they can be ground up into flour. Allow a student to drive the truck from the farm to the bag of flour, representing the flour mill.

9. Show students the ziplock bag of flour and explain that this is what the flour mill makes out of the wheat kernels. Ask students if they've seen this in their kitchens or at the grocery store. Explain that flour can be sold in stores, or it can be shipped to bakeries that use it to make bread. The loaf of bread on the table represents the bakery; allow a student to drive the truck from the flour mill (flour bag) to the bakery (loaf of bread).
  
10. Ask students where the loaf of bread has to go so that they can purchase it (they should say the grocery store). Allow one student to drive the truck from the bakery (loaf of bread) to the grocery bag (grocery store). Put the loaf of bread into the grocery bag and hand it to a student.
  
11. *Optional: serve the toast with toppings.* After the activity, or while students are enjoying their snack, ask students what other food they buy that is made from wheat like the wheat on their farm.

## Lesson 3

**Objective:** Students will create and enact a farmer's market, learning the basics of money exchange, and honing in their knowledge of identifying which products come from which type of farms.

**Background:** This lesson builds upon Lessons 1 and 2. In Lesson 1, students learned that the food they buy and eat comes from farms. Lesson 2 dove deeper into that concept, challenging students to become farmers for a day and walk through the process of planting, harvesting, and processing wheat. In this lesson students will examine another way food ends up on our tables – via a farmers' market – and learn the basics of money exchange. *This lesson plan requires basic addition and subtraction skills to calculate the cost of goods and make changes.*

### **Materials Needed:**

- Toy money in denominations of \$1
- Plastic toys or paper cut-outs of the following: cows, pigs, chickens, vegetables, wheat
- Paper and markers
- Classroom tables

### **Lesson Plan:**

1. Explain to the class that their classroom is now a farmer's market. This is a market where farmers can sell their products straight to shoppers.
2. **Split Class:** Split the class into 2 groups. Group 1 will be the shoppers at the farmer's market. They will be equipped with shopping lists for ingredients they need to make their dinner. Group 2 will be the farmers. Each student in Group 2 will represent a different type of farmer: vegetable, wheat, beef, or cheese. *Note: the wheat farmers will be selling both bread and noodles, and the vegetable farmers will be selling a variety of items. Instructors can decide if they want to differentiate between noodle and bread sellers, and different types of vegetable sellers, or if wheat and vegetable sellers should each sell a variety.*
3. **Farmer set up:** Give each farmer the cutouts or toys of the product they sell and instruct them to set their storefronts up at their individual tables. In addition, give each farmer a slip of paper and ask them to write down a price between \$1 and \$3 for what they want to sell their products for. You can have them reflect on farmers' hard jobs by asking a question like "how much do you think this vegetable is worth?"

You spent a lot of time growing it!” Give \$10 worth of \$1 dollar bills to the farmers in order for them to make change.

*Note: multiple students can be farmers of the same type. If each farmer of the same type set different prices, it would further challenge the shoppers to determine who to buy from in order to have enough money for all their ingredients.*

4. **Hand out supplies to shoppers:** Each shopper will be equipped with a grocery list for items they need to make their meals (\*\*see below suggestions\*\*) They will need to reflect upon what they learned in Lesson1 regarding the ingredients that go into each meal. They will also be given \$10 worth of \$1 bills to purchase the products they need.
  
5. **Open the Market:** Once the farmers have set their prices, open the market for shoppers! Shoppers will have to identify which shops to visit in order to purchase what they need. Instructors should keep an eye on the market and assist with any mathematical issues the farmers or shoppers might have.

**\*\*Suggestions for shoppers’ meals and ingredients\*\*** *Instructors can decide whether they would like to share the ingredient lists with shoppers, or just give shoppers a meal (‘spaghetti’) and let them determine what they will need to make it*

Meal 1: Spaghetti Tomatoes Noodles Beef	Meal 2: Cheeseburgers Bread Beef Cheese Tomatoes Lettuce
Meal 3: Grilled Cheese with Tomato Soup Bread Cheese Tomatoes	Meal 4: Beef Stew Beef Vegetables
Meal 5: Vegetable Soup Tomatoes Vegetables	Meal 6: Salad Lettuce Tomatoes Vegetables Cheese



