Cotton

*Lesson Plan for Grade 3, Science*

*Prepared by NAITC*

*Modified by Mississippi State University, School of Human Science*

*for Mississippi Farm Bureau Federation - AITC*

# OVERVIEW & PURPOSE

Students will recognize that agricultural careers are interconnected and that agriculture influences many parts of their daily lives.

# EDUCATIONAL STANDARDS

**Mississippi College-and-Career Readiness Standards:**

L.3.1 Students will demonstrate an understanding of internal and external structures in plants and animals and how they relate to their growth, survival, behavior, and reproduction within an environment.

ELA-SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.

**NALOs:**

T4.3-5 d Provide examples of science being applied in farming for food, clothing, and shelter products.

# OBJECTIVES

* Students will observe how food and fiber get from the farm to the store
* Students will discuss careers in agriculture

# MATERIALS NEEDED

* Producer to Consumer Cards

Activity One

* Five Career Signs
* 5 grocery bag carrier vests (See Career Vest Instructions)
* Crayons or markers (1 pack per student)

Activity Two

* Career vests (from Activity 1)
* *Farming* by Gail Gibbons
* T chart

### Essential Files (maps, charts, pictures, or documents)

* [Career Vest Instructions](https://drive.google.com/file/d/1zEz6ixwwMZL9cINKPs_zYN7f6d6fGavb/view?usp=drive_link)
* [Five Career Signs](https://drive.google.com/file/d/1SrAooArB4w9JYzTux-1reEcCpPmZH0yF/view?usp=drive_link)
* [Producer to Consumer Cards](https://drive.google.com/file/d/167AvaHIB6Lp85_TPe8mvKPTcv5k1LJb_/view?usp=drive_link)
* [T Chart](https://drive.google.com/file/d/1zqmtuPEibB8W5JEil60sQzucRQJv3jXl/view?usp=drive_link)

# Lesson Set Up:

1. Print the five career signs for the students and cut them out along with the producer to consumer cards.
2. Predetermine the student groups into first four groups and then for the second activity five groups.
3. Cut out and make five career vests (1 per group of students)
4. Lay out crayons and markers for each group.
5. Create the T chart on the board or display it somewhere in the classroom.

# VOCABULARY

**career:** an occupation undertaken for a significant period of a person's life and with opportunities for progress; generally a profession requiring special training

**consumer:** a person who buys and uses goods and services

**farmer:** a person who owns or manages a farm, cultivate land or crops or raises animals (e.g., livestock or fish)

**producer:** a person who grows or makes goods or provides services to be purchased

# Ag Facts:

* All in one day's work a farmer or rancher can use science, math, technology, and engineering to produce food we eat.
* The USDA reported in 2013 that there were almost 17 million farms and agriculture-related jobs found in the United States. This includes both part-time and full-time employment.
* Jobs found in forestry, fishing, food and beverage manufacturing, textile mill operations, leather products, and restaurant services are just a few industries related to agriculture.
* 1,310,000 bales of cotton produced in Mississippi in 2020.
* 780 farms produced cotton in Mississippi in 2020.

# Background information for teachers:

Before we had grocery stores people lived on farms and grew or hunted all of their food. Imagine that! Farming is important because it creates food and everyday products that humans and animals need in order to live. Farm fresh eggs and fresh grown vegetables are delicious and nutritious! Soft cotton sheets, bath soap, and the clothes we wear also come from agricultural products. Farming in the United States provides many of these items that we sometimes take for granted. These items grew from seeds and plants or came from animals before they were placed on a shelf for **consumers** to purchase. Many hands help in the process of getting items from farms to consumers. Workers such as truck drivers, veterinarians, chefs, and biologists play an important role in bringing these commodities to the marketplace for consumers to purchase.

**Careers** involving agriculture extend far beyond that of the **farmer**. A rancher raises livestock until they are ready to be sold. A truck driver is hired to transport the livestock to market. The buyer purchases the livestock at market. The buyer pays the rancher for the livestock (goods), and the rancher pays the truck driver for his services. The meat packer may purchase the livestock from the rancher directly or from a feed-yard. The meat is distributed to grocery stores. The butcher at the grocery store makes smaller cuts of meat and wraps it to be sold in the store. The meat is sold by the grocer to us, the consumers, and we use it to cook a meal in our homes.

Likewise, a farmer may grow a product such as potatoes and pay truck drivers to transport their produce to a factory. The factory purchases the potatoes from the farmer and uses them to make an item, such as french fries. The fries are packaged and distributed to a chain of restaurants. The cook at the restaurant prepares the french fries, and a waitress serves them to the consumer, who pays the restaurant for the goods and the service. There are many people involved in getting food products from the farmer or rancher to the consumer.

# LEARNING PROCEDURES

Interest Approach:

1. Ask the students the following questions;

**"Do you like to eat?"**

**"What are some of your favorite foods?"**

**"Where can you purchase these items?"**

**"How do these items get to the grocery store?"**

**"Other than a grocery store, where might you buy and/or eat these foods?"**

**"Who grows these foods?"**

**"What jobs are involved in getting food to your table?"**

1. Divide your students into four groups and hand out the *Producer to Consumer* cards*.*
2. Ask each group to place each set of jobs in a correct sequence by numbering each job listed in the box. Once completed, have each group share out their answers and tell them they will be learning about the many types of jobs interconnected to agriculture.

**Answer Key**

* Fried Chicken: 4 - 2 - 8 - 1 - 5 - 7 - 6 - 3
* Cotton Shirt: 8 - 6 - 5 - 1 - 3 - 2 - 4 - 7
* Fruit Salad: 3 - 5 - 2 - 6 - 4 - 1
* Milk: 1 - 4 - 3 - 5 - 2

### Procedures

**Activity One: Career Vest**

1. Show students the five signs: Farmer or Rancher, Truck Driver, Packager, Grocer or Chef, and Consumer. Explain that a consumer is a person who buys and uses goods or services.
2. Ask the students to discuss which of these words might be related to agriculture. Remind them that agriculture includes the five *F*'s: farms, food, fabric, forestry, and flowers. Encourage students to share their reasoning.
3. Divide the class into five groups. Assign each group to represent one of the terms on the signs. Have the groups discuss briefly what their job might include and how it may be related to agriculture.
4. Supply each group with a blank *Career Vest,* (instructions are in the Essential Files) crayons, and markers. Ask the group to work together to decorate the vest to match the term on their sign. Attach the sign to the completed vest.
5. Have each group share with the class how and why they decorated their *Career Vest* to show the jobs related to their assigned occupation.

**Activity Two: Jobs of a Farmer**

1. Regroup the class so that each group includes one member from each career.
2. Assign each farmer or rancher a commodity, such as potatoes, beef cows, cotton, pigs, corn, peaches, wheat, blueberries, etc.
3. Have the new groups come up with a scenario of how that commodity will involve each student's role and end up with the consumer.
4. Allow groups to wear their career vests and share their scenarios with the class..
5. Discuss the many agriculture commodities such as cotton are raised and produced by a farmer. Could we live without agriculture?
6. Use the *T chart* found in the Essential Files. On the left side, list the commodities mentioned in the book that the farmer produces. On the right side of the chart, have the students brainstorm the careers and/or jobs that may relate or have a connection to each commodity listed. For example, when discussing eggs, ask the students, "H*ow are the eggs delivered to the grocery store?", or "What other jobs are important to getting the eggs from the farm to your house?"*

**Concept Elaboration and Evaluation:**

After conducting these activities, review and summarize the following key concepts:

* Agriculture provides our most basic necessities including food, fiber, and shelter.
* There are many types of farmers. Some farmers raise animals and grow crops.
* In addition to farmers, there are many other careers in agriculture that include transportation, shipping, processing, sales, and much more.

# Additional Learning Procedures

To help students review and elaborate more about cotton try using the [“I used to think… Now I think..”](https://drive.google.com/file/d/1Z1KlmLmTQPB3VZxKo6eZ6UUu3AZ6scc2/view?usp=drive_link) method to allow students to think deeper and make new connections.

Additional text to include:

[The Adventures of Happy Shirt](https://www.agfoundation.org/recommended-pubs/the-adventures-of-happy-shrt)

[From Cotton to T-Shirt](https://www.agfoundation.org/recommended-pubs/from-cotton-to-t-shirt)

[In the Land of Cotton](https://www.agfoundation.org/recommended-pubs/in-the-land-of-cotton)



Source: <https://www.agclassroom.org/teacher/matrix/>

*The MS Farm Bureau Women’s Committee has additional resources to help aid you in this lesson such as a cotton gin, please contact Dedra Luke at 601-977-4169 to learn more!*

*For more information and additional lessons visit*

*https://msfb.org/ag-in-the-classroom/lesson-plans/.*