Farming - First Grade

Purpose
Students will develop an understanding for the importance of farming and investigate daily activities that occur on a farm.

Subject Area(s)
English Language Arts, Math, Science, and Social Studies

Common Core/Essential Standards
ELA
- R.L.1.1 Ask and answer questions about key details in a text.
Writing
- W.2. Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
- W.8. With guidance and support from adults, recall information from experiences or gather information from the provided sources to answer a question.
Math
- 1.OA.1 Use addition and subtraction within 20.
Social Studies
- 1.E.1.1 Understand the basic economic concepts.
- 1.E.1.1 Summarize the various ways in which people earn and use money for goods and services.
Science
- 1.L.2 – Summarize the needs of living organisms for energy and growth.
  (Living things need energy to grow)

Agricultural Literacy Outcomes
Culture, Society, Economy & Geography
- Discuss what a farmer does.
- Explain why farming is important to communities.
- Identify plants and animals grown or raised locally that are used for food, clothing, shelter, and landscapes.
- Trace the sources of agricultural products (plant and animal) used daily.
Food, Health, and Lifestyle

- Recognize that agriculture provides our most basic necessities: food, fiber, energy and shelter.

Plants and Animals for Food, Fiber & Energy

- Identify animals involved in agricultural production and their uses. (i.e., work, meat, dairy, eggs)
- Identify the types of plants and animals found on farms and compare with plants and animals found in wild landscapes. (please get rid of the red bullets)

Essential Questions

1. What are the many jobs of a farmer?
2. Make a list of things that are produced on a farm that can be sold for money?
3. What are things that a farmer needs in order to keep his farm productive?
4. What would happen if we did not have farmers to produce food for us?
5. What is agriculture?
6. What is a necessity?
7. List several items used every day and identify their connection to agriculture.

Vocabulary

**Agriculture**: science or occupation of cultivating soil, producing crops, and raising livestock.

**Farm**: a piece of land used for growing crops or raising animals.

**Tractor**: a large vehicle that has two large back wheels and two smaller front wheels used to pull farm equipment.

**Harvest**: the season when crops are gathered from the fields or the activity of gathering crops.

**Barn**: a building on a farm that is used for storing grain and hay and for housing farm animals or equipment.

**Fruits**: a usually sweet food (such as a blueberry, orange, or apple) that grows on a tree or bush; the part of a plant that has the seeds in it (such as the pod of a pea, a nut, a grain, or a berry).

**Vegetables**: relating to, constituting, or growing like plants.

**Animals**: a living thing that is not a human being or plant.

**Season**: a time characterized by a particular circumstance or features.

**Supply**: make (something needed or wanted) available to someone

**Demand**: the desire of purchasers, consumers, clients, employers, etc., for a particular commodity, service, or other item.

**Goods**: merchandise or possessions:

**Services**: perform a service or services for someone.
**Producers:** a person, company, or country that makes, grows, or supplies goods or commodities for sale.

**Consumers:** a person who purchases goods and services for personal use.

**Student Motivator**
Display the Agriculture Commodity Cards or pictures of six major farm animals: cattle, pigs, sheep, chickens, turkeys, horses.

1. Ask the students:
   - What do all of these animals have in common?
   - What is different about these animals?
   - Are there any similarities seen with each animal?

**Background Knowledge**
How do you define the word *agriculture*? Merriam-Webster’s Dictionary states that it is the “science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products.” An accurate definition; however, this definition doesn't impart the integral nature or importance of agricultural products—food, clothing and shelter—in our daily lives.

Agriculture is a big “umbrella” term that includes so many concepts—from farm-to-fork and field-to-fabric—not to mention all the other industrial uses of agricultural products such as linseed oil for paint and corn for fuel. Agriculture has transformed and had to work with natural ecosystems to fulfill societal needs. Agro-ecosystems are now recognized as a major part of global ecosystems. To understand the processes and components, and the dependence and interactions of organisms and environment in natural systems, is to understand the dynamics of agricultural systems.

Agriculture is all around us, everyday. No one can live a day without utilizing agriculture directly or indirectly. Can you think of all the ways you use agriculture from the beginning to the end of your day?

In the morning you may wake up from sleeping on sheets that were made from cotton and sleep in a bed made from oak or pine wood. The fibers in the rug you step on may have come from the wool of a sheep and the soap you use in the shower may consist of cottonseed oil or lanolin. The bowl of cereal may have corn in it and the milk you drink came from a Holstein cow. This is just a few items that derive from the industry of agriculture and you’ve barely left the house to begin your day at school. Agriculture in everywhere; just imagine a day without these products. Could you survive a long period of time without these products?
Procedures

Activity 1
1. Begin by showing students the *Farming Vocabulary Cards*. Ask students *what they are and what they know about the picture*. Tell students to look for those items as you read the book *Farming* by Gail Gibbons.
2. On a chart, brainstorm and list important facts learned from reading the story *Farming*, to include animals on the farm, and different types of farming. This may be used later for students to refer to when completing writing activities.
3. Have students complete the *Researcher* paper, *What do Farmers do?*
4. Next, have students work in small groups to compare/contrast different facts about farmers.
5. Allow students time to read different books on various animals: For example, *Jobs on the Farm, Milk Makers, and Pigs* by Gail Gibbons.
6. Have students complete the *Animals Research* writing activity. Allow the Researcher (student) to choose 4 different farm animals to draw and write about. Use *Research Paper* included for responses. Share writings with the class.
7. To further extend the research, have students research different kinds of farms in your state. Have students compare and contrast the information they discover with their current research.

Activity 2
1. Cut and laminate all parts to the *Barns Math Facts Sum* activity.
2. Place in a center or have students work in small groups to complete the addition facts.
3. Students can record answers on the recording sheet. **Note:** Each barn will have 1 farmer and one of each animal.
4. Using the blank barn and blank farm animals, have students make additional equations to match a given sum on the corresponding barn. Ex. Have students write the number 5 on the blank barn, then write equations on the farm animals whose sum equals 5.

Activity 3
1. Discuss vocabulary words: *supply, demand, goods, services, producers, and consumers*. Ask the students to explain the difference between a good and a service.
2. On chart paper, create an Anchor Chart as seen below by drawing or displaying a picture of a farmer.
3. Brainstorm and write all the jobs of a farmer around the picture of the farmer and making sure to emphasize that farmers can be men or women.

4. Have students complete the Farmers Can/Have/Are sheet. This can be done whole group or independently.

5. Follow up for understanding with completing the Farming Goods and Services Paper.

6. Next, have students cut pictures from magazines and sort into 2 categories using the Goods and Services Sorting Sheet. Glue the pictures in the correct category.

**Activity 4**

1. Living/Nonliving things – Teach students the difference between living and nonliving things. Students should know that plants are living things that need energy and can grow. Plants need to take in water, nutrients and light for energy and growth. Animals are living things that grow and have basic needs for energy, air and water.

2. Make a T-chart and label as “Living” and “Nonliving.” List living and nonliving things that were found in the book Farming, and explain why they go in each specific category.

3. Sing songs: Living/Nonliving with students.

**Materials**

- Various books on farming and animals listed as Companion Resources
- Writing Tools (pens, markers, pencils, etc.)
- Chart Paper
- Farming by Gail Gibbons
- Writing Papers
- Pencils
- Counters (if needed)
- Scratch paper
Suggested Companion Resources

- A Young Shepherd (Book/Booklet)
- Brave Dogs, Gentle Dogs (Book/Booklet)
- Farm Animals (Book/Booklet)
- Farm Animals (Book/Booklet)
- Farming (Book/Booklet)
- From Sheep to Sweater (Book/Booklet)
- Pigs (Book/Booklet)
- Sheep on the Farm (Book/Booklet)
- About Farm Animals Mini Kit (Kit)
- About...Books (Kit)
- Animal Facts (Map/Chart/Graphic)
- Farm Pop-ups (Map/Chart/Graphic)
- America's Heartland (Multimedia)

Essential Files

- Animal Vocabulary Words
  - Animal Term Flashcards
- Farmer Goods and Services Sheet
- Farmers-Can, Have, Are writing paper
- Goods/Services Sorting Sheet
- Living/Nonliving Songs
- Farming Vocabulary Cards
- Researcher Paper, What Do Farmers Do?
- Animal Research Activity
- Barns Math Facts Activity

Essential Links

- Facts on Commodities
  - Commodity Cards
- Farm Animal Facts
  - Animal bookmark

Ag Facts

- North Carolina’s agricultural industry, including food, fiber, and forestry contributes $78 billion to the state’s economy, accounts for more than 17 percent of the state’s income, and employs 16 percent of the work force.
North Carolina is one of the most diversified agriculture states in the nation. The state's 52,200 farmers grow over 80 different commodities, utilizing 8.4 million of the state's 31 million acres to furnish consumers a dependable and affordable supply of food and fiber.

North Carolina produces more tobacco and sweet potatoes than any other state and ranks second in Christmas tree cash receipts and the production of hogs and turkeys. The state ranks seventh nationally in farm profits with a net farm income of over $3.3 billion. Net income per farm in the state is over $63,000.

**Extension Activities**
Create an opportunity for students to write about a day in the life of a specific animal. A writing prompt might be: I woke up this morning and I had magically been transformed into a________(calf, bull, hen, etc.)

Have a member of the local Farm Bureau visit your class and talk with the students about owning and working on a farm.

**Sources & Credits**
- [http://www.ncagr.gov/stats/general/overview.htm](http://www.ncagr.gov/stats/general/overview.htm)