



## A Year at a Farm – Early Elementary K-2

### Purpose

To introduce students to changes that occur throughout the year on a farm. Students will interact with images of things commonly found on the farm during each month throughout the year to demonstrate the importance of jobs, people, and happenings on the farm.

### Subject Area(s)

English Language Arts, Science, and Social Studies

### Common Core/Essential Standards

#### ELA

- **CCSS.ELA-Literacy RI.2.4** Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

#### Science

- **K.E.1 Understand change and observable patterns of weather that occur from day to day and throughout the year.**
  - **K.E.1.1** Infer that change is something that happens to many things in the environment based on observations made using one or more of their senses.
  - **K.E.1.2** Summarize daily weather conditions noting changes that occur from day to day and throughout the year.
  - **K.E.1.3** Compare weather patterns that occur from season to season.
- **1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.**
  - **1.L.1.1** Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
  - **1.L.1.2** Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.
  - **1.L.1.3** Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there (e.g., reuse or recycle products to avoid littering).
- **2.E.1 Understand patterns of weather and factors that affect weather.**
  - **2.E.1.1** Summarize how energy from the sun serves as a source of light that warms the land, air and water.

- **2.E.1.2** Summarize weather conditions using qualitative and quantitative measures to describe: Temperature, Wind direction, Wind speed, Precipitation
- **2.E.1.3** Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.
- **2.E.1.4** Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.

#### **Social Studies**

- **K.H.1.2** Explain how seasons change over time.
- **K.G.1.3** Identify physical features (mountain, hills, rivers, lakes, roads, etc.)
- **1.G.2.1** Explain ways people change the environment (planting trees, recycling, cutting down trees, building homes, building streets, etc.)
- **2.G.2.1** Give examples of ways in which people depend on the physical environment and natural resources to meet basic needs.

### **Agricultural Literacy Outcomes**

#### **Agriculture and the Environment**

- Provide examples of how weather patterns affect plant and animal growth for food.

#### **Plants and Animals for Food, Fiber & Energy**

- Explain how farmers work with the lifecycle of plants and animals (planting/breeding) to harvest a crop.
- Identify the importance of natural resources (eg. Sun, soil, water, minerals) in farming.
- Identify examples of feed/food products eaten by animals and people
- Identify the types of plants and animals found on farms

#### **Science, Technology, Engineering, and Math**

- Recognize and identify examples of simple tools and machines used in agricultural settings

#### **Culture, Society, Economy & Geography**

- Discuss what a farmer does
- Explain why farming is important to communities
- Identify people and careers involved from production to consumption of agricultural products
- Trace the sources of agricultural products (plant or animal) used daily.
- Identify plants and animals grown or raised locally that are used for food, clothing, shelter, and landscapes.

## Essential Questions

1. How many months are in a year?
2. How is each month different at the farm?
3. Explain why each month is important at the farm.
4. What happens during each season: Fall, Winter, Spring, and Summer?
5. What are some jobs on the farm?

## Vocabulary

**Archaeologist:** people who learn about the past by digging up and studying objects

**Archer:** someone who shoots at a target with a bow and arrow

**Bales:** large bundles of straw or hay that are tied tightly together

**Burrows:** tunnels or holes in the ground where animals live

**Combine:** a machine that harvests grain

**Ducklings:** baby ducks

**Fertilizer:** a substance containing chemicals that help crops grow

**Hay:** dried grass that farm animals eat

**Lambing:** the birth of lambs

**Lambs:** baby sheep

**Shear:** to cut wool off sheep

**Stalks:** plant stems

**Straw:** dried stems of wheat, oats, and another grain plant

**Veterinarian:** an animal doctor

## Student Motivator

Today we are going to take a long trip but we will never leave the classroom. We are going to take a trip to a farm for a whole year. Print the *Scavenger Hunt Activity*. This should be an introduction activity to discuss new vocabulary, discuss misconceptions and front load any information that is necessary.

## Background Knowledge

You may not have lived on a farm or even know someone who has lived on a farm, but believe it or not farming and agriculture are all around us...even in big cities. When you go to the grocery store almost everything there can be traced back to the farm. The clothes we wear and buy from the store, started on a farm. So if someone asks you if you are connected to the farm...you can say yes because farms provide the food and fiber we all need to survive.

Just as the farmer is important to the farm, each season is important to the farm too. As seasons change the way the farmer works the farm changes and the animals change too. A farmer plants most crops in the late winter and early spring to be ready for harvest in the fall. Farmers are very smart people because they have to know when to plant different things to make sure they grow and develop to provide food for people. But today's farms are much more diversified; farmers grow crops and have livestock too. Because of the way farmers take care of their animals on the farm we are lucky enough to have an abundant amount of food to eat. Farm animals provide a lot of things for us – milk, eggs, cheese, bacon, beef, etc. but seasons are important to animals too and farmers have to care for the animals differently in each season just as they do with their crops.

### **Materials**

- *Scavenger Hunt Activity*
- *A Year at a Farm* by Nicholas Harris (book)
- Small bucket
- White paper
- Crayons/markers
- Construction paper
- Glue stick
- scissors
- *Farm in a Year Activity*
- Craft materials: cardboard, paint, paint brushes, glitter, pipe cleaners, corn seed, farm animal toys, etc.
- *Jr. Sprout – Communities additional reading material*
- *Who lives on a Farm?* Activity sheet *see essential links*

### **Procedures**

#### **Activity 1**

1. Before you begin pass around a bucket with Scavenger Hunt activity (cut individually – there will be 30 cards). Make sure each student has a card. Ask each student to read his or her card. Explain that students are in charge of finding this word as we take a picture walk through our year at the farm.
2. Teacher will display *A Year at a Farm* by Nicholas Harris, read the introduction page THIS IS THE STORY...explain that we are going on a picture walk to take in all the sights as we look throughout the book.
3. Draw student's attention to the side of the book where you will see pictures of our scavenger hunt activity cards. Go quickly through the picture walk – showing each page of the book for

about 15 seconds. Allow students to have fun with this activity – raise their hand when their card is called, see if they can spot the picture that describes their word.

4. At the conclusion of this activity take up the cards, placing them back into the bucket.
5. Teacher will now read *A Year at a Farm* by Nicholas Harris aloud to students.

## Activity 2

1. After reading book *A Year at a Farm* by Nicholas Harris begin *Farm in a Year Activity*. Give each student the activity sheets, construction paper, scissors, crayons, and glue stick.
2. Instruct students to first cut out months of the year to complete *Farm in a Year Activity*. In this activity students will cut out 12 cards with each month of the year and they will draw things that they would see on the farm during this month. Students will work independently taking note to the different seasons: Fall, Spring, Summer, and Winter and the different weather activity that happens during each season. Students will draw pictures for each month as it connects to the farm.
3. After students have completed the activity discuss different things that occur on the farm and the importance of each person, animal and thing that happens on the farm. Display student work in the classroom.
4. After a class discussion, assign students in partners and have them create an 8.5X11 size picture of a month out of the year and things that happen on the farm.
5. Talk with students about how different things are grown and even sold at local grocery stores. Think about Holidays – Halloween (pumpkins), Christmas (trees), etc. *This would be a great idea for a class calendar showing the artwork of each student for a different month of the year.*

## Activity 3

1. Before you begin this lesson explain to the class that we are going to be building a classroom farm – provide students with unusual materials, cardboard, glitter, cups, popsicle sticks, pipe cleaners, Legos (anything that you think could be used to construct things).
2. Divide the students into four groups – Fall, Winter, Summer, Spring. A great way to do this is put the numbers 1,2,3,4 on slips of paper and have students draw them out of a bucket.
3. Brainstorm building ideas and provide examples of ideas for students to use in their activities. Show students that they can have a piece of paper with something strong behind it so it will stand freely.
4. Once groups are formed provide them with materials and guidelines. You may even have purchased some plastic toy animals or farm equipment for the students to use in their projects.
5. Allow students to work on this project at least two days so they can have time to plan and implement their ideas. Students will display their work in the classroom.



#### Activity 4

1. Before you begin this lesson divide a whiteboard or piece of chart paper into two columns. Talk with students about animals that we see on a farm. Write the names, ideas, and different things down on the white board/chart paper.
2. Next, ask students to talk about other animals that we would not see on a farm. Write these ideas and things down on the other side of the white board.
3. Have students complete *Who lives on the Farm?* Coloring activity sheet.
4. Discuss with students why certain animals live on the farm and their role on the farm.

#### Extension Activity

1. Begin the lesson by asking the students to identify different roles on the farm. In reading our book we were introduced to families, friends, farmers, scientists, etc. Ask the students to tell you what each person would do on the farm. What do the farmers do? How do the farmers take care of their duties/jobs on the farm? What do we use hay for? What types of animals eat hay?
2. Provide students with *Jr. Sprout Communities packet*. Students will read through the packet and complete an interactive activity. Explain that this is a neat story that shows one of our favorite foods produced by things grown on a farm.

#### Suggested Companion Resources

- [Jr. Sprout Communities \(Virginia Ag in the Classroom\)](#)

#### Essential Links

- [Who Lives on the Farm?](#)

- [Animal Matching](#)
- [Scavenger Hunt Cards \(additional document\)](#)
- [A Year on the Farm Activity \(additional document\)](#)

- Ag Facts**
- North Carolina is second in the nation in the production of Christmas trees, hogs & pigs, trout, and turkeys.<sup>1</sup>
  - North Carolina has a broad range of climate conditions due to its three distinct regions: the Appalachian Mountains, the Piedmont, and the Coastal Plains. This topographical variety along with the presence of the Gulf Stream off the coast, gives our state the largest climate variability of any state east of the Mississippi.<sup>1</sup>
  - The growing season growing season ranges from 130 days in the northern mountains to 242 in 270 days along the coast.<sup>1</sup>
  - The eastern 2/5 of North Carolina is characterized as coastal plain and tidewater. Moving west, the next 2/5 of North Carolina, about 200 miles wide, consists of a piedmont plateau. In the west, the land slopes upward from gentle to rugged rolling hills to the high southern Appalachian Mountains containing the Blue Ridge and Great Smokey Mountains.<sup>1</sup>
  - North Carolina ranks number one nationally in the production of flue-cured tobacco, and sweet potatoes; second in the production of Christmas trees; third in the production of cucumbers. Strawberry, cotton and tomato production rank fourth nationally, followed by greenhouse/nursery production, burley tobacco, peanuts, bell peppers, and squash at fifth.<sup>2</sup>
  - Hogs and pigs, turkeys, broilers, cattle and calves are the main animals raised by North Carolina farmers. North Carolina ranks second in the nation in the production of hogs/pigs and turkeys, and fourth in the production of broilers and trout.<sup>1</sup>

### Extension Activities

- Plan a trip to a local farm or greenhouse
- Have students research a commodity crop and its growth throughout the year
- Have students draw pictures and write definitions to words found in the book *A Year at a Farm* by Nicholas Harris

### Sources & Credits

- <http://www.enchantedlearning.com/coloring/farm.shtml>
- <http://learningenglish-esl.blogspot.com/2010/03/animal-matching-worksheets.html>
- <http://aginthe classroom.org/Teachers/LessonPlans.aspx>

- [https://www.nass.usda.gov/Statistics\\_by\\_State/North\\_Carolina/Publications/Farm Reports/index.php](https://www.nass.usda.gov/Statistics_by_State/North_Carolina/Publications/Farm_Reports/index.php)
- <http://www.agclassroom.org/teacher/stats/northcarolina.pdf>

### **Ag Facts**

1. <https://www.agclassroom.org/kids/stats/northcarolina.pdf>
2. <https://www.agclassroom.org/teacher/stats/northcarolina.pdf>