



ROCKER 7 FARM PATCH FIELD TRIP LESSON-FALL 2018

Area: Agricultural Education-K-4

**AZ Academic Standards: R/W/M/SC
Standards are listed by grade level on page 5
Agriculture and the classroom**

**Lesson Title:
A Day on the Farm- Rocker 7 Farm Patch**

Objectives:

1. The students will be able to observe seeds and understand the conditions needed for seeds to grow. Students will gain an understanding of the importance of seeds in our lives.
2. The students will be able to recognize and identify common farm animals, their importance and what products we get from farm animals.
3. The students will be able to understand the importance of sunflowers in agriculture and the consumer. The students will explore sunflowers in the garden and make scientific observation through a guided tour.
4. The students will be able to understand the characteristics and importance of honeybees and their relationship to our environment.
5. The students will be able to distinguish between sweet corn and field corn and how it grows. The students will be able to name several items or uses corn has in our lives and our environment.
6. The students will be able to identify direct and indirect ways that people can consume water on a daily basis. Students will be able to explain why water conservation is important on a farm and in their personal lives. Students will gain an understanding of the irrigation process and the importance of conservation.
7. The students will be able to select a pumpkin in a field environment with the assistance of their tour guide.
8. The students will observe the state of Arizona and its' counties, along with identifying each county's top plant and animal production.

Tour Objective: *Our Tour Objective is to provide a Quality Educational Experience, full of fun and enjoyment for all participants touring our farm. Goals achieved will be through ample opportunities provided within our programs to meet the educational Arizona State standards.*

Summary: *Agriculture is the largest and most important industries in our world. By understanding the basic concepts of agriculture we can effectively and efficiently educate the younger generations about where their food and products used daily comes from. We also utilize agricultural education to reinforce concepts to students that they might not otherwise learn in a classroom setting. By giving students hands on activities coupled with a safe and effective learning environment, we can give students the basic background agriculture knowledge.*

Time: 90 minutes

Additional Resources:

Agclassroom.org

NAFDMA Educational Resources

http://www.uncleshucks.com/uncle_shucks_educational_school_tours.php

<http://www.thevirtualvine.com/farm.html>

<http://www.theteachersguide.com/onthefarm.htm>

<http://www.kidzone.ws/thematic/farm/>

<http://agcensus.usda.gov>

Key Vocabulary:

seed(s), grow, soil, farm, animals, products, sunflowers, agriculture, consumer, garden, honeybees, environment, water, consume, irrigation, conservation, corn, field, ripe, pumpkin, crop, vine, stem, plant, flowering plant, oil, kernel, harvest, striped

Greeting: The students will be greeted on the bus by their field trip guide and given a very brief introduction. As students come off the bus they will gather in the hay barn to go over a few rules about the farm and get briefed about the field trip.

Transition: Depending on the size of the group the field trip coordinator will split the class into groups and each group will go to a different part of the farm.

Summary of Content:

Objective 1: Students will be able to observe seeds and understand the conditions needed for seeds to grow. Students will gain an understanding of the importance of seeds in our lives.

Overview: There are many different kinds of plants, flowers and trees around us. Students will discover, sort, and observe seeds. While observing the current foliage around them the students will identify the structure of plants, including seeds, roots, stems, leaves, flowers and fruit. Students will learn how much we depend upon plants by categorizing common plant products found on the farm and in our home.

Objective 2: The students will be able to recognize and identify common farm animals, their importance and what products we get from farm animals.

Overview: Farm animals are an essential part of farms. They contribute greatly to the production and fosters a moral bond between humans and animals while farming. It is the responsibility of the farmer and visitors to help with the welfare of the farm animals. The guide will invite the students on how to help groom the farm animals on site. Once the students have been instructed on the correct formation on grooming the animals, the students will get to go into the petting zoo and accomplish the task at hand. The students will be advised how important grooming the animals are and how crucial it is for the health of the anima to be taken care of daily.

Objective 3: The students will be able to understand the importance of sunflowers in agriculture and the consumer. The students will explore sunflowers in the garden and make scientific observation through a guided tour.

Overview: The vibrant, strong sunflower is a recognized worldwide for its beauty; it is also an important source of food. The students will be informed on the many uses of the sunflower, ie. sunflower oil is a valued and healthy vegetable oil and sunflower seeds are enjoyed as a healthy, tasty snack and nutritious ingredient to many foods. The students will be informed and prompted through the sunflower walk by the guide and student led questions. Upon completion the students will be able to answer the question boards by putting pictures and corresponding words in the correct spots with/without help.

Objective 4: The students will be able to understand the characteristics and importance of honeybees and the relationship to our environment.

Overview: The guide will read the students "Bee's Amazing Adventure" in a whole group. Upon completion of the story, the students will be led to the bee display to watch the bee's hard at work. Students will be informed that the bee's help the farm by pollinating plants and trees to produce fruits and nuts, as well as producing honey. A bee may visit 100-1,500 blossoms in a single trip and will travel up to five miles from its hive. Each hive has one queen bee, several hundred drones (reproductive males), and up to 40,000 workers (females who gather food, care for the young and the queen, and protect and repair the hive). Students will leave with a better understanding that bee's are very important on a farm. Students will be given honey straws to have at the farm facility or back in the classroom.

Objective 5: The students will be able to distinguish between sweet corn and field corn and how it grows. The students will be able to name several items or uses corn has in our lives and environment.

Overview: *Students will be led inside the cornfield. They will be informed that corn is a part of the grass family. An ear or cob of corn is actually part of the flower and an individual kernel is a seed. We get so many interesting things from corn. The guide will pull off an ear of corn as a visual representation and show the students. Students will be prompted to ask several questions about what they see and want they know about corn. The guide will then inform the students by grade level appropriate vocabulary words to describe the corn plant. Students will then be informed that corn can be divided into two types, Sweet Corn and Field Corn. Sweet Corn is what we eat and you buy at the grocery store. Field Corn is corn what the see all around them today. It is also know as silage corn. This corn is specifically grown to feed livestock. Students will be informed that corn is grown on 6 of the 7 continents. It doesn't grow corn on Antarctica. There is 3,500 different uses for corn. Just a few items are cereals, peanut butter, potato chips, soups, marshmallows, ice cream, baby food, cooking oil, margarine, mayonnaise, salad dressing, and chewing gum. Students will then play a game to review what they learned about corn to determine if the particular item is for animals, humans or cars.*

*(Have the students get into a line and go through the activity and allow them to go through the maze)
(Allow students to go through maze and meet at exit have all students back before continuing tour!)*

Objective 6: The students will be able to identify direct and indirect ways that people can consume water on a daily basis. Students will be able to explain why water conservation is important on a farm and in their personal lives. Students will gain an understanding of the irrigation process and the importance of conservation.

Overview: *The guide will begin the discussion with the students by asking if anyone knows what water conservation is and what it means. The students will then be informed on why water recycling is so important to our lives and in agriculture. The group will have a discussion how clean water is supplied to our homes and all the different uses they use water in their daily lives. Students will observe how much water is on the Earth and how much is actual, clean drinking water. Students will then begin to understand what valuable resource water is and how water conservation is important. The students will discuss on how help to conserve water and review the consequences of overusing or wasting water. (Because the supply of water is not endless.)The students will be informed why farmers need water and how it helps their crops grow and for their animals to drink. The group will then begin to list or verbally discuss out loud ways they can take actions to reduce water use at school and in the community.*

Objective 7: The students will be able to select a pumpkin in a field environment with the assistance of their tour guide.

Overview: *The students will move to the Jack-b-Little pile where they will have the opportunity to pick out their very own pumpkin. After they have gotten their perfect pumpkin, they will come back to the barn and be given a piece of paper and a writing utensil. At that point they will be informed that part of picking the perfect pumpkin is giving it a name! Have the students give their pumpkin a name and write a quick sentence explaining the pumpkin and giving it a background story. (i.e. where did*

the pumpkin come from? What does it look like...) This writing activity can also be done inside of the classroom when they return from the Farm Tour field trip.

Objective 8: The students will observe the state of Arizona and its' counties, along with identifying each county's top plant and animal production.

Overview: *The students will observe the large state of Arizona, which is broken into counties. Tour guide will ask students what they think are the top plant and animal produced in each county. Guide will reveal the top answers, especially highlighting Maricopa County. See attached sheet for the county highlights.*

Summary (Teacher): What is one thing you learned today on your visit of the farm?

Conclusion (Student): The students will refer to one of the above objectives

Application:

Extended Classroom Activity: The teacher will be given a resource packet that is filled with numerous reference materials that the teacher can use during their regular scheduled class time.

Evaluation of Overall Student Attainment: Teachers determines their overall student attainment.

Standards Used by Grade Level:

	Science	Eng/Language Arts	Math
Kindergarten	S:1 C:1 PO:1,2,3 S:1 C:4 PO:1,2 S:4 C:1 PO:1 S:4 C:2 PO:1 S:4 C:3 PO:1,2 S:5 C:1 PO:1 S:6 C:1 PO:1,2,4,4	RL.1,2,3 RI.1,2,4,7 W.1,2,3,8 SL.1,2,3,4,5,6	MD.1,2,3
First	S:1 C:1 PO:1,2,3 S:1 C:4 PO:1,2 S:4 C:1 PO:1 S:4 C:2 PO:2 S:4 C:3 PO:1,2,3 S:5 C:1 PO:1 S:6 C:1 PO:1,2,3,4,5	RL.1,2,3 RI.1,2,4,6,9 W.1,2,3,8 SL.1,2,3,4,5,6	MD.1,2,4
Second	S:1 C:1 PO:1,2 S:1 C:4 PO:1,2 S:4 C:3 PO:1,2,3	RL.1,3 RI.1,2,3,4,6,7 W.1,2,3,8 SL.1,2,3,4,5,6	MD.1,2,3,4
Third	S:1 C:1 PO:1,2 S:1 C:2 PO:3 S:1 C:4 PO:1,2,3 S:3 C:1 PO:1,2 S:4 C:1 PO:1 S:4 C:1 PO:1 S:4 C:2 PO:1,2	RL.1,2,3 RI.1,2,3,4,6,9 W.1,2,3,4,8 SL.1,2,3,4,5,6	MD.4

	S:4 C:3 PO:1,2,3,4,5 S:4 C:4 PO:1,2,3		
Fourth	S:1 C:1 PO:1,2 S:1 C:3 PO:3,4 S:3 C:1 PO:1,2 S:4 C:1 PO:1,2 S:4 C:3 PO:1,2,3,4	RL.1,2,3 RI.1,2,3 W.1,2,3 SL.1,2,3,4,5,6	MD.1

*Additional standards can be supported within lesson extensions in the classroom setting per individual classroom teachers.