

8. Agriculture, Food and Natural Resources Cluster - Farm Animals and Careers (4 hours)

Purpose/Abstract: To introduce students to the different careers on a farm under the agriculture, food, and natural resources cluster.

NCCCS Adult Education Standards: R.3.1.5, R.3.3.5, W.1.2.4, W.5.1.1.,M.1.2.5

Learning Objective:

By the end of the session, students will be able to:

- Describe life-sustaining needs of farm animals
- Describe the day of a farm hand
- Complete a basic timesheet for a farm hand

Soft Skills	enthusiasm & attitude problem solving & critical thinking	Resources	Video: Agricultural Workers Career Video Webpages (direct students to these pages for the group work) • Farmworkers and Laborers, Crop, Nursery, and Greenhouse • Agricultural Equipment Operators • Farmworkers and Laborers, Crop, Nursery, and Greenhouse Handouts: • Vocabulary Words and Writing - 1 for each student • Reading Comprehension - 1 for each student • Farm Worker Timesheet - 1 for each student
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Additional Materials

- Reading Comprehension handout, one for each student (print scaffolded version as required)
- Vocabulary Words and Writing, one for each student
- Farm Worker Timesheet, one for each student
- Web pages: [Farmworkers and Laborers, Crop, Nursery, and Greenhouse](#), [Agricultural Equipment Operators](#), [Farmworkers and Laborers, Crop, Nursery, and Greenhouse](#)
- Art supplies (glue, glitter, markers, etc.)
- OPTIONAL but encouraged: Place value unit manipulatives
- Pencils, paper
- Computers for student use

Icons	 Activity	 Check-In	 Review
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PREPARATION

- Review the [Instructional Support Guide](#) and print/prepare referenced scaffolds.
- Print handouts.
- Familiarize yourself with average wages for the suggested tasks provided in the timesheet handout.
- Familiarize yourself with the [OneStop Career Clusters](#).
- Familiarize yourself with [O*NET](#)

- Familiarize yourself with [Skills to Pay the Bills](#), though it won't be used directly in this lesson.

INTRODUCTION (20)

Welcome students to the class!

Begin by reviewing the previous lesson briefly. Ask students to share what they learned in the previous lesson about pet care occupations and the agriculture, food, and natural resources cluster.

Have students form a circle and toss a ball or a soft toy at each other. Whoever catches the ball has to say their name and one thing they like or dislike. For example, "My name is John and I like pizza" or "My name is Mary and I dislike spiders."

Introduce the topic of the lesson using this [video](#). Guide a short discussion on the video using a few questions from the list below.

- Have you ever worked on a farm or done any agricultural work?
- Do you know anyone who works in agriculture? What do they do?
- What do you think are some common tasks for agricultural workers?
- Have you ever eaten any fruits or vegetables that were grown on a farm? Which ones?
- Have you ever seen any farm equipment before? What did it look like?
- What do you think are some benefits of working in agriculture?
- Why do you think it's important to have people working in agriculture?
- What do you think are some of the most important skills needed for agricultural workers?

Review the objectives for this lesson and explain how they will be achieved through the different activities planned for the day.

Instructor notes:

Be sensitive to students' needs and willingness/reluctance to share at any point, and verbalize that your classroom is a safe space.

VOCABULARY, READING, and WRITING (60 minutes)

Remind students that throughout your time together, every lesson will focus on soft skills.

VOCABULARY AND WRITING (25 minutes)

Write these terms on the board or project them on a screen:

- Cultivate - To prepare and work on the soil to help crops grow.
- Irrigation - The process of supplying water to crops to help them grow.
- Tractor - A powerful vehicle used on farms to pull machinery and perform other tasks.
- Pesticide - A chemical substance used to kill or control pests, such as insects, that can harm crops.
- Propagation - the process of growing new plants from seeds or cuttings
- Livestock - animals raised on farms for meat, milk, or other products

Ask students to choose one of the job titles from the video and imagine that they are a farmhand working on a farm.

Tell them to write a short account of what a day in your life looks like on the farm. Encourage them to use at least three of the vocabulary words above in their writing, and underline or highlight them. Students can use the simple definitions above to help them understand what each word means.

Ask students to use descriptive language to bring your day to life, and be sure to include details about your tasks and interactions with other farmhands or animals.

Allow 20 minutes for this activity, and encourage students to use their creativity and imagination.

Have 3-4 volunteers read what they have written with the rest of the class.

Instructor notes: Consider assigning volunteers before the start of an activity to help prepare them to present their answers to the class.

READING COMPREHENSION (25 minutes)

Ask students to stay with the same partner for the reading comprehension activity.

Provide each student with a copy of the comprehension passage and questions.

Instruct the pairs to take turns reading the article aloud to each other. Encourage them to stop and ask questions or clarify information as needed.

After each partner has had a chance to read the passage, ask them to individually write the answers to the comprehension questions in the handout.

Once the students have finished filling in the answers, have them share their answers with their partner and discuss any differences or similarities in their interpretation of the passage.

Allow 20 minutes for this activity.

REFLECTION (10 minutes)

✓ Facilitate a short discussion about the passage and encourage students to share their responses to the comprehension questions.

Instructor notes: Not all students might be willing/able to write, so allow them to draw their responses or share them verbally.

Lower Level

Provide sentence starters to help them write the answers as specified in the handout. Allow students to draw their responses or share the answers verbally with their partner.

Higher Level

Encourage students to add another paragraph to the passage about what challenges they might face while caring for farm animals.

MATHEMATICS (45 min)

Explain how the addition and subtraction they have been practicing so far will help them in their jobs on the form. Ask students to share how they have applied these skills in the previous two lessons.

Highlight the importance of tracking time and hours worked on a farm. Ask students how tracking time might help them with planning and organizing their day.

Introduce a basic timesheet template by drawing this table on the board and asking students to share what they notice about the columns and how this template might be useful for someone working on a farm.

Date	Task	Total Hours	Total Wage
Hourly Wage = \$12			
Total Hours - Weekly (add all the hours in the total hours column) = \$			
Total Wages - Weekly (add all the wages in the total wages column) = \$			

Ask students how addition and subtraction skills will help them fill out similar timesheets, and have 1-2 volunteers demonstrate an example. You can use a few of these tasks to demonstrate how to fill out the timesheet.

- Planting seeds
- Watering crops
- Harvesting vegetables
- Operating farm equipment
- Cleaning and maintaining animal housing
- Feeding livestock
- Applying pesticides or fertilizers
- Constructing or repairing farm buildings or fences
- Sorting and packing harvested products
- Assisting with irrigation activities
- Shearing wool from sheep
- Collecting eggs from hatcheries
- Milking cows or goats
- Herding and grazing animals
- Weighing and loading animals for transport.

Explain that to calculate the total wages, the hourly wage has to be multiplied by the total number of hours. Briefly explain that multiplication is repeated addition, and for this activity, the students can limit the total hours for each task to 3 hours to help make their calculations easier.

Provide a basic timesheet template and have students fill in the hours worked and tasks completed. Assist students in calculating the total hours worked and the pay earned. Walk around and check that all students are able to fill in the template.

Discuss the importance of being accurate and honest with time tracking.

REFLECTION (10 minutes)

Review answers with the class, discussing common mistakes or misunderstandings.

Wrap up this section by asking students to summarize how tracking time for work tasks will help them.

Lower Level

Consider modeling entries and calculations. Provide wage amounts for entries if students cannot come up with their own.

Higher Level

Encourage students to brainstorm ways in which they can organize their time efficiently to prioritize tasks that will pay them more or help increase their skills. Ask them to write down their ideas below their timesheet.

GROUP PROJECT (60 min)

RESEARCH and DISCUSSION

Explain that there are many jobs relating to farm animals and on farms, and that in this lesson they will focus solely on three occupation groups.

Tell students they will work in groups to research each occupation group and present their findings to the rest of the class.

Divide students into 3 groups and assign each group one of the following occupation groups:

- [Farmworkers and Laborers, Crop, Nursery, and Greenhouse](#)
- [Agricultural Equipment Operators](#)
- [Farmworkers and Laborers, Crop, Nursery, and Greenhouse](#)

Tell students to read about the assigned occupation and discuss which aspects of it they would enjoy and which they might not. Encourage them to read through the worker characteristics and reflect on whether they match their interests, strengths, and personalities. This information does not have to be presented, as it is more for individual reflection.

Provide art supplies and have students create a visual representation of the key tasks they might do in these jobs, such as a drawing, collage, or diorama.

While working in their groups, ask students to reflect on how enthusiasm, attitude, problem solving, and critical thinking skills will help them excel in their tasks. Ask them to take note of their discussions to share with the rest of the class during the presentations.

REFLECTION (10 minutes)

✓ Have each group present their project to the class and explain the importance of their task in farming.

Ask, “How will being enthusiastic and having a positive attitude help you in these jobs?” and have a few students share their answers.

Lower Level	Higher Level
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Consider assigning roles within the groups to ensure that each student contributes to the research and the presentation.

Encourage students to reflect on and write down why the jobs are a match or a mismatch for their skills and personality traits.

Instructor notes:

Make a note of the groups, as students will continue working with the same group in the next lesson to explore the career matrix further.

PARTNER WORK TIME (45 min)

Tell students that they will apply their understanding of the life-sustaining needs of farm animals to designing a farm layout.

Provide each student or pair of students with a piece of paper and colored pencils or markers.

Explain to the students that they will be designing a farm layout based on what they have learned about the needs of farm animals and crops. Review with the students the basic needs of farm animals, such as food, water, shelter, and medical care, as well as the needs of crops, such as sunlight, water, and soil nutrients.

Encourage the students to be creative with their designs, but also remind them that their layout should reflect an understanding of the needs of farm animals and crop placement. They should also think about how the layout will facilitate easy access and movement for farmers and farm workers across the farm. Give them an example of how proximity to a water source will ensure that animals get clean water refills when required while reducing the time required to walk back and forth for the farmworkers.

✓ Once the students have completed their farm layouts, have them share them with the class and explain their design choices.

Lower Level	Higher Level
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Provide magazines or other images for students to use if they aren't comfortable drawing. Consider pairing them up with higher level students if required.

Encourage them to research and add details to their farm layout, such as the types of crops and animals they would raise, the equipment they would need, and the roles of farm workers.

WRAP-UP & REFLECTION (10 min)

◊REVIEW

Have students reflect on what they learned about the role of a farm worker and what they find interesting about the tasks.

Ask volunteers to share their thoughts.

Facilitate a short discussion about why problem solving and critical thinking are important for these jobs. Share a few real life examples where these skills will be applied to encourage students to share their thoughts.

Distribute exit slips to students.

Ask for a few volunteers to share their reflections.

Collect and review the answers.

Instructor notes:

Inform students that the reflection slip will be the same after every lesson. Take some time to review each question on the slip and pause for student questions. Provide any assistance completing the slips for this and the next few classes until students are comfortable with the process.

Vocabulary Words & Writing

Name: _____

Date: _____

Directions:

- Choose one of the job titles from the video and imagine that you are a farm hand working on a farm.
- Write a short account of what a day in your life looks like on the farm.
- Use at least three of the vocabulary words given below in your writing, and underline or highlight them.
- Use the simple definitions above to help you understand what each word means.
- Use descriptive language to bring your day to life, and be sure to include details about your tasks and interactions with other farm hands or animals.

Vocabulary Words:

Cultivate - To prepare and work on the soil to help crops grow.

Irrigation - The process of supplying water to crops to help them grow.

Tractor - A powerful vehicle used on farms to pull machinery and perform other tasks.

Pesticide - A chemical substance used to kill or control pests, such as insects, that can harm crops.

Propagation - the process of growing new plants from seeds or cuttings

Livestock - animals raised on farms for meat, milk, or other products

Reading Comprehension

Name: _____

Date: _____

Directions:

- Read the passage out loud to your partner.
- Write down the answers to the questions in the space provided, independently.
- After writing all the answers, discuss them with your partner.
- Ask your instructor for help if you need it.

Life-Sustaining Needs of Farm Animals

Farm animals, such as cows, pigs, and chickens, have some basic needs that they require to stay healthy and happy. One of the most important needs for farm animals is food. Animals need to eat enough food to give them energy and keep their bodies working properly. Farmers make sure their animals get enough food every day, which might include hay, grain, or special pellets.

Another important need for farm animals is water. Just like people, animals need water to stay hydrated and keep their bodies working well. Farmers provide water for their animals in troughs or buckets. They also make sure the water is clean and free of any harmful germs or bacteria.

Shelter is also essential for farm animals. Animals need a safe and dry place to live, especially when it is cold or rainy outside. Farmers provide barns, coops, and shelters for their animals to protect them from harsh weather conditions. The shelter also gives them a place to rest and feel safe.

Finally, farm animals also need medical care to stay healthy. Farmers work with veterinarians to make sure their animals are getting the care they need. This can include regular check-ups, vaccinations, and treatments for illnesses or injuries.

Questions:

1. What are some basic needs that farm animals have?	
2. Why is it important for farm animals to have clean water?	

3. What is shelter, and why is it important for farm animals?	
4. Who helps farmers make sure their animals are healthy?	

Reading Comprehension

Name: _____

Date: _____

Directions:

- Read the passage out loud to your partner.
- Write down the answers to the questions in the space provided, independently.
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Questions:

1. What are some basic needs that farm animals have?	Farm animals require...
2. Why is it important for farm animals to have clean water?	Clean water is important for farm animals because...

3. What is shelter, and why is it important for farm animals?	Farm animals need shelters to
4. Who helps farmers make sure their animals are healthy?	To help keep animals healthy, farmers work with ...

Farm Worker Timesheet

Directions:

- Enter the date, task, total hours, and total wages.
- Use the list of suggested tasks to fill out this sample timesheet. You can create your own tasks if you like.
- Limit the total hours for each task to a maximum of 3 hours when filling out the timesheet.
- Be realistic while filling in hours for each task.

Date	Task	Total Hours	Total Wages (total hours * \$12)
			\$
			\$
			\$
			\$
			\$
			\$
			\$
Hourly Wage = \$12			
Total Hours - Weekly (add all the hours in the total hours column) = \$			
Total Wages - Weekly (add all the wages in the total wages column) = \$			

List of Suggested Tasks

• Planting seeds	• Shearing wool from sheep	• Feeding livestock
• Watering crops	• Collecting eggs from hatcheries	• Applying pesticides or fertilizers
• Harvesting vegetables	• Milking cows or goats	• Constructing or repairing farm buildings or fences
• Operating farm equipment	• Herding and grazing animals	• Sorting and packing harvested products
• Cleaning and maintaining animal housing	• Weighing and loading animals for transport.	• Assisting with irrigation activities

Reflection Exit Slip

In one sentence, describe what you learned in this lesson.

Today, I learned _____.

Is there anything you still need help understanding?

One question I have is...

Circle the emoji that shows how you feel about your mastery of content in this lesson.



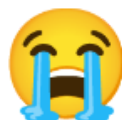
Happy



Smart



Confused



Sad



Angry