

Lesson 1: Animal Health: Making Cows Smile

Lesson Introduction

Dairy farming is a way of life for over 40,000 farm families in the United States. Dairy farmers have a very important job to do. In this lesson, students will learn ways farmers care for their cows every day and some of the people helping the dairy farmer care for their animals. The lesson will also highlight the career of being a veterinarian.

Lesson Objectives

- Students will list at least three ways dairy farmers care for their cows.
- Students will name people who help the dairy farmer care for their animals.
- Students will list the responsibilities and education of being a veterinarian.

Time: 45 - 60 minutes

Standards: See the <u>Discover Dairy website</u> for complete listing by grade level.

Vocabulary

• Bulk tank, bull, calf, cud, dairy cow, heifer, milker, total mixed ration, and udder

Materials Needed

- Computer
- Lesson PowerPoint
- Multimedia Projector and Screen
- Internet Access
- Discover Dairy and Animal Care Video
- Pencils

Activities

- Animal Care Video Discussion Guide (fill in the blank with or without word bank)
- Comparison Matching Activity
- <u>Kahoot! Game</u>
- Making Cows Smile Activity
- <u>Making Cows Smile eBook</u>
- <u>Quizlet Set (flashcards and Quizlet live game)</u>
- Writing Prompt (picture or no picture)

Procedure

Introduction (10 minutes)

- Go over the essential vocabulary terms and their meanings for this lesson.
- Because multiple careers are discussed, go over the careers and their meanings.
- Activating Strategy: Let's discover how the health and care of dairy cows are important to the farmer by watching the video, <u>Discover Dairy and Animal</u> <u>Care.</u>

Main Areas of Cow Care (8 - 15 minutes)

- Introduction
- $\circ\,$ Discuss the Main Responsibilities of a Dairy Farmer using the slides and their information.
- Have students read the Making Cows Smile eBook together or on their own.
- Closure: We discussed what dairy farmers do every day to take care of their cows. Tell the class one way that dairy farmers are responsible for the care of their cows.

Career Spotlight: Veterinarian (6 minutes)

- Introduction
- Facilitate the Career Spotlight on Veterinarians using the video and discussion of responsibilities and education.
- Closure: Dairy farmers depend on veterinarians to help them take care of their cows.
 - Tell us one way that veterinarians help dairy cows.
 - Are you interested in being a veterinarian when you grow up?

Summative Activity (15-30 minutes, depending on the activities)

- Introduction
- Pass out Activity to students
- Allow students class time to complete the Activity.
- Walk around, offering help and answering questions as needed.
- **Lesson Closure:** Today you learned about what dairy farmers do every day to take care of their cows and that they work with many people to take good care of their animals, so we have milk to keep us healthy. Tell us one person farmers work with and what that person does to help the farmer and his or her cows.

Career Spotlight

Veterinarian

Summative Assessment

Students will complete at least one of the activities with a mastery level of 80% of higher.





Lesson 1: Animal Health Vocabulary Word Definitions

Bulk Tank - a special container used to cool and store milk on the dairy farm until it is picked up to be processed

- Bull a male calf or cow
- **Calf -** a baby cow
- Cud something produced after a cow eats her food

Dairy Cow - a farm animal who is female and produces milk for us to drink

- Heifer a female calf or teen-aged cow
- Milker the unit that removes the milk from the cow's udder

Total Mixed Ration - the special mix of feed that a cow eats to meet her specific dietary needs

Udder - the part of the cow's body which produces and stores milk

Careers with Meanings

Dairy Farmer - a person who takes care of cows and provides milk for us to drink

Herd Manager (i.e. Herdsman) - a farm employee who has special training in cow health

Nutritionist - someone who has special training in balancing a mixture of feed to keep cows healthy

Veterinarian – an animal doctor who gives regular medical care to the animals



Lesson 1: Animal Health

Lesson Introduction: Veterinarian

Description

Veterinarians prevent, diagnose, treat, and research illnesses in food production animals such as dairy cattle, swine, poultry, and beef cattle. They monitor animal performance and provide regular feedback via performance management reports. They provide technical expertise in health management, including biosecurity, disease identification, and prevention.



Common Responsibilities

- Travel to the farm for regular visits as well as emergency calls
- Prescribe and administer medications and vaccinations to all types of animals
- Draw blood for testing and diagnose illness and disease
- Perform surgeries
- Operate medical equipment like X-ray machines and ultrasound technology
- Advise on ways to prevent occurrence or spread of diseases
- Adhere to standard safety protocols and maintain a clean, sterile environment

Education/Training Requirements

Bachelor's Degree in Animal Nutrition, Animal Science, Biology, Chemistry, Zoology or other related major (required, before doctoral program acceptance), Doctorate of Veterinary Medicine (required), and Certifications for Therapy, Ophthalmology, Anesthesiology, or Neurology (optional)

Information Sourced from agexplorer.com

Discover Dairy and Animal Care Video Discussion Guide

Directions: Fill in the blanks as you watch the "Discover Dairy and Animal Care" video.

1. When a cow is chewing her cud, it means that she is _____.

2. Cows eat _____ and drink a lot of _____ to make milk.

3. Cows drink a _____ worth of water every day.

- 4. Cows eat _____ pounds of food every day.
- 5. Cows milk about _____ glasses of milk per day.

6. Cows are milked either ____ or ____ times per day.

7. Every time before a cow has her next baby, she has a ____ month vacation from being milked to prepare for the baby to come.

8. A cow's doctor is called a _____.

9. Cows sleep on _____.

10. A cow chewing her cud is like a cow's _____.



Discover Dairy and Animal Care Video Discussion Guide ANSWER KEY

Directions: Fill in the blanks as you watch the "Discover Dairy and Animal Care" video.

- 1. When a cow is chewing her cud, it means that she is **CONTENT.**
- 2. Cows eat **PLANTS** and drink a lot of **WATER** to make milk.
- 3. Cows drink a **<u>BATHTUB</u>** worth of water every day.
- 4. Cows eat <u>90</u> pounds of food every day.
- 5. Cows produce about <u>200</u> glasses of milk per day.
- 6. Cows are milked either **2** or **3** times per day.

7. Every time before a cow has her next baby, she has a $\frac{2}{2}$ month vacation from being milked to prepare for the baby to come.

8. A cow's doctor is called a VETERINARIAN.

- 9. Cows sleep on **SAND**.
- 10. A cow chewing her cud is like a cow's **SMILE.**



Name: _____

Discover Dairy and Animal Care Video Discussion Guide

Directions: Use the correct number or word from the bank to complete the sentences as you watch the "Discover Dairy and Animal Care" video.

2	2	3	90	200	Bathtub	Content	
Plants		Sand Smile			Veterinarian	Water	

1. When a cow is chewing her cud, it means that she is _____.

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7. Every time before a cow has her next baby, she has a 2 month vacation from being milked to prepare for the baby to come.

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Lesson 1 Animal Health Comparison Matching Activity

Direction: Draw a line comparing how a cow's care requirements compare to our own.

1. Providing a Nutritious Diet



2. Keeping the Animals Healthy



3. Providing a Place to Live



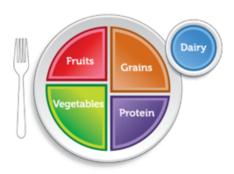
4. Providing Safe, Quality Milk











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2. Keeping the Animals Healthy



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4. Providing Safe, Quality Milk





Name: _____

k

Lesson 1 Animal Health Making Cows Smile Activity

WORD SEARCH

Find these words in the puzzle. Words can be written up, down, forward, backward and diagonally.

> COW HEIFER CALF FARMER VETERINARIAN NUTRITIONIST HERDSMAN STALL BARN HOOF RATION WATER

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	q	а	ο	r	n	а	n	t	i	g	i	ο	ο	е	k
	j	t	t	е	k	i	С	t	а	а	r	n	s	i	У
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	q	i	b	а	r	n	а	r	s	i	t	С	х	х	w
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v a i o i h e r d s m a n t

1. Describe three ways dairy farmers care for their cows:

- 2. What is the cow's doctor called?
- 3. What is the name of the farm employee who takes care of the cows?
- 4. What is the name of the special mix of feed cows eat?

Lesson 1 Animal Health Making Cows Smile Activity

WORD SEARCH

Find these words in the puzzle. Words can be written up, down, forward, backward and diagonally.

> COW HEIFER CALF FARMER VETERINARIAN NUTRITIONIST HERDSMAN STALL BARN HOOF RATION WATER

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1. Describe three ways dairy farmers care for their cows: (SAMPLE ANSWERS)

- Feed them and provide them with a continuous supply of water
- Provide a comfortable, clean place for them to live.
- Milk them 2 times a day, everyday
- Treat them when they are sick

2. What is the cow's doctor called?

Veterinarian

3. What is the name of the farm employee who takes care of the cows? Herdsperson or Herdsman

4. What is the name of the special mix of feed cows eat?

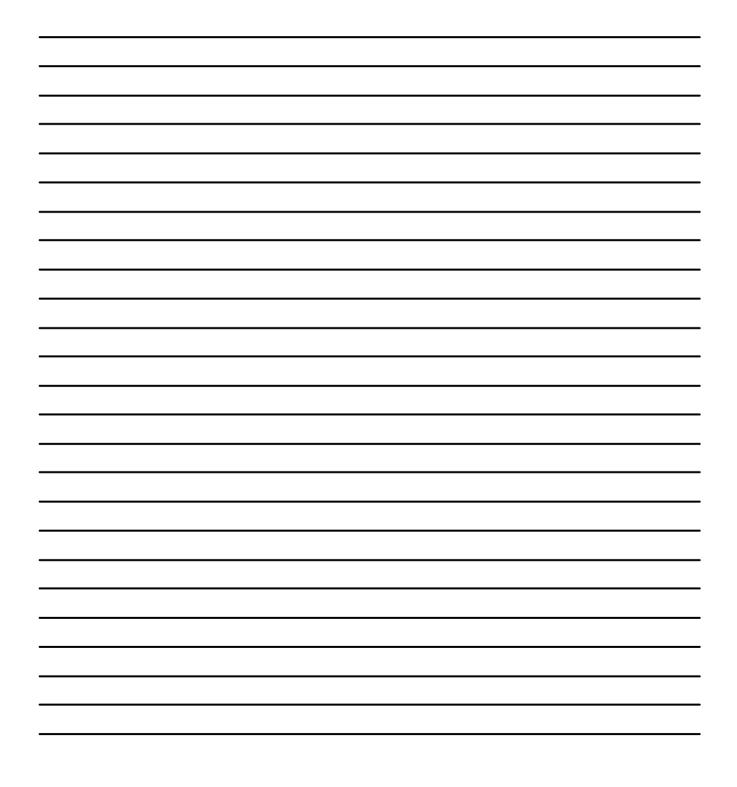
Total Mixed Ration or TMR

Lesson 1 Animal Health Writing Prompt

Prompt: Draw a picture to show one way that farmers take care of their dairy cows. Then write 1 - 2 sentences explaining how farmers care for their animals.

Lesson 1 Animal Health Writing Prompt

Prompt: Dairy farmers take great care of their animals. Describe how farmers care for their dairy cows and how your parents take care of you. Use three supporting statements to show the similarities and differences.



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