Dairy Lifecycle

Student Learning Targets:

- »Students will describe the different changes of weight a dairy animal goes through the lifecycle.
- »Students will be able to explain the life cycle of a dairy cow.
- »Students will identify "terms to know" associated with the lifecycle of the cow.
- » Students will understand the role of fact sheets in public relations.
- »Students will be able to outline the required components of a fact sheet.
- »Students will be able to identify important information to include in a fact sheet.

Standard Alignment:

- » AS.02.01. Demonstrate management techniques that ensure animal welfare.
- » AS.02.01.01.a. Explain the implications of animal welfare and animal rights for animal systems
- » AS.02.01.03.a. Distinguish between animal husbandry practices that promote animal welfare and those that do not.

Supplies:

Quantity:	Item:
	Slide Deck
	1 piece of paper per student
	Writing Utensils

Modifications:

- »Work with students to shorten definitions based on their needs
- »ELL students compare the words to their own language
- »Allow students longer work time on Fact Sheet those that do not.

Overview:

- »Introduction and Anticipatory Set
 - Dairy by the Numbers
 - Cut up the numbers and corresponding descriptions and place in Ziploc bags. Then, have students match up the numbers with the description and use this as the answer key.
 - Think, Pair, Share
- »Teaching and Main Activities
 - Presentation of Core Material
 - PowerPoint Presentation
 - Discussions Embedded Throughout
- »Communication Principles

Introduction and Anticipatory Set:

- » Dairy by the Numbers
 - Cut up the numbers and corresponding descriptions and place in Ziploc bags. Then, have students match up the numbers with the description and use this as the answer key.

Teaching and Main Activities:

- »Presentation of Course Material
 - Student Learning Targets
 - Students will describe the different changes of weight a dairy animal goes through the lifecycle.
 - Students will be able to explain the life cycle of a dairy cow.
 - Students will identify "terms to know" associated with the life cycle of the cow.
 - Context and Description
 - Share the material found in a presentation
 - Assessment or Questions
 - Informal Discussions
 - There are some prompts and probes throughout the presentation for students to respond to individually or as a large group.
- »Activity: Think, Pair, Share!
 - Student Learning Targets
 - Students will be able to explain the life cycle of a dairy cow.
 - Context and Description
 - Think!- Take 5 minutes to brainstorm on a piece of scratch paper what areas of the dairy cow's life cycle consumers of dairy products might have questions or concerns about. Are there any concerns they might have with how the animals are treated? Animal health? Safety?
 - Pair!- Share with a partner for 5 minutes about what are the concerns that you have listed on your paper. Agree on what your top two concerns are to share with the class.
 - Share!- Take time to share as a class
 - What is one part of the cow's life cycle consumers might have questions or concerns about? Why?
 - -Students should reach the goal concerns of weaning and milking (Al confinement etc). If they haven't ask probing questions to lead them to this discussion.

TRANSITION: And these safety concerns are what many other consumers also think about.

»Activity: Communications Activity

- Student Learning Targets
 - Students will describe the different changes of weight a dairy animal goes through the lifecycle.
 - Students will be able to explain the life cycle of a dairy cow.
 - Students will identify "terms to know" associated with the lifecycle of the cow.
- Context and Description
 - Just as you all (students) had questions when learning about dairy other consumers have questions about the dairy industry
 - Consumers get their information from the media
 - What is the media? (Pose question)
 - Media: (As defined by dictionary.com) Media is the means of communication, as radio and television, newspapers, magazines, and the Internet, that reach or influence people widely
 - Can you think of a time when you saw something in the media (tv, on line, radio, etc.) about agriculture that was miscommunicated (used the wrong word, showed the wrong picture, etc.)?
 - Chick-Fil-A ad with cow's teats Photoshopped out.
 - STOP AND THINK QUESTIONS: "Who should share information that we learned in this lesson?" and "How should they do this?"
 - Noteworthy definitions Advocate-"a person who publicly supports or recommends a particular cause or policy."
 - Discuss how an advocate is important in many areas of policies, sharing stories, and standing up for beliefs.
 - How would this work in the agriculture sector?
 - Noteworthy definitions- Agvocate- "In agriculture, an agvocate (or ag-vocating) is similar to advocating for a cause-except, advocating for agricultural issues and the agriculture industry as a whole.
 Sometimes Facebooking and Tweeting by farmers and agriculturalists (other than news sources) promoting agriculture is agvocating."
 - What are some examples of this?
 - Take 10 seconds to think about this question: How do you think we could communicate with the media to help make sure information like this isn't miscommunicated again?
 - •The goal is to get students to thinking about how a fact sheet can be useful.
 - Example: If a student says, "We should tell them the correct facts that a cow has an udder because she produces milk" then a fact sheet would be useful

- One way we can do this is with a fact sheet.
 - A fact sheet is an important tool used in public relations to provide an overall view of the topic (In this case dairy).
 - A fact sheet is a tool that can be used by a media writer (reporter, etc.) when writing about a topic he or she is not knowledgeable about.
 - The fact sheet is a reference for the reporter that he or she can use to make sure they use the correct terms and understand the topic as clearly as possible.
- Based on the information you've learned, develop a fact sheet FFA
 members might use to hand out to visitors or display when exhibiting
 their dairy SAE, to provide to your school newspaper staff when writing a
 story about dairy, or to the local news media.
 - What should your fact sheet look like? (Example fact sheets can be found here: https://www.midwestdairy.com/dairy-resource-center/ on-farm-resources/?_sft_product_cat=fact-sheets)
 - Clear Header with an Image/Graphic (see example similar to a letterhead)
 - Three subheadings that clearly identify the three main points to be communicated in the fact sheet
 - In a bulleted format, under each subheading list 3 bullets to support the subheading
 - Each bullet should include 2-3 sentences explaining the subheading points
 - Two Photos
 - Students should cover 3 main points in their fact sheet that answer the "how" and "why" of weaning and milking (Ex: How are cows milked?, why are they milked for 305 days?, why are calves taken from their mothers?, etc.).
 - Example: Weaning/ calf care- take the calf away from the mother (dam)at birth, not being constantly fed the dam's milk, the calf is removed from milk at 6-8 weeks.
 - Example: Milking- cows are milking for 305+ days, artificially inseminated to have another calf so they can milk again next year, housing options
 - Students should be allowed to use 1:1 devices to find these added an swers to the questions that aren't covered in the lesson. You can provide websites to use or let that be open to the students.
 - Split the class into two groups- one group's topic will be weaning and one will be focused on milking process
 - Students should work in assigned groups of 2 or 3

Wrap Up:

- » Activity: Carousel Review
 - Student Learning Targets
 - Students will understand the role of fact sheets in public relations.
 - Students will be able to outline the required components of a fact sheet.
 - Students will be able to identify important information to include in a fact sheet.
 - Context and Description
 - Today we talked about fact sheets. Why are fact sheets important for the media and consumers?
 - What do you think were the most important parts of the fact sheet?
 - Why did you select the information that you chose to be on your fact sheet?
 - Assessment or Questions
 - The "share!" part of the activity would be an informal assessment to see how students learned from the material