

My Day as a Dairy Cow...

Grades: 2nd + 3rd

Objectives

- Students will identify and sequence the events in the day of a dairy cow.
- Students will write narratives as if they were dairy cows. The narratives will include factual information from the Mobile Dairy Classroom assembly.

Common Core State Standards

CCSS.ELA-Literacy.W.3.3

Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

CCSS.ELA-Literacy.W.3.3a

Establish situations and introduce narrators and/or characters; organize event sequences that unfold naturally.

CCSS.ELA-Literacy.W.3.3b

Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show characters' responses to situations.

CCSS.ELA-Literacy.W.3.3c

Use temporal words and phrases to signal event order.

CCSS.ELA-Literacy.W.3.3d

Provide sense of closure.

CCSS.ELA-Literacy.W.3.4

With guidance and support from adults, produce writing in which development and organization are appropriate to task and purpose.

CCSS.ELA-Literacy.L.3.2

Demonstrate command of conventions of standard English capitalization, punctuation, and spelling when writing.

Materials

Flip chart

Lined paper for story

Cow Fact Sheet (for teacher use)

Procedure

1. The teacher will encourage the students to share the facts they learned from the assembly.
2. The teacher will record the students' responses on a flip chart.
3. The facts will be displayed so the students can incorporate them into their narratives.
4. The teacher will read the writing prompt and set guidelines and expectations for the narratives.
 - a. The students will be expected to include in their narratives at least 1 or 2 facts from each of the 4 content areas:
 - 1) The anatomy of a cow
 - 2) The cow's diet and digestion
 - 3) Life cycle of a cow
 - 4) How a cow is milked
5. The students' stories can be shared with the class or displayed on a bulletin board.
6. Extension Activity
The students' stories can be made into a book that would include illustrations on each page.

Writing Prompt

The Mobile Dairy Classroom has just visited your school. You have learned many new and interesting facts about cows. Pretend you are a dairy cow and then imagine a day in the life of a dairy cow on a farm. In your narrative you will include 1 or 2 facts from each of the following content areas.

1. The anatomy of a cow
2. The cow's diet and digestion
3. Life cycle of a dairy cow
4. How a cow is milked

Start your narrative with an engaging introduction with you as the cow. Make sure to use 3 adjectives to describe the cow in your introduction (for example, black and white, big, and friendly). Add vivid language to show what you are thinking. Use words that order, or sequence, events. End with an interesting conclusion that summarizes your day as a cow on the farm.

Cow Fact Sheet

The Anatomy of a Cow

Basic anatomy and features of dairy cows: head, eyes, teeth, hooves, shoulder, back, hip, udder, teats, tail

Cow Diet and Digestion

- Cows eat about 50 pounds of food each day and drink about 40 to 60 gallons of water.
- Their diet consists of alfalfa hay, grains, and water.
- Over 90 percent of what cows eat cannot be eaten by humans! Cows do a good job of converting foods that people can *not* eat into milk (which is used to make milk products).
- Milk contains many nutrients that humans need to be healthy, like calcium and protein.
- Cows have 32 teeth—no top front teeth.
 - The lower jaw has molars in the back and incisors up front.
 - The upper jaw has molars in the back.
- Cows have a 4-compartment stomach: rumen, reticulum, omasum, and abomasum (vocabulary for upper grade students only).
- Cows are ruminants, which means they form a cud (bolus) in the first 2 stomach compartments and regurgitate it to chew it again.

Life Cycle of a Producing Dairy Cow

- Cows become adults at 1 year of age and mothers at 2 years.
- Babies are called calves (heifers and bulls).
- A cow must have a calf and become a mother to make milk—“Mammal Mothers Make Milk.”
- Cows produce milk (lactation) for 10 months (fresh cow), and then they are dry (vacation) for 2 months (dry cow).
- Cows have a 9-month gestation period, give birth, and lactate for another 10 months.
- Cows normally have 1 calf each year, but they can have twins.

How a Cow is Milked

- Milk is produced in the udder.
- Cows produce 6 to 7 gallons of milk per day.
- Cows are milked by machine at dairies.
 - Cows need to be milked 2 times each day, sometimes 3 times.
 - Milking a cow takes about 5 to 7 minutes and is very comfortable for the cow. Milking does not hurt. It feels good and relieves the pressure of milk from the udder.

Milk comes out warm (mammals are warm-blooded, and a cow’s body temperature is about 101 degrees). It goes through pipes into a bulk tank at the dairy to be cooled down. A truck (like a thermos on wheels) picks up milk from the dairy and transports it to a processing plant.