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November 2026- Monthly Book
Milk from Cow to Carton
Written by: Dr. Michelle Schack
Illustrated by: Pablo López

Grade Levels Suggested: Adaptable for all Grades



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Lesson Plan

Dairy Detectives: How Did Milk Get Into My Carton?

Time length of the lesson: 45 minutes–1 hour

Standards Addressed:

- **ELA.OE.2: Learn and share information through written, spoken, and visual texts.**
- **ELA.OE.3: Use clues to make inferences and build understanding. ● ELA.OE.4: Work with others and use active listening skills.**
- **ELA.OE.5: Use evidence to explain answers.**

Objective of the lesson:

- Students will be able to identify dairy vocabulary using questions and picture clues.
- Students will be able to describe how milk is collected, cooled, transported, and pasteurized.

National Agricultural Literacy Outcomes:

- Agriculture and the Environment: Recognize the natural resources used in agricultural practices to produce food, feed, clothing, landscaping plants, and fuel (e.g., soil, water, air, plants, animals, and minerals) (T1.3-5.e)
- Culture, Society, Economy & Geography: Explain the value of agriculture and how it is important in daily life. (T5.3-5.d)
- Plants and Animals for Food, Fiber & Energy: Provide examples of specific ways farmers meet the needs of animals (T2.3-5.d)

Materials list:

- *Milk from Cow to Carton* written by Dr. Michelle Schack
- Six station question cards
- Six picture clue cards
- Student recording sheets
- Teacher answer key

Lesson Steps:
Before the lesson: Cut out the question cards and picture clues. Place the six question cards around the room. Put each matching picture clue face down inside a resealable bag beside its question. Use the teacher's answer key to match the cards.

1. Ask students what they know about where milk comes from.
2. Read *Milk from Cow to Carton*. Discuss the dairy vocabulary as it appears in the book.
3. Review these words: udder, milking parlor, milking machine, cooling tank, milk tanker, and pasteurization. Use the book's pictures to explain their meanings.
4. Tell students they will become dairy detectives and visit six stations.
5. Show students how to complete a station. Read the question and three answer choices. Explain that they may turn over the picture clue if they need help. Have students return

the clue face down when finished.

6. Give each student a recording sheet. Have students write their name and date. 7. Divide students into six groups. Start each group at a different station. 8. Have students read the question, discuss the choices, and circle A, B, or C beside the matching station number on their recording sheet.
9. Allow two to three minutes at each station. Have groups move to the next station until they have visited all six.
10. Review the answers together. Have students explain what each vocabulary word means and how the book or picture clue helped them.
11. Arrange the picture clues in station order. Explain that the first three pictures show where milk begins and how it is collected. The remaining pictures show cooling, transportation, and pasteurization.
12. Ask what happens next. Discuss how milk is packaged and delivered to

stores. **Grade-level adjustments:**

- **K–2:** Read the questions and answer choices aloud. An adult may help students record their answers.
- **3–5:** Have students explain their answers using details from the book. Ask why cooling, transportation, and pasteurization are important.

Assessment:

Review the student recording sheets for correct answers. Have students name one dairy vocabulary word and explain what it means. Students may write, draw, or answer aloud.

Additional Resources:

- Discover Dairy—Classroom Enrichment
- South Carolina Farm Bureau—Ag in the Classroom
- National Agriculture in the Classroom Curriculum Matrix

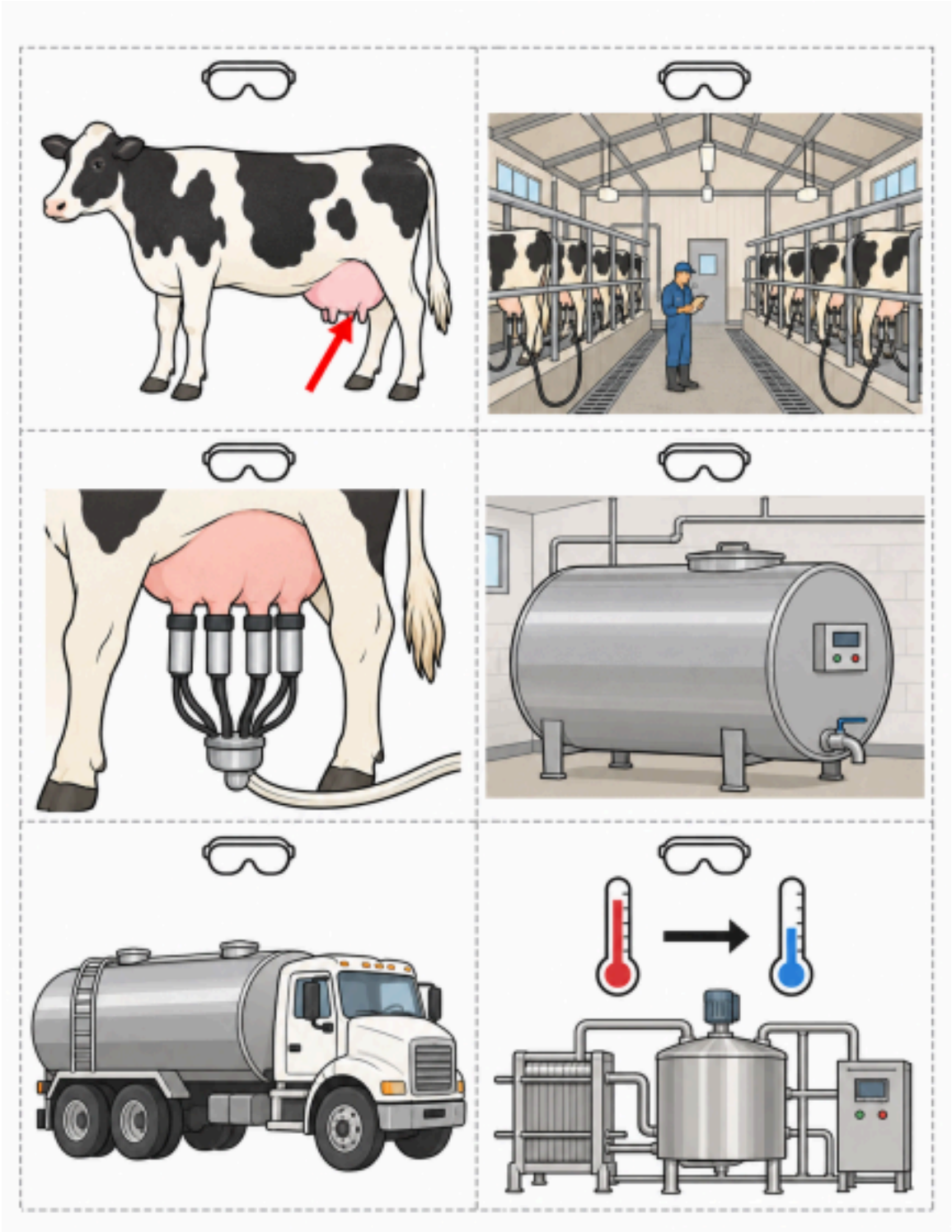
References:

- Schack, M. (2026). *Milk from Cow to Carton*.
- South Carolina Department of Education. *South Carolina College- and Career-Ready English Language Arts Standards*.
- Spielmaker, D. M., & Leising, J. G. (2013). *National Agricultural Literacy Outcomes*.

Answer Key

Station	Question	Answer Choices	Picture Clues
1	What part of a cow's body produces milk?	A. Hoof **B. Udder** C. Tail	Cow with an arrow pointing to the udder
2	Where on a dairy farm are cows milked?	**A. Milking parlor** B. Grocery store C. Processing plant	Cows inside a milking parlor
3	What machine collects milk from the cow's udder?	A. Cooling tank B. Milk tanker **C. Milking machine**	Close-up of a milking machine attached to an udder
4	What keeps milk cold on the farm after milking?	A. Milking machine **B. Cooling tank** C. Feed mixer	A cooling tank inside the farm's milk room
5	What carries milk from the farm to the processing plant?	**A. Milk tanker** B. Tractor C. Cooling tank	A milk tanker truck
6	What process heats milk to kill harmful germs, then cools it quickly?	A. Packaging B. Milking **C. Pasteurization**	Processing equipment showing heating followed by cooling

Clue Cards



Question Cutouts:

STATION 1

What part of a cow's body produces milk?

A. Hoof

B. Udder

C. Tail

Need help? Turn over the picture clue.

STATION 2

Where on a dairy farm are cows milked?

A. Milking parlor

B. Grocery store

C. Processing plant

Need help? Turn over the picture clue.

STATION 3

What machine collects milk from the cow's udder?

A. Cooling tank

B. Milk tanker

C. Milking machine

Need help? Turn over the picture clue.

STATION 4

What keeps milk cold on the farm after milking?

A. Milking machine

B. Cooling tank

C. Feed mixer

Need help? Turn over the picture clue.

STATION 5

What carries milk from the farm to the processing plant?

A. Milk tanker

B. Tractor

C. Cooling tank

Need help? Turn over the picture clue.

STATION 6

What process heats milk to kill harmful germs, then cools it quickly?

A. Packaging

B. Milking

C. Pasteurization

Need help? Turn over the picture clue.

Dairy Detectives

Follow the clues. Discover the dairy journey!

Name: _____ Date: _____

Your mission: Visit each station around the room. Find the question card and choose an answer. Circle A, B, or C below for that station. Use the picture clue if you get stuck. You may start at any station.

1 **What part of a cow's body produces milk?**

A B C

2 **Where on a dairy farm are cows milked?**

A B C

3 **What machine collects milk from the cow's udder?**

A B C

4 **What keeps milk cold on the farm after milking?**

A B C

5 **What carries milk from the farm to the processing plant?**

A B C

6 **What process heats milk to kill harmful germs, then cools it quickly?**

A B C

Check your work: Did you answer all six questions?