

Dear Educator,

At school, at home, and in their communities, students are increasingly aware of the importance of caring for the environment and the effects of climate change. But they may not be aware of how local dairy farmers are setting an example for tackling these issues.

This free educational program from Dairy Farmers of Wisconsin and the curriculum specialists at Young Minds Inspired will introduce your students to some of the responsible, sustainable farming practices dairy farmers have adopted to care for the environment, their cows, and consumers. The program features standards-based activities designed to supplement your English language arts curriculum, and each activity includes ideas to extend the learning at home.

Please share these materials with other teachers in your school. Although the materials are copyrighted, you may make as many copies as needed for educational purposes. Comment online at [ymiclassroom.com/feedback-WisconsinDairy](https://www.ymiclassroom.com/feedback-WisconsinDairy) to provide feedback. We look forward to hearing from you.

Sincerely,
Youth and Schools Team at Dairy Farmers of Wisconsin

Dr. Dominic Kinsley
Editor in Chief
Young Minds Inspired



For questions, contact YMI toll-free at 1-800-859-8005 or by email at feedback@ymiclassroom.com.



How Dairy Cares

Target Audience

Elementary school students in grades 2-4 and their families

Program Objectives

- Explore dairy farmers' sustainable farming practices
- Raise awareness of the animal-care principles of dairy farmers
- Inspire healthy eating that includes nutritious dairy products
- Support language arts skills

Program Components

- This one-page teacher's guide
- Three reproducible activity sheets
- A reproducible Wisconsin Dairy Breeds coloring sheet
- Please comment online at [ymiclassroom.com/feedback-WisconsinDairy](https://www.ymiclassroom.com/feedback-WisconsinDairy)

How to Use This Program

Photocopy the teacher's guide and activity sheets before beginning the lesson. To review program alignment with Common Core standards, visit [ymiclassroom.com/WisconsinDairy](https://www.ymiclassroom.com/WisconsinDairy).



ACTIVITY 1

Caring About Cows

In this activity, students will learn that dairy cows are cared for in a way that benefits them, their milk, and the environment.

To introduce the activity, show students pictures of the different cows found at <https://www.americandairy.com/dairy-farms/dairy-cows/>. Explain that these cows are all found at dairy farms, which provide the milk that local communities rely on for high-quality nutrition. Click on a couple of the cow profiles and read the "fun fact" to students. As an optional activity, distribute the Wisconsin Dairy Breeds coloring sheet found at [ymiclassroom.com/WisconsinDairy](https://www.ymiclassroom.com/WisconsinDairy) for students to complete.

Distribute the activity sheet. Have students read the story, answer the questions, and then discuss the answers. **Answers:**

Part 1: 1. 6 hours; 2. 5 minutes; 3. Holstein; 4. 250 glasses;

Part 2: 1. milking parlor; 2. feed; 3. freestall barn; 4. sprinklers

Extension Activity: Have students work in small groups to create "meet a dairy cow" posters, using the information found at the link above.



ACTIVITY 2

Caring About the Environment

In this activity, students will learn that dairy farmers are responsible environmentalists who engage in sustainable farming practices that

help their own farms as well as the Earth — including practices that may help fight climate change. (For an overview, share the "Discover Dairy...In Our Environment" video at https://youtu.be/Z-874_14tCA.)

Divide students into small groups and distribute the activity sheet. In Part 1, have students work together to identify practices they might already do at home that are similar to those done by dairy farmers to help care for the environment. In Part 2, ask students to show what they've learned by creating a comic strip demonstrating how kids and families can care for the Earth.

Answers: Will vary. **Part 1: Conserve Energy:** turn off lights when not in use, open windows and use fans instead of using the air conditioner, turn off computers in the classroom when not in use. **Conserve Water:** turn off the faucet when you brush your teeth; take quick showers; use low-water washing machines and other appliances. **Reduce, Reuse, Recycle:** recycle paper, plastic, and cans; save and reuse cardboard for school projects; use both sides of a piece of paper. **Help Wildlife:** set up a birdfeeder, birdhouse, or birdbath in your yard; plant a butterfly garden. **Protect Waterways:** cover the ground with plants to help stop soil from washing into streams or rivers. **Part 2:** Examples include recycling paper, riding a bike instead of driving a car, using solar or wind energy instead of fossil fuels, replacing plastic bags with cloth bags, and driving electric cars.

Extension Activity: Have students share and/or act out their comic strips for the class. Or put the comic strips together to create a book or digital slideshow that can be shared with students in other classes.



ACTIVITY 3

Caring About Nutrition

In this activity, students learn about the nutrition that dairy products provide and how dairy farmers ensure that consumers can rely on milk and calcium-rich, low-fat dairy foods such as yogurt and cheese for high-quality nutrition.

Distribute the activity sheet. Ask students to listen as you review the correct nutrition pairings (see below), then have students match the items on the sheet. For younger students, you may want to complete the activity as a class.

Part 1: Pairings: 1. Calcium helps build and maintain strong bones; 2. Protein helps build tissues like your muscles; 3. Vitamin D helps maintain a healthy immune system.

Answers: Part 1: 1-b; 2-c; 3-a. **Part 2:** Children should circle the milk, yogurt, and cheese slices; answers will vary.

Now introduce your students to a Wisconsin dairy farm family. Navigate to **Wisconsin Dairy Farm-Scientific Holsteins** to learn about dairy farm families. Show the farm video to students and prompt discussion with questions such as "How do you think the family feels about their dairy farm, and why?" Do students think dairy farms are important parts of the community?

Extension Activity: In small groups, have students create a graphic organizer to track the dairy products in a week's worth of school lunches, evaluating the choices offered by reviewing the guidance at www.myplate.gov/. Based on what they have learned, students can suggest ways to provide a wider variety of dairy foods in a mock menu.

Resources

Dairy Farmers of Wisconsin: [WisconsinDairy.org](https://www.WisconsinDairy.org)

Milk Nutrition: [13 Nutrients in Milk Infographic](https://www.13NutrientsinMilk.com)

Discover Dairy: <https://www.discoverdairy.com/>

Downloadable Materials:

<https://www.wisconsin dairy.org/Materials-Ordering>

Lessons: [ymiclassroom.com/WisconsinDairy](https://www.ymiclassroom.com/WisconsinDairy)

Caring About COWS



Welcome to Vision Aire Farms, LLC and the Grade and Clark Families in Eldorado, WI.

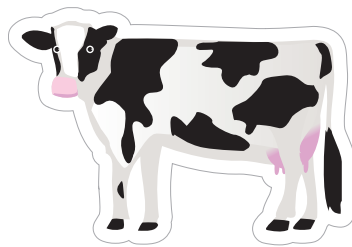
1. Let's take a tour. First, we'll head to the freestall barn to see where the cows live.



2. Did you know that cows spend about 6 hours eating every day? They eat a nutritious mix of grass, grain, and other foods as part of their diet. Sometimes their meals include leftover foods from grocery stores like orange peels. Cow food is called *feed*.



3. Cows can drink fresh water any time they want. When they are tired, they can rest on a soft bed of sand, wood shavings, shredded paper, or water mattresses. Fans and sprinklers cool the barn on hot days.

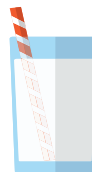


4. Holsteins, the cows with black spots, are the best-known and most common breed of dairy cows.

5. Now we'll head to the milking parlor. It takes about 5 minutes to milk one cow. They are milked two or three times each day.



6. One cow can provide up to 250 glasses of milk per day — that's a lot of fresh, nutritious milk! After milking, the cows go back to the freestall barn where they can relax and "chow down" some more.



*** 250!**

Part 2: Now show off your vocabulary smarts. Unscramble these dairy terms.

1. **mingilk poalrr**

(where a cow is milked)

2. **defe**

(cow food)

3. **erefstall rban**

(where cows eat and sleep)

4. **krinsprles**

(how cows stay cool)

What did you learn on your tour?



Part 1: Show off your cow smarts. Write the answer on the line.

1. About how many hours a day do cows spend eating? _____
2. About how long does it take to milk one cow? _____
3. What is the best-known breed of dairy cow? _____
4. About how many glasses of milk does a dairy cow provide each day? _____

Families! To learn more about dairy farm families and dairy farming, visit <https://www.discoverdairy.com/classroom-enrichment/>.



Local milk is available 365 days a year.



Caring About the Environment



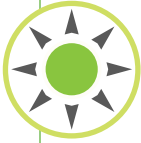
Part 1: Dairy farmers help the environment by conserving natural resources, which is good for everyone — including local wildlife. This is called *sustainability*. It includes reducing waste and recycling where possible. Read about sustainability on a dairy farm. Then write about a similar way you can help the Earth at home.

At Bomaz Farms in Hammond, WI, dairy farmers reuse the sand bedding that their cows lie on to recycle and conserve natural resources.



Sustainability on the Farm

Sustainability at Home



Conserve Energy

Many dairy farmers conserve energy by using energy-efficient lighting. They also reduce fuel use by using cold well water instead of refrigerators to cool milk and by making fewer trips on their tractors.

Conserve Energy



Conserve Water

Dairy farmers conserve water by recycling it. Water used to cool milk becomes water for the cows to drink.

Conserve Water



Reduce, Reuse, Recycle

Some dairy farmers reduce waste by using washable cloths instead of paper towels to clean cows. Farmers also reuse waste paper as soft cow bedding. And they recycle food waste like orange peels and cotton seeds by adding them to the feed for their cows.

Reduce, Reuse, Recycle



Help Wildlife

Dairy farms often have streams and forests serving as habitats for wildlife that farmers help preserve.

Help Wildlife



Protect Waterways

Farmers cover the ground with plants. The plant roots help keep soil from washing away during storms and harming fish and other stream wildlife.

Protect Waterways



Part 2: Show off what you've learned! Work with a friend to create a comic strip in which you teach kids and families about the ways to care for the Earth — similar to what dairy farmers do. Use the other side of this sheet or separate paper. Fold the sheet into four or six squares to get started.



The Grade and Clark families of Vision Aire Farms, LLC in Eldorado, WI, grow corn to feed their cows, much like you can grow a garden to feed your family.

Family Gardeners! Take a page from a dairy farmer's book and help the environment at home. Grow plants native to your area, make your own compost, protect storm drains and waterways by keeping trash, leaves, grass clippings, and oil out of them, mulch plant beds, use composted cow manure as fertilizer, and plant cover crops to protect the soil.



Local milk is available 365 days a year.



Caring About Nutrition



Part 1: You might enjoy a glass of milk, but how much do you know about the nutrition milk provides? One serving of milk provides many of the essential nutrients your body needs. Listen as your teacher describes milk's nutritional benefits, then write the letter under the milk carton to match each nutrient with how it benefits the body.



1. _____



2. _____



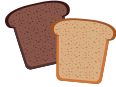
3. _____

a. Helps maintain a healthy immune system

b. Helps build and maintain strong bones

c. Helps build tissues like your muscles

Part 2: Eating balanced meals is important for our bodies. Dairy is part of that! Children ages 4 to 8 should get 2½ cups and children ages 9 to 13 should get 3 cups per day. What foods do you think are part of the dairy group? Circle the dairy foods below.



Look at the dairy foods you circled. Which could you add to your meals to help you get the recommended daily serving? Draw a picture of a different dairy food in each box.

Breakfast

Lunch

Dinner



Families! How can you incorporate more nutritious, delicious dairy products in your diet? As a family, create a meal plan that includes dairy products such as low-fat milk, hard cheeses, and yogurt at every meal.



Local milk is available 365 days a year.

WISCONSIN DAIRY BREEDS

Holstein

black and white; came from Holland in 1621



Milk comes from dairy cows. In Wisconsin, there are seven main breeds of dairy cows. Most dairy cows in Wisconsin are Holsteins. One way to tell the breed of a dairy cow is by its color. Which breeds have you seen before?

Red & White Holstein

red and white; came from Holland



Brown Swiss

solid brown, varying from very light to dark; came from Switzerland in 1869



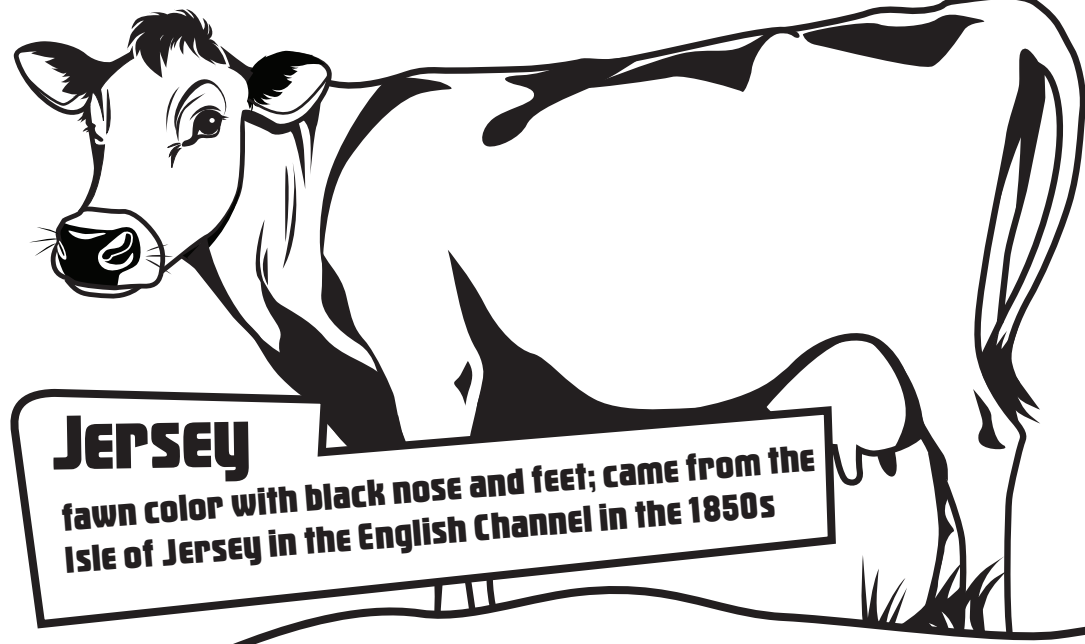
Milking Shorthorn

reddish-brown with small white spots; came from Northeastern England in 1783



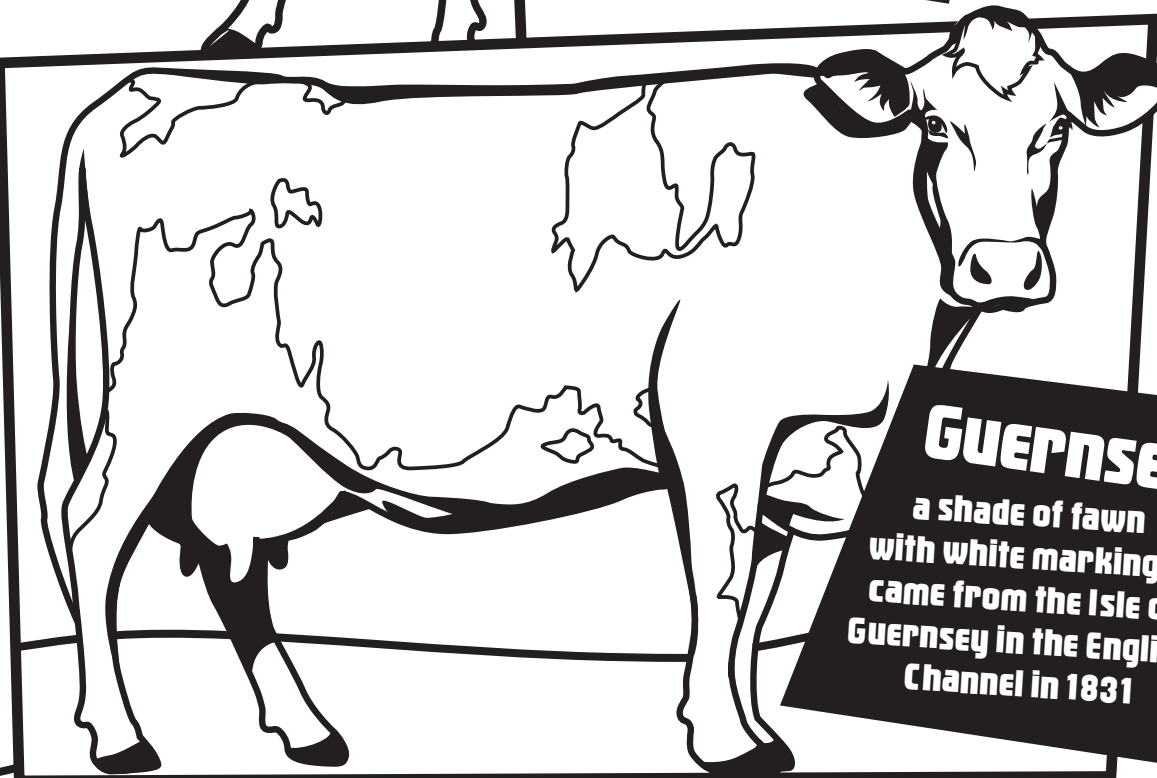
Jersey

fawn color with black nose and feet; came from the Isle of Jersey in the English Channel in the 1850s



GUERNSEY

a shade of fawn with white markings; came from the Isle of Guernsey in the English Channel in 1831



Ayrshire

light to deep cherry red with white; came from the County of Ayr in Scotland in 1822



How Dairy Cares



Grades 2-4 English Language Arts Common Core State Standards *

SECOND GRADE	Activity 1	Activity 2	Activity 3
READING: INFORMATIONAL TEXT			
Key Ideas and Details: <u>CCSS.ELA-LITERACY.RI.2.1</u> Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	√	√	√
Craft and Structure: <u>CCSS.ELA-LITERACY.RI.2.4</u> Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area	√	√	√
Integration of Knowledge and Ideas: <u>CCSS.ELA-LITERACY.RI.2.7</u> Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.		√	√
READING: FOUNDATIONAL SKILLS			
Phonics and Word Recognition: <u>CCSS.ELA-LITERACY.RF.2.3</u> Know and apply grade-level phonics and word analysis skills in decoding words.	√	√	√
Fluency: <u>CCSS.ELA-LITERACY.RF.2.4</u> Read with sufficient accuracy and fluency to support comprehension.	√	√	√
SPEAKING & LISTENING			
Comprehension and Collaboration: <u>CCSS.ELA-LITERACY.SL.2.1</u> Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.	√	√	√
LANGUAGE			
Conventions of Standard English: <u>CCSS.ELA-LITERACY.L.2.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	√	√	√

Knowledge of Language: <u>CCSS.ELA-LITERACY.L.2.3</u> Use knowledge of language and its conventions when writing, speaking, reading, or listening.	√	√	√
Vocabulary Acquisition and Use: <u>CCSS.ELA-LITERACY.L.2.4</u> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.	√	√	√

THIRD GRADE	Activity 1	Activity 2	Activity 3
READING: INFORMATIONAL TEXT			
Key Ideas and Details: <u>CCSS.ELA-LITERACY.RI.3.1</u> Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	√	√	√
Craft and Structure: <u>CCSS.ELA-LITERACY.RI.3.4</u> Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.	√	√	√
Integration of Knowledge and Ideas: <u>CCSS.ELA-LITERACY.RI.3.7</u> Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).		√	√
READING: FOUNDATIONAL SKILLS			
Phonics and Word Recognition: <u>CCSS.ELA-LITERACY.RF.3.3</u> Know and apply grade-level phonics and word analysis skills in decoding words.	√	√	√
Fluency: <u>CCSS.ELA-LITERACY.RF.3.4</u> Read with sufficient accuracy and fluency to support comprehension.	√	√	√
SPEAKING & LISTENING			
Comprehension and Collaboration: <u>CCSS.ELA-LITERACY.SL.3.1</u> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.	√	√	√
LANGUAGE			
Conventions of Standard English: <u>CCSS.ELA-LITERACY.L.3.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	√	√	√

Knowledge of Language: <u>CCSS.ELA-LITERACY.L.3.3</u> Use knowledge of language and its conventions when writing, speaking, reading, or listening.	√	√	√
Vocabulary Acquisition and Use: <u>CCSS.ELA-LITERACY.L.3.4</u> Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.	√	√	√

FOURTH GRADE	Activity 1	Activity 2	Activity 3
READING: INFORMATIONAL TEXT			
Key Ideas and Details: <u>CCSS.ELA-LITERACY.RI.4.1</u> Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	√	√	√
Craft and Structure: <u>CCSS.ELA-LITERACY.RI.4.4</u> Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	√	√	√
Integration of Knowledge and Ideas: <u>CCSS.ELA-LITERACY.RI.4.7</u> Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.		√	√
READING: FOUNDATIONAL SKILLS			
Phonics and Word Recognition: <u>CCSS.ELA-LITERACY.RF.4.3</u> Know and apply grade-level phonics and word analysis skills in decoding words.	√	√	√
Fluency: <u>CCSS.ELA-LITERACY.RF.4.4</u> Read with sufficient accuracy and fluency to support comprehension.	√	√	√
SPEAKING & LISTENING			
Comprehension and Collaboration: <u>CCSS.ELA-LITERACY.SL.4.1</u> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.	√	√	√
LANGUAGE			
Conventions of Standard English: <u>CCSS.ELA-LITERACY.L.4.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	√	√	√

Knowledge of Language: <u>CCSS.ELA-LITERACY.L.4.3</u> Use knowledge of language and its conventions when writing, speaking, reading, or listening.	√	√	√
Vocabulary Acquisition and Use: <u>CCSS.ELA-LITERACY.L.4.4</u> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.	√	√	√