

Florida Dairy



TASTE TESTING IN THE CLASS

- Ask the students to create a smoothie recipe that includes milk, yogurt and their favorite fruits.
- Let the students help measure the ingredients and take photos of their creation.
- Share the photos and recipe in a parent newsletter.
- Plan a school-wide smoothie contest. Have each class compete to create the tastiest new recipe!



TASTE

NUTRITION EDUCATION

- Milk contains nine essential nutrients, including calcium, vitamin D and potassium, which may be lacking in the average American diet.
- On average, an 8-ounce glass of milk provides 8 grams of protein.
- Milk travels from the dairy farm to your grocery store in 2-3 days.
- Okeechobee and Lafayette are the leading dairy producing counties in Florida.

LEARN



GET ACTIVE

Physical Activity Jeopardy

Write 5-10 physical activities on an index card and put them inside an envelope. Activities could include: boxing jabs, jumps, push-ups, tricep dips using their chair, arm circles, jumping jacks, elbow to opposite knee touches, etc. Write 10, 15, 20 and 25 on the outside of each envelope and tape them to the board in front of the class. Call on a student to pick one of the envelopes, and the class performs the physical activity inside it for the number of repetitions listed on the front of the envelope.



GROW

BOOK SUGGESTIONS

Milk From Cow to Carton
Written by: *Aliki*
Ages 4 and up

Extra Cheese, Please! Mozzarella's Journey From Cow to Pizza
Written by: *Chris Peterson*
Ages 4 and up

SunnyBell's Florida Dairy Farm Adventure
Written by: *Sean Sancel*
Ages 4 and Up

READ

CLASSROOM GUIDE

K-2



present...

Florida Dairy

Hey! It's SunnyBell, the mascot of Florida Dairy Farmers. This month, your class will learn all about our state's dairy industry. Did you know that:

- There are about 123,000 dairy cows in Florida that collectively produce about 277 million gallons of milk in a year.
- Records indicate that the making of cheese dates back more than 4,000 years.
- One gallon of milk is approximately 345 squirts of a cow's udder.

Learn more fun facts like these by integrating the enclosed standards-based lesson plans and materials in your classroom. Let's have some fun with Florida Dairy!

For more resources, visit these websites:
 Florida Farm to School: FreshFromFlorida.com/FarmtoSchool
 Florida Dairy Farmers: FloridaMilk.com



Visit www.FloridaMilk.com to take a virtual tour of a Florida Dairy Farm.



Smoothie Bar

Try this nutritious snack with your students!

You need:

- Fresh or frozen fruits (i.e. strawberry, banana, blueberry, raspberry, mango, etc.)
- Low-fat milk OR plain low-fat yogurt
- Ice (not needed if fruit is frozen)
- Blender



1. Survey students to find out which fruits each student would like in their smoothie.
2. For one serving, blend one cup of fruit with one-half cup of low-fat milk OR one cup of plain low-fat yogurt. Add ice if fruit is NOT frozen.
3. Blend until smooth and enjoy!



FOR MORE INFORMATION OR FEEDBACK VISIT US ONLINE FRESHFROMFLORIDA.COM/FARMTOSCHOOL

Florida Department of Agriculture and Consumer Services
 Adam H. Putnam, Commissioner



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LESSON PLANS K-2

Math

Objective: Students will use pictographs representing multiplication concepts of pictures signifying groups of equal numbers.	Materials: “Milk Helps You Grow: Reading a Pictograph” worksheet
Standards: MAFS.2.OA.3.4	Estimated Time: 45 minutes
Introduction: Background: Teacher will review the concept of multiplication. (<i>Multiplication is repeated addition. It can be represented in pictures or groups of the same size.</i>)	
Guided Activity: Teacher will model: We have 5 students. Each student gets 2 cartons of milk. How many cartons of milk were given to all students? (<i>Draw 5 happy faces and two squares under each face. Call on a student to assist with counting how many cartons were given. Also, demonstrate by showing $2+2+2+2+2=10$.</i>) Teacher will model: We have 4 groups of 3 cows. (<i>Draw four boxes with 3 x's in each box to represent the cows. Call on a student to assist with counting the cows. Also demonstrate by showing $3+3+3+3=12$.</i>)	
Independent Activity: Students will complete the “Milk helps you grow: Reading a Pictograph” worksheet.	

Science

Objective: Students will develop a hypothesis and conduct an experiment to test their theory.	Materials: “Dairy Science” worksheet, chart paper, markers, paper, pencil, 1 flat bowl or aluminum pie pan 5-7” diameter and at least 1” deep (use one bowl for each 4-6 students), milk, box of different colors of food coloring, liquid dishwashing detergent (“Dove” or “Dawn” works well; “Joy” does not), toothpicks or cotton swabs.
Standards: SC.2.N.1.1, SC.2.N.1.2, SC.2.N.1.3	Estimated Time: 45 minutes
Introduction: Teacher will cover the basic concepts of mixtures and solutions in the “Explanation” section on page one of the “Dairy Science” worksheet.	
Guided Activity: Teacher will ask students to come up with a hypothesis of what will happen when they mix milk, food coloring and liquid soap together in a bowl or pie pan. (<i>Teacher will write the sample hypothesis on the chart paper to document the students hypothesis for review at the conclusion of the experiment</i>) With prompting and support, students will mix a little milk, food coloring and a drop of liquid soap. (<i>Teachers will follow the procedure for the experiment found on the “Dairy Science” worksheet</i>)	
Independent Activity: Students will document their observations and defend whether or not their hypothesis was correct by providing supporting evidence.	

More free resources online from
Florida Farm to School!
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LESSON PLANS K-2

Language Arts

Objective: Students will create their own Superhero and identify the parts on its body that the nine essential nutrients found in dairy products benefit.	Materials: “Superhero Nutrients” worksheet PowerPoint Paper, scissors, pencil, glue, and crayons
Standards: LAFS.1.RI.1.1, LAFS.1.RI.1.3, LAFS.1.W.1.2	Estimated Time: 45 minutes
Introduction: Teacher will explain that milk and cheese build strong bones and muscles, boost energy and support vision. Dairy products contain nine essential nutrients that help their bodies build SUPER powers so they can grow healthy and strong. Tell students that some nutrients in dairy products help the cells in their bodies digest food, carry oxygen to their lungs and fight against diseases by healing wounds. Working together, all of the nutrients found in dairy products can help students be a health Superhero!	
Guided Activity: Teacher will pull up the PowerPoint to the “Milk is Nutritious” image on Slide 10. The teacher and students will work together to identify the places on the body that the nine essential nutrients benefit.	
Independent Activity: The students will be placed into collaborative groups and will receive the “Superhero Nutrients” worksheet to complete together. Students will be able to use the “Milk is Nutritious” PowerPoint slide to assist with answering the questions on the “Superhero Nutrients” worksheet. Once students complete questions 1-9 by matching the answers, they will draw a Superhero figure on a separate sheet of paper. Cut and glue the Superhero nutrients printed for them onto their Superhero figure in the areas that best match the body part that nutrient helps. Some body parts are helped by more than one nutrient. Write a sentence from your Superhero about the power of dairy products!	

Social Studies

Objective: Students will identify various steps in the milk supply chain.	Materials: Video ‘From the Farm to the Fridge’ at http://www.floridamilk.com/on-the-farm/from-the-farm-to-the-fridge.stml “Farm to Fridge” worksheet Pencils or Crayons
Standards: SS.2.E.1.2	Estimated Time: 45 minutes
Introduction: There are about 123,000 dairy cows in Florida that collectively produce about 2.34 billion pounds of milk a year. Each Florida dairy cow produces about 6-8 gallons of milk each day and is milked 2-3 times per day. This amounts to 277 million gallons of Florida-produced milk in local grocery stores. Discuss with students that this much milk is produced because of consumer demand. To meet this demand, there are many steps in the supply chain.	
Guided Activity: Milk is among the most highly regulated foods in the country. Maintaining milk’s freshness and quality is a job that starts at the dairy farm and continues through processing. From the time the milk leaves the cow’s udder, it is chilled to about 38 degrees and remains cold in a stainless steel tank. Milk is picked up at dairy farms every day of the year and is shipped immediately to a processing plant where it is tested, pasteurized and bottled. (<i>Teacher will play the video entitled ‘From The Farm To The Fridge’ found at http://www.floridamilk.com/on-the-farm/from-the-farm-to-the-fridge.stml</i>)	
Independent Activity: Based on the information in the video, students will identify the order in which each step happens in the “farm to fridge” process. Using the worksheet, allow students to work alone or in small groups to order the steps in the supply chain. Then, replay the video and/or discuss the correct steps as a class and allow students to review their answers.	

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