Farm To Market: Dairy

Assessment of Prior Knowledge:

- What kinds of cows give us milk? Grown up cows or young cows? Male cows or female cows?
- How does milk become cheese; butter; yogurt; ice cream?

Vocabulary:

Udder: The large milk-producing "sack" underneath the cow.

Ruminant: Cud chewing animals, including cattle, goats, deer, giraffes.

Cud: A mouthful of food sent from the stomach back up into the mouth of the cow.

Pasteurization: The process of heating milk to a temperature high enough to kill harmful bacteria.

Curd: A The solid, custard-like substance that is created when milk turns sour - the basis for cheese.

Comprehension Questions:

Dairy Cows

- 1. How many hours a day do cows spend eating?
- 2. What do cows eat?

Milking Parlor

- 1. How often are cows milked?
- 2. Why do many dairy farmers prefer to use machines to gather milk from their cows?

Cheese

- 1. How do cheese makers get the milk to turn sour?
- 2. What are curds and whey? What role do they play in the making of cheese?

Butter/Yogurt/Ice Cream

1. What is different about the ways that butter, yogurt and ice cream are made?

Discussion Questions:

1. Why do the dairy farmers and the dairy workers have to be so careful and clean about working with milk and milk products?

Follow-up Activities:

- Students can research the life and work of Louis Pasteur, the inventor of the pasteurization process. What were this man's other accomplishments? How do his other projects compare in importance to his influence on the modern dairy industry?
 Students can discuss the nutritional value of milk and milk
- Students can discuss the nutritional value of milk and milk products. What is calcium and why is it important for our bodies?
 What other valuable nutrients are found in milk?
- Have a dairy foods pot luck. Students can bring in their favorite dairy foods - the more diverse the selection the better. They will be amazed to taste all the different flavors side-by-side, knowing that each of these foods is made from milk. As students enjoy the tasting, they can reflect on the different processes that yield such different products.



The Phoenix Learning Group, Inc. 2349 Chaffee Drive, St. Louis, Mo 63146

314-569-0211 FAX: 314-569-2834 800-221-1274 www.phoenixlearninggroup.com