

Content Area Lesson 1: Products and By Products
Activity 3: Dairy By-Products Bingo

Iowa Core Curriculum:

Science Standards:

- Content Standards 1: Students can understand and apply skills used in scientific inquiry.
- Social Studies
- Essential Concept and/or Skill: Understand the changing nature of society.

Supplies Needed:

Bingo Sheets from Dairy Products Bingo (<http://extension.iastate.edu/allamakee.info/dairystory>)

Activity Length: 30 minutes of less

Activity Directions

1. Make enough copies for the students in your class of the bingo sheets provided. There are a total of 12 different bingo sheets
2. Take the words below and cut them apart. Place all words in a hat/tub to draw from.
3. Have students take turns pulling the products out of the hat/tub.
4. Talk about the products as they are pulled from the hat/tub by using the information sheet provided on the second page.

Bingo Words

Whole Milk	Evaporated Milk	Egg nog	Buttermilk	Cream Cheese	Ice Cream
Butter	Half and Half	Whipping Cream	Sour Cream	Yogurt	Cottage Cheese
Baby Milk Formula	Powdered Milk	Frozen Custard	Pudding	Cream Soup	Sliced Cheese
Mozzarella	Swiss Cheese	Go-Gurt	Muenster Cheese	Cheddar Cheese	String Cheese
Cheese Curds	Sweet and Condensed Milk	Crayons	Frostings	Cheese Whiz	Yo-Jay
Nonfat Dry Milk	Soft-Serve	Animal Feeds	Lubricants	Leather Sporting goods	Printing Ink

Activity Introduction:

What do hamburgers, jello, crayons and gum all have in common? They are all products that come from dairy cows. We get by-products from the cow's hide, hooves, blood and body fluids. Almost everything is recycled when cattle are processed (98% of the animal is used).

Use the Bingo game to talk about the different types of dairy products we get from dairy cattle. This is a great time to try out some different types of dairy products in class or when you are eating the curds from the curds and whey activity which is Activity 7 under lesson 1.

Dairy Product Information

Animal Feeds	Dog food and other small animal foods are made from small left over pieces of animal meat.
Baby milk formula	Babies get protein and carbohydrates from the cow milk that is in their formula.
Butter	It takes 21 pounds of whole milk to make one pound of butter.
Buttermilk	This is the lowfat milk that is left over after making butter, it is made differently today for bulk purpose.
Cheddar Cheese	Almost 90 % of the cheese sold in the United States is considered a cheddar cheese.
Cheese Curds	Cheese Curds are about the size and shape of a peanut. All cheese is made from curds but pressed together to make blocks of cheese.
Cheez whiz	Cheez whiz was first created and sold in 1952.
Crayons	Some crayons are made of processed beef fat or tallow.
Cottage Cheese	It takes 20 pounds of milk to make 3 pounds of cottage cheese.
Cream Cheese	One ounce of cream cheese is one serving.
Egg Nog	The eggnog season is very short, from mid November to January 1 st .
Evaporated Milk	Contains no sugar.
Frostings	Milk is added to give it a creamy texture.
Frozen Custard	More creamy than regular ice cream.
Go-Gurt	Go-Gurt makes a delicious frozen treat.
Half and Half	Made from milk and cream mixed together.
Ice Cream	The Ice Cream Cone's invention is linked to the 1904 World's Fair in St. Louis. Ice Cream cone vendor didn't have enough dishes to keep up with demand so he teamed up with a waffle vendor who rolled his waffles into cones.
Leather Sporting Goods	Very durable and dirt and water resistant.
Lubricants	Can be made from the fat of animals.
Mozzarella	Mozzarella was first made in Italy near Naples from the rich milk of water buffalos.
Muenster Cheese	Has a dark brown colored shell around a yellow colored cheese.
Nonfat Dry Milk	Made by removing the water from pasteurized Skim Milk.
Powdered Milk	Same as Nonfat Dry Milk just another name for it.
Printing Ink	Ink made from plants and animals is

	environmentally friendly.
Pudding	Comes in flavors from vanilla to pistachio.
Sliced Cheese	This is processed cheese that is molded into its square shape and then cut into slices.
Soft-Serve	Creamy milk processed by a machine to make it like ice cream.
Sour Cream	This product can be refrigerated and consumed up to one week after the date printed on the container.
String Cheese	When pulled apart comes in string also another form of mozzarella cheese.
Sweet and Condensed Milk	Used to make a lot of sweet treats like candy bars.
Swiss Cheese	Air pockets make the wholes in this cheese.
Whipping Cream	Makes a great topping for pie.
Whole Milk	Contains 3.5% milk fat and has a rich and creamy texture.
Yogurt	Creamy dairy treat comes in 100's of flavors today but starts with plain yogurt years ago.
Yo-Jay	Mixture of Yogurt and Juice.

Resources:

1. <http://www.mayoclinic.com/health/infant-formula/PR00058/NSECTIONGROUP=2>
2. <http://www.grassland.com/news/default.asp?tid=77&name=Grassland-Butter-Bits&navID=43>
3. <http://www.midvalleyvu.com/Buttermilk.html>
4. <http://www.foodreference.com/html/fcheddarcheese.html>
5. <http://eatcurds.com/StaticPages/FAQs.aspx>
6. <http://www.bigsiteofamazingfacts.com/why-do-crayons-smell-so-good-and-what-are-they-made-of>
7. <http://www.livestrong.com/article/258215-kraft-cream-cheese-nutritional-facts/>
8. <http://purityeggog.com/newsandeggogfacts.html>
9. <http://www.foodreference.com/html/fevaporatedmilk.html>
10. www.agr.state.tx.us/.../30508_TDA%20HIDE%20BRO%205.2009.pdf –
11. <http://www.mozzco.com/mozzhisty.html>
12. <http://www.innovatewithdairy.com/Pages/FactsAboutNonfatDryMilk.aspx>