



National Farmers Union Youth Curriculum

Grades 1-2

Contents:

Lesson 1: The Food Connection ~ lesson plan, *1 hour*

Lesson 2*: Food Full Circle ~ lesson plan and one hand-out, *1 hour*

Lesson 3: Our Daily Bread ~ lesson plan and two hand-outs, *30 minutes*

Lesson 4: Preserving Fresh, Local Food ~ lesson plan and hand-out, *30 minutes*

Lesson 5*: Plant a Garden ~ lesson plan, gardening activity and song, *1 hour*

Optional Activities

** Lesson contains a cooperative education component.*

For more information contact:

Laura Johnston Monchuk

NFU Director of Education

laura.monchuk@nfu.org

202.741.9410

www.nfu.org

Lesson Plan 1: The Food Connection

Unit Objective: Learn about a farmer's contributions to society and the process of producing and selling foods our families buy. Learn the interdependence of farmers and the community.

Grades: 1-2 (may also be tailored for grades 3-5)

Length: 1 hour

Materials Needed: A guest farmer

Preparation Needed: Arrange for a local farmer to visit the class

Background:

Where does our food come from? A grocery store? A restaurant? A farmer's market? A refrigerator? All of these answers are correct, but really, all food starts out in the same place...a farm!

Farmers all across the country produce different foods and products. There are vegetable farmers, dairy farmers, wheat farmers, corn farmers, cranberry growers, apple growers, beef producers, hog farmers, chicken farmers, turkey farmers, and so on. Some farmers grow more than one thing, and other farmers may only produce one thing.

After farmers produce their food, they must find a way to market it so that it gets to you and me. Some farmers sell it directly to consumers from their farms. Other farmers bring their fresh foods to the farmer's market in town. Some companies buy a farmer's food so they can process it, preserve it and send it longer distances to grocery stores all over the world.

Farmers depend on everyone in the community in order to have a successful farm, and everyone in the community depends on farmers for food. That's why cooperation and community are so important.

Teaching Strategy:

1. Present the background information above to the children. Ask the question, "*Where does food come from?*" Lead them to look beyond the grocery store to the people who grow and produce their food.
2. Introduce the guest farmer. Ask the farmer to describe all the work involved in planting and harvesting, as well as his/her routine of a typical day on the farm, and what happens during all four seasons of the year. Have the farmer describe the path of his/her commodity from the farm to the children's tables.
3. Go through a list of foods and ask the children to answer what type of farmer grows each:
 - a. Milk? A dairy farmer
 - b. Hamburger meat? A cattle rancher or beef producer
 - c. Bread? A wheat farmer
 - d. Corn on the cob? A corn or vegetable farmer
 - e. Pork chops? A hog farmer
4. Ask who would like to be a farmer. Pick a volunteer and ask what type of a farmer they'd like to be. Explain that this farmer will depend on everyone in the community to have a successful farm, and everyone in the community depends on the farmer to eat. Ask the students to help with different jobs to reinforce the idea. *Who will help him/ her plant the corn? Who will drive the corn to the market? Who will shuck the corn? Who will buy his/ her food? Etc.*
5. Have the students imagine what they would do if farmers only produced enough food to feed their own families and there wasn't any food on the grocery shelves. Point out again that we all need farmers and farmers need us and that's why community and cooperation is important.

Idea submitted by: Sonny Harrell, Education Director, Montana Farmers Union
300 River Drive North, Great Falls, MT 59403
406.452.6406 ~ sharrell@montanafarmersunion.com

Adapted from activities by: Judy Krak, St. Charles Community Schools, St. Charles, MI

Lesson Plan 2: Food Full Circle

Unit Objective:	Understand our role within a local, sustainable food system.
Grades:	1-2
Length:	1 hour
Materials Needed:	paper plates, crayons, flip chart or chalk board, peanuts, raisins, pretzels, M&Ms, Chex cereal, a spoon, a mixing bowl, small containers for serving and play money.

Background:

Where our food comes from and how it is produced is just as important as how it tastes. Today we will learn about where our food comes from and how where it comes from affects our community.

A “local, sustainable food system” is defined as production, processing, sale and consumption of all the food needed for a community. Local, sustainable food systems produce healthy food that is good for the earth and helps our community grow. Everyone plays a part of a local, sustainable food system. Knowing what role you play is important to making it work.

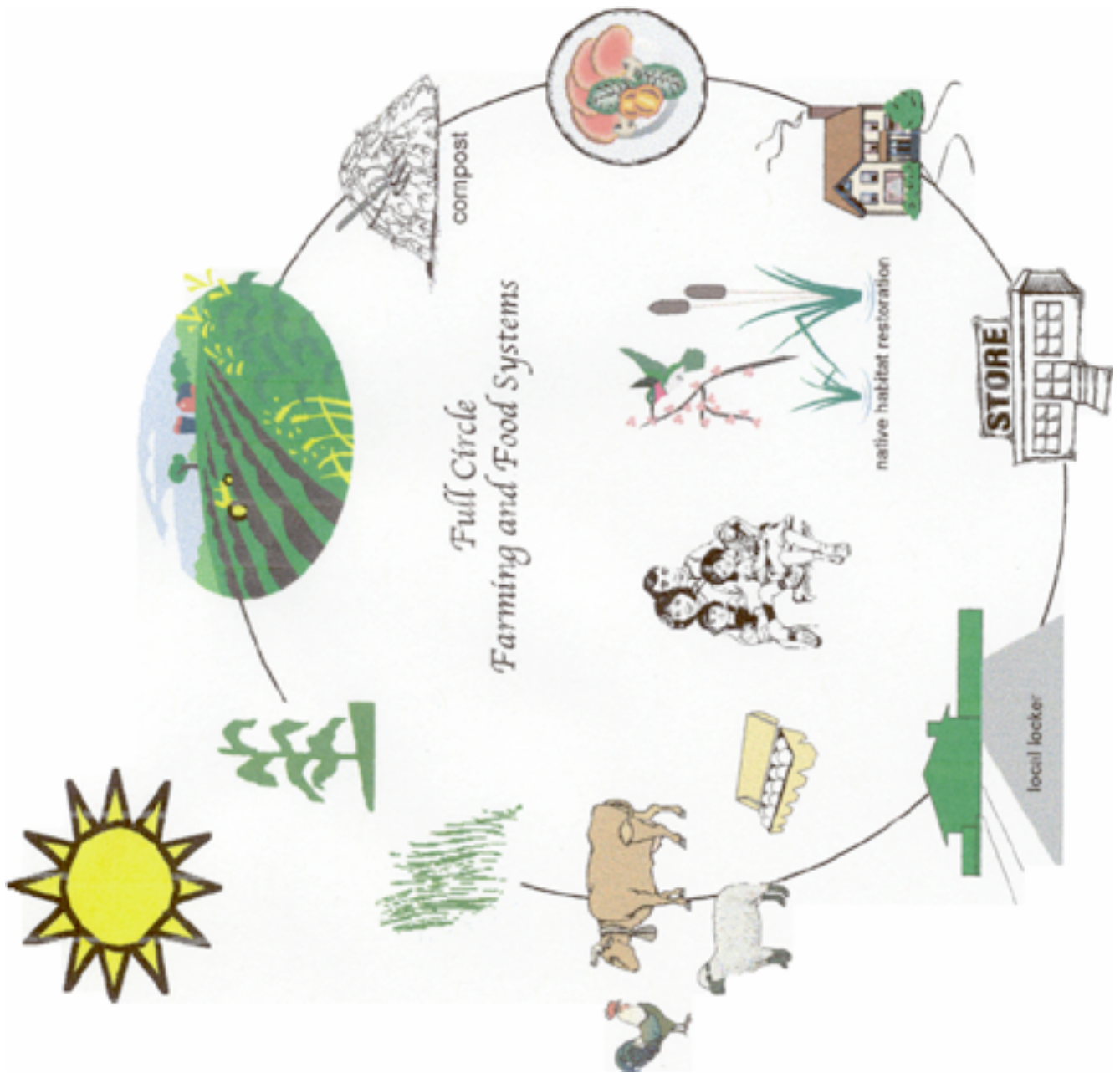
Teaching Strategy:

1. With the “Full Circle” graphic page as the “placemat,” place paper plates on a flat surface arranged like a dinner table. Place crayons like utensils on each side of the plate.
2. Ask the students to find a seat for the meal. Say to the students, *“Today we are going to have a feast. In the next couple of minutes let’s draw our favorite meal on the paper plate in front of you.”*
3. After everyone has finished, go around the table and ask what all of the meals are.
4. *Let’s list some of the ingredients needed to make our meal on the board.* Gather several ingredients including (grain, milk, meat, fruit, vegetables, eggs)
5. *Where does the food we listed come from?* (From the store? From the farm?)
6. *Does anyone know someone who grows crops or vegetables or farm animals?* (have the students write the person’s first name by the product on the Full Circle sheet)
7. Ask about each of the products on the list. Include people who work or own grocery stores and process meat or produce. (Students may know a few, but probably not all.)
8. *In the future wouldn’t it be great if we knew everyone around this circle? When we know all of the people who produce and sell our food that is what we call a “local, sustainable food system.”*
9. Go over the background information above and set up trail mix exercise.
10. Hand out the ingredients to the trail mix items. Each item should go to a different student. Ask two students to work together as the store. Distribute fake money to each of the students.
11. *Let’s create a sustainable food system with just what we have in the room. The first step is to find out who we are.*
12. Read aloud the description of each group:
 - a. Producers – you are the ones who produce the ingredients for the foods we eat.
 - b. Processors – you buy the ingredients from producers and process it into a final product.
 - c. Retailers – you buy the final products from the processors or directly from producers.
 - d. Consumers – you are the ones who use (or eat) the final product. We are all consumers.
13. *Who all would like some trail mix? Well, that means that there is a need for that product, so our processor should begin processing.*

14. Walk the students through the following: The person with the bowl and spoons needs to buy from the people with the ingredients. Pay them one dollar each for the ingredients. Now have them mix it all together and give the bowl to the store for 5 or 6 dollars. Then have the store place the product in cups and sell to anyone who wants trail mix for 1 dollar a cup.
15. *Everyone got food and we could go through the cycle over and over again if our producers could produce more. What would have happened if some people would have chosen to buy their food somewhere else? How would that affect the store? How would it affect the processor? What about the producers?* Responses might include “they would have no money” or “they couldn’t make any more.”)
16. *This is why it is important for each group to play their role in the food system. Sometimes when people work together to produce a product like this it can also be called a **cooperative or a co-op**. Co-ops are partnerships between producers and processors so everyone can make more money.*
17. *What is your family’s role in the sustainable food system?* (Everyone is a consumer.)
18. *We have been talking about where our food comes from and who grows it. Who can describe a “local, sustainable food system?”* (When we know everyone who produces the food we eat.)
19. *We all have to help so that we can make this happen. So here is how you can help.* List on a flip chart the following, and describe what each of the items means:
 - a. Shop at Farmer’s Markets
 - b. Grow a garden
 - c. Buy food from your neighbors or sell food to neighbors
 - d. Look for food in the grocery store that is from your area.
20. *Pick one of these to ask your parents to do next week so your family can help.*

Written by: Amy Meyer and Jake Davis, Missouri Farmers Union
325 Jefferson, Suite 100A, Jefferson City, MO 65101
573.659.4787 ~ ameyer@missourifarmersunion.org

Source: Center for Integrated Agricultural Systems, Madison, WI
<http://www.cias.wisc.edu/curriculum/index.htm>



Lesson Plan 3: Our Daily Bread

Unit Objective: Understand where our food comes from and define farm diversification.
Grades: 1-2
Length: 30 minutes
Materials Needed: “Our Daily Bread” hand-outs and crayons for each student, a loaf of fresh bread from the “No-Knead Whole Wheat Bread” recipe (optional—also check to make sure no child have allergies)

Background:

When we make or buy food from fresh products, it is much healthier. Foods that we eat, like bread, can be made at home or locally. You can make your own bread at home with the recipe on your hand-out. Take that home with you and have an adult help you make fresh bread.

The family in our story today had lots of different types of fresh foods that they grew on their farms. When we grow several different things on our farm, that is what we call “diversification.” Diversification is just a big word that means farmers choose to grow and sell a lot of products instead of only one or two.

Diversification is good for farmers because it helps them spread out their risks related to their incomes. For example, if the family we read about only had chickens and the chickens caught a disease, what would the family do? Or, if the family only had wheat, and a hail storm damaged the crop what would they do? If they had vegetables and the market prices for vegetables dropped, what would they do? Since they were diversified, they had chickens and wheat and vegetables, they may be able to avoid some of this uncertainty.

Diversification can also be good for the environment as mixing up crops allows more productive and sustainable crop rotations. When farmers grow different types of food, it is also good for the local, sustainable food system.

Teaching Strategy:

1. Have students gather around for story time.
2. Place the crayons in the middle of the circle so students can get to them easily.
3. *Today we are going to talk about how farmers produce the food we eat. I have a story I want to read to you, but we are going to read the story a little different than usual. I will read a little of the story at a time and each time I do this (raise your hand in the air or some creative motion) then your job is to color one of the pictures that describes what I just read. I will read a little more and you will color another picture. (You may need to demonstrate so the students understand.)*
4. Read the story aloud and stop at key points (points to stop might include after talking about items grown on the farm, after harvesting wheat, after making of bread, etc.)
5. *What did this family grow on their farm?* (wheat, tomatoes, lettuce, chickens)
6. Go over the background information above.
7. Around the margin of the sheet have students draw and color things they might want to grow on their farm
8. If time, have the students color the “color me” sheet while they enjoy their fresh bread as a snack (optional).

Submitted by: Amy Meyer and Jake Davis, Missouri Farmers Union
325 Jefferson, Suite 100A, Jefferson City, MO 65101
573.659.4787 ~ ameyer@missourifarmersunion.org

Source: Community Food Systems & Sustainable Agriculture Program
University of Missouri ~ <http://agebb.missouri.edu/sustain/>



Our Daily Bread...

How does it get from the farm to your plate?

“Payton! Analise! Judy! Ali! Amelia! Come on! It’s time for the picnic,” Payton and Analise’s mom hollered. The kids came racing in from all corners of the farm.

Payton helped his sister, Analise unpack three big picnic baskets while their parents, Susan and Curtis, sliced loaves of fresh, warm, whole wheat bread. “OK,” Susan said, “Everyone can make their own sandwich. See if you can guess which ingredients were raised right here on our farm.”

“What’s that?” Amelia asked, as Payton pulled a round orange fruit from a basket. “An orange tomato,” Payton explained. “We grow all kinds of fruits and vegetables here — tomatoes, lettuce, corn and lots more in every color, shape, and size you can think of.” “See, here’s a purple tomato, and this is red leaf lettuce,” Analise chimed in. “And those deviled eggs are from chickens I raised!”

“Well, you didn’t grow this!” Amelia laughed, pointing at the bread. “Yeah, we did,” Payton said. “My mom and dad grow the wheat and grind it into flour that we use to make bread.

Ali said, “My mom buys your wheat flour at the grocery store in town, Payton.” Amelia took a bite of bread. “This tastes just like the whole wheat bread we buy at the bakery,” she said, then mumbled through her sandwich, “Mmm, good!”

“Hey, don’t talk with your mouth full, Amelia,” Payton teased. Amelia swallowed. “Isn’t that wheat?” she asked, pointing to a field beside them. “Sure is,” Payton said. “Well, how do you turn that plant into bread?” “It’s easy,” Payton said, then laughed as he noticed his dad rolling his eyes. “OK, it’s easy, when Mom and Dad do most of the work,” Payton added with a grin. “But Analise and I help. First, Mom and Dad harvest the wheat — that happens in July when the wheat is tall and golden yellow.” “I can tell you how that works,” Analise said. “We use a combine to cut the wheat down. It’s a machine that cuts the tops of the wheat plants off. It leaves the wheat stalks in the field and gathers up all of the little wheat berries together.”

“Right,” Payton said. “Then we store the grain — the wheat berries — in those grain bins over by the house.” “Yeah,” said Amelia, “but how do you turn it into bread?”

"Mom grinds the wheat berries into flour with an electric grain mill that has two round stones set right next to each other. The mill grinds the wheat berries between the stones and that turns the wheat into flour. It's kind of like mashing the wheat berries between your teeth, only with a machine."

Analise spoke up, "We sell the flour to bakeries and grocery stores, and even to restaurants. Folks buy the wheat flour, and mix it with eggs and yeast, water, and molasses and stuff and bake it and..." "Eat it!" said Amelia. "Mmm good!"



Mmm...good! Make some at home!

No-Knead Whole Wheat Bread

7 1/2 cups whole wheat flour
4 cups warm water

2 tablespoons dry yeast

1/4 cup molasses

1 tablespoon honey

Place flour in a large bowl and place in a warm oven for about 20 minutes to warm flour and bowl. If it is a gas oven, the pilot light will give sufficient heat; if electric, set at lowest temperature.

In a small bowl, dissolve yeast in 1 cup warm water and then add honey. Let sit until it begins to foam (i.e., proof yeast and honey mixture).

Mix molasses with 1 cup warm water.

Combine yeast mixture with molasses mixture and add to flour. Add enough warm water to make a sticky dough, about 2 cups.

Butter 2 large loaf pans, at least 9 x 5 inches, or 3 small loaf pans, and place entire mixture directly into pans. No kneading is necessary. Let rise in a warm place for 1 hour. Preheat oven to 400 degrees Fahrenheit.

Bake for 30 to 40 minutes, or until crust is brown. Remove pans from oven and let cool on wire racks for 10 minutes. Remove loaves from pans and let cool completely on wire racks before slicing.

Makes 2 large, or 3 small loaves.

Story: Community Food Systems & Sustainable Agriculture Program, University of Missouri ~ Artwork: Marachel E. Citarello of Mexico, MO ~ Recipe: Rodale's Basic Natural Foods Cookbook, Rodale Press, 1984.

"Eat Fresh, Buy Local" ~ National Farmers Union Curriculum

Color Me!

Artwork by Marachel E. Citarello of Mexico, MO



Lesson 4: Preserving Fresh, Local Food

Unit Objective: Learn the difference between fresh foods, preserved foods and processed foods with preservatives.

Grades: 1-5

Length: 30 minutes

Materials Needed: Activity Sheet A, packages, cans, jars of foods that are dried, frozen and canned, as well as fresh food examples and “unhealthy” food with preservatives

Background:

Some fresh, local foods are only available during certain seasons of the year. What if we want to eat corn and beans in the winter and peaches in February?

Foods can be preserved so that we can eat them all year round. Foods can be preserved by freezing them, canning them or drying them so they don't spoil.

Some foods you find in a grocery store have been preserved so they can stay on the shelves longer. However, many of these products contain “preservatives,” or chemicals, sugars, fats and salt, which aren't very healthy for us. Foods that go through this process also lose a lot of their nutrients.

Fresh, local foods are the healthiest. So, how can you tell what is the healthiest food?

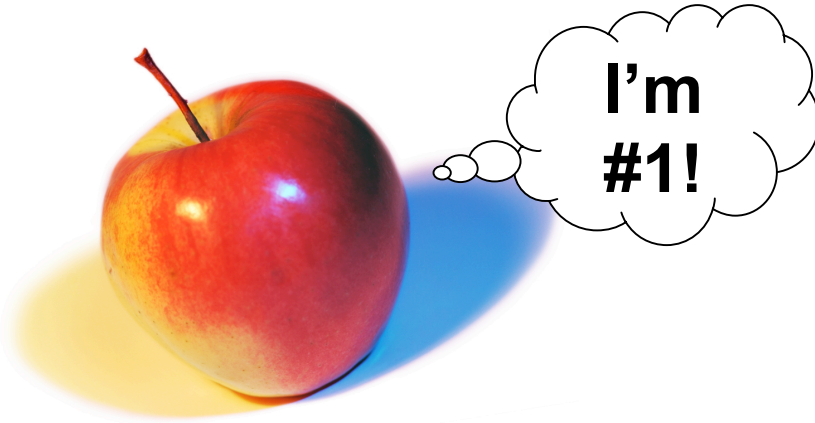
Teaching Strategy:

1. Present background information to the class.
2. Show them examples of frozen, dried and canned items.
3. Brainstorm a list of common dried foods: raisins, rice, pasta, beans, peas, and spices.
4. Brainstorm a list of foods that are frozen or canned for future use.
5. Brainstorm foods that are processed with preservatives: junk food
6. Have the class complete Activity A on their own using crayons. Before they start, make sure they understand the difference between fresh, preserved or processed with preservatives. Go through a couple examples to get them started.

Idea submitted by: Sonny Harrell, Education Director, Montana Farmers Union
300 River Drive North, Great Falls, MT 59403
406.452.6406 ~ sharrell@montanafarmersunion.com

Activities developed by: National Farmers Union and Judy Krak, St. Charles Community Schools

Fresh, Preserved or Processed?



Directions: In each row, place 1, 2 or 3 beside each food.

#1 for fresh foods; **#2** for preserved foods, and **#3** for processed foods with preservatives.

- | | | |
|---|----------------------------|---------------------------------|
| 1. ____ peanuts | ____ natural peanut butter | ____ peanut butter cups |
| 2. ____ ice cream | ____ evaporated milk | ____ milk |
| 3. ____ baked fish | ____ breaded fish sticks | ____ smoked salmon |
| 4. ____ banana cream pie | ____ dried bananas | ____ bananas |
| 5. ____ Craisins
(dried cranberries) | ____ cranberry sauce | ____ fresh cranberries |
| 6. ____ grapes | ____ raisins | ____ grape pop |
| 7. ____ frozen peaches | ____ peach | ____ canned peaches in
syrup |
| 8. ____ roast beef | ____ natural beef jerky | ____ bologna |
| 9. ____ potato chips | ____ baked potato | ____ canned potatoes |
| 10. ____ rolled oats | ____ sugared cereal | ____ whole grain cereal |
-

REMEMBER: When looking for fresh, healthy foods, ask yourself, “Where did this food come from?” If you can’t figure out how it got from the farm to your plate, it probably picked up a lot of sugar, salt, fat and chemicals along the way.

Lesson Plan 5: Planting a Garden

- Unit Objective:** Learn how to grow fresh, local foods while practicing cooperation
- Length:** 1 hour
- Grades:** 1-8
- Materials Needed:** One vegetable or herb plant per student, with care instructions; small containers for planting in that students can take home with them; soil, organic fertilizer, water; Optional: markers for flower pots
- Preparation Needed:** -- Locate an area in which a garden may be planted
-- Draw a diagram of garden
-- Fill watering can
-- Visit <http://www.bananaslugstringband.com/sound/DirtMML.mp3> to learn the tune to “Dirt Made My Lunch.” (Lyrics follow.)

Background:

Another way to have fresh, nutritious, local food is to grow your own! Growing our own gardens help make our community more sustainable. Do you or anyone you know have a garden? What are some of the foods that you can grow in a garden?

Can anyone think of anything that we eat that doesn't originate from the soil? What about cheese? Well, cheese is made from milk, which comes from a cow, which eats grass, which grows in dirt. What about eggs? Eggs come from chickens, which eat grain, which is grown in the dirt. The fact is, EVERYTHING we eat comes from dirt!

Teaching Strategy:

1. Go over the background information and discuss all the things that come from the soil.
2. Teach the song: “Dirt Made My Lunch.” Sing it several times so they learn it.
3. Optional: have students decorate planting pots with pictures of what they have learned today about farmers and food. Encourage them to sing the song while they draw.
4. *How many of you like salad raise your hand. What do you like in those salads? (lettuce, tomatoes, cucumbers, etc.) What other vegetables do we like (green beans, carrots.) How would you like to be able to grow your own salad?*
5. Pass out a plant to each student and let them go around and tell the other students what they have. Make sure all the students have a vegetable they like.
6. Help each of the students plant the product in the container they made using extra soil and a little fertilizer, then add water
7. Be sure to include the care instructions for the plants so they and their parents can take care of them at home.
8. *If we all lived on the same farm in just a few months we would have everything we need for our salad. Some people get together and grow different products like this and then trade something they grow for something they want this is sometimes called a **cooperative**. You can go home and grow plants like this in your backyard or containers. You can eat or sell the crops you grow to help our community be more sustainable*

Submitted by: Amy Meyer and Jake Davis, Missouri Farmers Union
325 Jefferson, Suite 100A, Jefferson City, MO 65101
573.659.4787 ~ ameyer@missourifarmersunion.org

Sonny Harrell, Montana Farmers Union
300 River Drive North, Great Falls, MT 59403
406.452.6406 ~ sharrell@montanafarmersunion.com

Dirt Made My Lunch

Listen to the tune at: <http://www.bananaslugstringband.com/sound/DirtMML.mp3>

CHORUS:

Dirt made my lunch,
Dirt made my lunch.
Thank you Dirt, thanks a bunch,
For my salad, my sandwich
My milk and my munch 'cause
Dirt, you made my lunch.

VERSE 1:

Dirt is a word that we often use,
When we're talkin' about the earth beneath our shoes.
It's a place where plants can sink their toes;
And in a little while a garden grows.

CHORUS

VERSE 2:

A farmer's plow will tickle the ground,
You know the earth has laughed, when wheat is found.
The grain is taken and flour is ground,
For making a sandwich to munch on down.

CHORUS

VERSE 3:

A stubby green beard grows upon the land,
Out of the soil the grass will stand.
But under hoof it must bow,
For making milk by way of a cow.

CHORUS

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The Banana Slug String Band
P.O. Box 2262, Santa Cruz, CA 95063
(888) 32-SLUGS, (888) 327-5847 Phone and Fax
slugs@bananaslugstringband.com



Optional Activities

The following activities could be incorporated at the end of any lesson to fill extra time.

1. Have youth create posters from the information that they learned today, ultimately answering the question of why it is so important to buy local. Have volunteers share posters with the class.
2. Teach some Farmers Union songs.
3. Use dried foods (rice, corn, beans, seeds) to make mosaics. The children glue the pieces in a design with white glue on cardboard. Have show and tell.
4. Provide children with tractors, farm animals and trucks to encourage creative play about farming.