

Our Lives Depend on Agriculture

LESSON 6

| | |
|-----------------------------------|---|
| CONTENT OBJECTIVES | Identify and describe how your life depends on agricultural products, Define value-added agriculture and make an example |
| LIFE SKILL OBJECTIVES | Critical thinking; Communicating by reading, listening, writing, and telling stories |
| INDICATORS EVALUATIONS | Write and tell stories about agricultural products in your life, Identify value-added agricultural products, Make a value-added agricultural product |
| SUBJECT STANDARDS | <p>Language Arts: Vocabulary, Sequencing, Inferring, Interpreting, Factual understanding, Summarizing, Main idea, Writing, Speaking</p> <p>Math: Number and operations, Data analysis and probability, Reasoning and proof, Connections, Representation, Measurement</p> <p>Science: Science and technology (understanding science and technology), Science in personal and social perspectives (types of resources)</p> <p>Social Studies: Individual development and identity; People, places and environment; Production, distribution and consumption</p> |
| LEARNER TYPES | Linguistic-words, Logical-mathematical, Spatial-visual, Bodily-kinesthetic, Interpersonal, Intrapersonal, Natural |
| MATERIALS | <p>“Good Morning, Agriculture!” (<i>Copy one per student, found in the Introduction section</i>)</p> <p>Overhead projector (<i>optional</i>)</p> <p>Marker or chalkboard, large piece of paper, transparency</p> <p>Markers or chalk</p> <p><i>My Life with Agriculture</i> pictures (<i>Copy one picture per student, see the Do section, pictures found at the end of the lesson</i>)</p> <p>Tomato, catsup, pizza sauce, spaghetti sauce (<i>optional, see the Reflect section</i>)</p> <p>MATERIALS LIST continued on next page</p> |



MATERIALS
continued

“The Pizza Game” (one copy per student or a few copies for students to play in small groups, see the Reflect section, game found in back pocket)

Corn, soybean, pumpkin, or sunflower seeds (optional, to use as game markers)

Mini Pizza ingredients:

one squeeze bottle of pizza sauce, snack crackers, pepperoni, American cheese slices, napkins (optional; one cracker, pepperoni, quarter-slice of cheese, and napkin per student; cut the plastic-wrapped cheese slices into fourths with clean kitchen scissors)

To Market, To Market by Anne Miranda (optional, see the Apply section)

Stone Soup by Marcia Brown (optional, see the Apply section)

INTRODUCTION

ENGAGE

SET THE STAGE

10 MINUTES

Language Arts:

Vocabulary, Sequencing,
Inferring, Interpreting,
Factual understanding,
Writing, Speaking

Social Studies:

Individual development and
identity; People, places and
environment; Production,
distribution and consumption

Science and Technology:

Understanding science and
technology

Science in Personal and

Social Perspectives:

Types of resources

Math:

Number and operations ▼

Copy the “Good Morning, America!” story from the following page on a transparency or make a copy for each student.

How many agricultural products can you find in the “Good Morning, America!” story?

(Have the students read the story to themselves and find the agricultural products. They can write them down or underline them if they have their own copy of the story. Have them count the number of agricultural products they find. Find out who has the most and have that student start listing them as they appeared in the story. Write the agricultural products in a list on the board, on a transparency, or on a large sheet of paper. Have other students fill in missing agricultural items. Use the following list of more than thirty agricultural products in the story to discover how important agriculture is in starting your day.)

AGRICULTURAL PRODUCTS KEY

| | | |
|--|--|--|
| Alarm clock (plastics, batteries) | Shampoo | Medicine |
| Cotton sheets | Bath towel | Toothbrush |
| Wool blanket | Hairbrush | Toothpaste |
| Wooden house | Chair | Bus (upholstery, tires, plastics, battery) |
| Carpet (fiber, glue) | Bacon | Soy biodiesel fuel for bus |
| Dresser | Eggs | Backpack |
| Underwear | Toast | Books (paper, ink) |
| Wool socks | Milk | Lunch |
| Jeans | Juice | Jean jacket |
| T-shirt | Table | Sheepskin lining |
| Soap | Cereal (corn, wheat, oats, rice, soy products) | Door |

How was Grady’s morning similar to your school-day mornings?

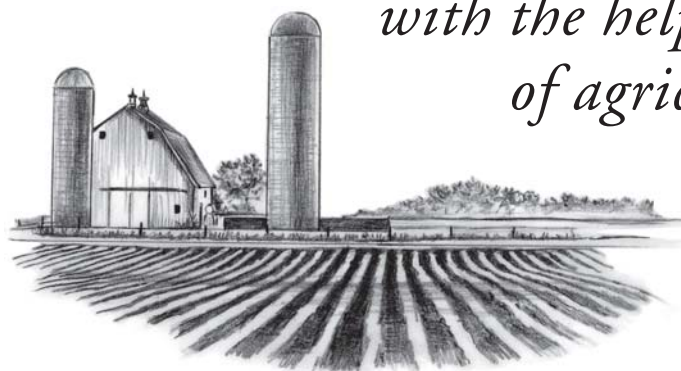
(Discuss similarities.)

Raise your hand if you think you need agricultural products to make it through your day.

Good Morning, Agriculture!

It was hard for Grady to turn off his alarm clock, wake up and crawl out from under the soft cotton sheets and warm wool blanket. The cool, crisp autumn air filled his second-floor bedroom in the family's 1920s wooden house located in the midst of some rolling hills. He stepped across the carpeted floor, opened up his dresser, and pulled out his underwear, wool socks, jeans, and long-sleeved T-shirt. With sleepy eyes, he wobbled into the bathroom to get ready for school. The smell of a special breakfast made him feel hungry, and he hurried to use the soap and shampoo in the shower. He grabbed the bath towel, dried himself off, got dressed, brushed his hair, and ran to the kitchen. He sat in his chair just as the bacon, eggs, toast, milk, and juice were put on the table. Grady usually had cereal for breakfast. He hardly had enough time to eat, take his medicine, and brush his teeth before the bus, fueled with soy biodiesel, arrived to take him to school. He put his books and lunch into his backpack, threw on his jean jacket lined with sheepskin, hugged his family, and ran out the front door. "Good Morning," said the bus driver and his friends as he got on the bus. Grady was off to a good day at school . . .

*with the help
of agriculture!*



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Do
EXPLORE

INVESTIGATE CONCEPTS

5 MINUTES FOR INSTRUCTIONS

40 TO 60 MINUTES FOR STUDENTS,

POSSIBLY DIVIDED BETWEEN DAYS

Language Arts:

Vocabulary, Sequencing,
Inferring, Interpreting,
Factual understanding,
Summarizing, Main idea,
Writing

Science and Technology:

Understanding science and
technology

Science in Personal and

Social Perspectives:

Types of resources

Social Studies:

Individual development and
identity; People, places and
environment; Production,
distribution and consumption

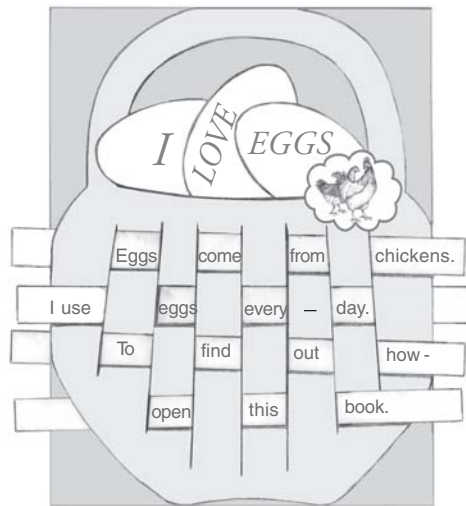
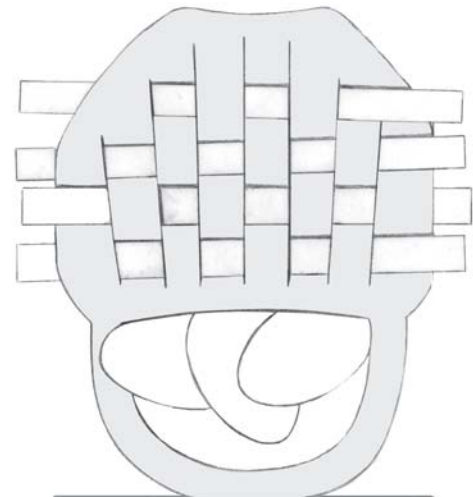
Decide how many of each of the “My Life with Agriculture” animal and plant pictures (found at the end of this lesson) you want to copy and cut apart so that each student has his/her own picture and agricultural product list. Distribute the pictures after defining agricultural products and giving instructions for the assignment.

How do you know if something you use is an agricultural product?

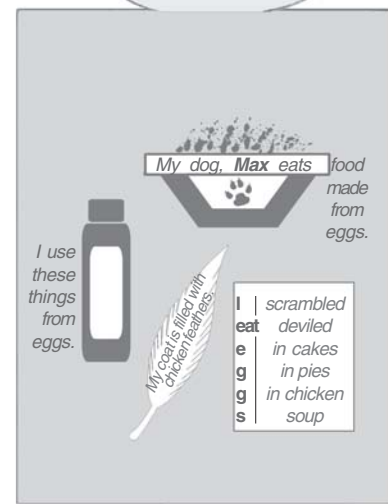
The product, whether it is something you eat, wear or use, is made from a plant or animal usually grown on a farm or ranch. You may have to read the label or do some research to discover if something is made from a farm plant or animal. Most of the agricultural products we identified in the “Good Morning, Agriculture!” story we already knew came from agricultural plants and animals such as wool and sheepskin from sheep, cotton sheets and bath towels from cotton, bacon/pork from pigs or turkey, and so on. Other items such as soap and shampoo, a hairbrush, a chair, and parts of the bus we guessed were agricultural products because some part of them was probably made from plants or animals.

“My Life with Agriculture” ASSIGNMENT INSTRUCTIONS

Now, it’s your turn to create a story about how agricultural products are part of your life. Please create a fun-to-read book with colorful flaps, doors, folds, or creative artwork to tell how agricultural products can touch your life. You will be assigned your own farm plant or animal and some of the products that come from it. You must cut out and use the illustration of the plant or animal in your story. You must use all of the agricultural products when you tell your story. Your story must be titled “My Life with Agriculture” and it must be about something that could actually be true about you now or in the future (nonfiction). Remember, stories have a beginning, middle and end.



BOOK CLOSED



BOOK OPENED

SHARING “My Life with Agriculture”

Ask the students to present their books to the rest of the class.

You may want to create a bulletin board or table display of the books. If your class reads at a local retirement center or health care facility, have the students take their books to show their reading pals. These resources would be fun to display on the students’ desks during open house or for parent-teacher conferences.

VALUE-ADDED AGRICULTURE *(possibly the next day)*

Many of the agricultural products you shared in your creative books are examples of value-added agriculture. (Write “value-added agriculture” on the board.) Value-added agriculture is when you take a raw agricultural product such as tomatoes, corn, soybeans, eggs, or meat and add something or change it to make it more valuable to people. (Write “adding to or changing something about an agricultural product to make it more valuable” on the board.)

Let’s take a vote to see what value-added agriculture means. (If possible, hold up examples of the following products.)

What’s this?

(Hold up a fresh tomato.) A tomato

What’s the main ingredient in catsup, salsa, pizza, or spaghetti sauce?

(Hold up a container of one or more of the products.) Tomatoes

(You may want the students to read the labels to discover the agricultural products used to make these tomato sauces.)

Raise your hand if you would rather eat a fresh tomato instead of tomatoes in the form of catsup, salsa, pizza, or spaghetti sauce.

(Take a quick count and record it on the board.)

Raise your hand if you would rather eat tomatoes in the form of catsup, salsa, pizza, or spaghetti sauce.

(Take a quick count and record it on the board.)

Which is the most popular way to eat tomatoes?

Usually as catsup, salsa, pizza, or spaghetti sauce.

If more people will buy tomatoes and eat them as catsup, salsa, pizza, or spaghetti sauce, will the farmers or growers need to grow more tomatoes?

Yes.

Why?

More people will buy them and it takes more of them to make catsup, salsa, pizza and spaghetti sauce. The farmers or growers will probably get more money for the tomatoes they grow because more people want them. Tomatoes become more valuable when more people want them in processed products such as catsup, salsa, pizza, and spaghetti sauce.

Does it take more people to bring you a raw tomato or to make the tomato into catsup, salsa, pizza, or spaghetti sauce?

More people have to work in the processing plant to make the catsup, salsa, pizza, or spaghetti sauce. They get paid to work there, and they will probably spend most of what they earn back in their communities. Value-added agriculture also adds value to the local economy.

REFLECT

EXPLAIN

DEVELOP CONCEPTS

45 MINUTES,

POSSIBLY DIVIDED BETWEEN 2 DAYS

Language Arts:

Vocabulary, Sequencing, Inferring, Interpreting, Factual understanding, Summarizing, Main idea, Presenting to a group

Math:

Number and operations, Data analysis and probability, Reasoning and proof, Connections, Representation

Science and Technology:

Understanding science and technology

Science in Personal and Social Perspectives:

Types of resources

Social Studies:

Individual development and identity; People, places and environment; Production, distribution and consumption

E Think of a cheeseburger that you buy at a fast food restaurant. What items on your cheese hamburger are examples of value-added agriculture?

- The bun is made from wheat and other agricultural products.
- The hamburger is made from meat that was ground and probably formed into patties before reaching the restaurant.
- The cheese is made from milk from a dairy cow.
- The catsup is made from tomatoes.
- Pickles comes from cucumbers.
- Mustard comes from mustard seed.
- Onions are prediced or sliced before reaching the restaurant.
- If lettuce is purchased as a head of lettuce, that is not value-added agriculture. But when lettuce is washed and torn and other salad ingredients are added so that you can use it right out of the bag, that is an example of value-added agriculture.

What are examples of value-added agriculture from the “Good Morning, Agriculture!” story we read at the beginning of this lesson?

Practically everything on our list started as an agricultural product that was changed somehow. Unless the eggs are similar to Egg Beaters® or processed eggs, the egg in the shell has not been changed and is not an example of value-added agriculture. Soybeans were used to make soy biodiesel, but soybeans were probably in several of the other products in the story. Corn is made into ethanol, a fuel we use in our vehicles. Corn was probably used in several of the other products from the story.



THE PIZZA GAME

Distribute copies of “The Pizza Game” and seeds or other game markers. You may want to mix up the seeds so that some students are playing with corn seeds, others with soybeans, and so on. The advantage of giving the students their own game boards is that they can take them home and play the game with their families. They can also color and make notes on their own game board.

We are going to play “The Pizza Game” later. As you can see, you’ll start your game markers or seeds in the pizza garden and you’ll end the game in the pizza. Let’s look at the game board before we start playing and see how many people it might take to add value to the tomatoes and other garden produce to turn them into pizza sauce, a popular tomato product.

How many people do you think it takes to make pizza sauce starting from the garden on “The Pizza Game” to the pizza at the end of the game?

Have the students write their own prediction or guess under their name in the top left corner of the game. After this activity, you may want to turn the predictions and the numerical answers to the questions into a charting activity.

Every time we talk about a person that is needed to bring us pizza, draw a stick figure by the illustration.

1. Who plants and harvests the garden?

Gardeners or farmers plant, grow and harvest tomatoes, onions, peppers, and herbs that go into pizza sauce. Draw stick figures of gardeners or farmers by the garden.

2. How do the tomatoes, peppers, onions, and herbs from the garden make it to the processing plant?

A trucker hauls the garden produce to the processing plant. Draw a stick figure by the truck nearest the garden.

3. Who inspects the food from the garden?

An inspector does; draw an inspector next to the glove that tells you to wait and take a look at your food.

4. How many people does it take to wash, cut, cook, can, label, and box the tomato sauce at the ABC Processing plant?

Draw lots of stick figures around the processing plant.

5. What should you draw next to the gloves on the game board?

Inspectors that are inspecting the food, the equipment used to make and store food, the trucks and other vehicles used to move it around

6. What should you draw next to the trucks that are hauling the pizza sauce from the processing plant to the distribution center?

Truckers

7. The pizza jar represents salespeople or marketers that have sold more pizza sauce to stores, restaurants, or directly to customers. Draw a stick figure near the jar for the salesperson or marketer that sells the pizza sauce.

8. What happens at the distribution center?

It takes lots of people to unload the trucks, put the tomato sauce on the right shelves, sell big quantities of it to stores or restaurants, load it back up, and send it on its way. Draw lots of stick people around the distribution center.

9. Add stick figures for truckers, inspectors and salespeople next to the trucks, gloves and pizza jars between the distribution center and the grocery store.

10. Who works in a grocery store?

Grocers buy groceries from distributors and sell those groceries to customers. People also stock shelves, clean, work in the checkout lanes, and sack groceries. Draw lots of stick figures by the grocery store.

11. Let's pretend that the customer that buys the pizza sauce from the store is someone in your family. Draw that person next to the inspector's glove after the Choice Food Store. The customer is the next food safety inspector because he/she should check the dates and make sure the food is stored and prepared safely.

12. On the next food safety glove, draw a stick figure that represents you. How are you like a food safety inspector?

You need to wash your hands and make sure your food is served on a clean plate with clean silverware.

Count the number of stick figures you've drawn on "The Pizza Game" and write the number under your prediction or guess.

Discuss how many the students have counted and how realistic the count is. Processing plants alone can have three hundred employees working several shifts. The students can write a more realistic number underneath the number of stick figures that they drew.

The stick figures you drew represented the people that made the pizza sauce. How many people do you think it took to make the crust, sauce, meat, and cheese?

Make guesses and have them write their guesses under the number representing people that made the tomato sauce for the pizza.

How much does your family pay for pizza?

Discuss what they think their families pay for pizza for a family meal. You'll probably end up in a discussion about eating pizza at a restaurant, buying frozen pizza, making pizza from a box, or making your own pizza. Have them compare the cost to the number of people that are paid to make their ingredients, assemble, package, and distribute pizza.

Now, let's play "The Pizza Game" to see how value is added to food from the garden.

Play "The Pizza Game" by using dice, a spinner or numbers drawn out of a bowl. Call out "corn-six" and everyone with corn seeds moves ahead six spaces. See which seed or game marker moves from the garden to the pizza first.

MINI PIZZAS *(optional)*

You may want to become processors and make your own mini snack pizzas. The students should wash their hands and hold them out as if they are ready to work on a processing line. Wash your own hands and, if possible, you may want to wear gloves from your foodservice kitchen. Put a napkin with a cracker on it in the students' open hands. Squeeze a bit of pizza sauce on each cracker. Put one slice of pepperoni on top of the sauce. Have the students unwrap their quarter slice of cheese. As you are handing out each ingredient, have the students tell what main agricultural product it came from before it became a value-added agricultural product. Examples: cracker-wheat, pizza sauce-tomatoes, pepperoni-pork (pigs) and beef (cattle), cheese-milk (dairy cows). Read the labels to find out the other ingredients. Eat and enjoy!

APPLY EXPAND

ELABORATE IN A NEW WAY

30 MINUTES,

ON ANOTHER DAY

Language Arts:

*Vocabulary, Sequencing,
Inferring, Interpreting,
Factual understanding,
Summarizing, Main idea,
Writing, Speaking*

Math:

*Number and operations,
Connections, Measurement*

Science and Technology:

*Understanding science and
technology*

STANDARDS *continued*

on next page

What agricultural plants and animals are growing on farms where you live?

If you are in Iowa, you could have corn, soybeans, oats, alfalfa, apples, grapes, a variety of vegetable or fruit crops, pigs, chickens that lay eggs, turkeys, beef cattle, dairy cows, sheep, and goats growing on farms where you live.

What agricultural products will you see or use from what is growing where you live?

Discuss several of the pork, beef, dairy, sheep, turkey, chicken, and egg products we eat. Although a large amount of the corn and soybeans grown in Iowa is used to feed animals, there are thousands of other uses for corn and soybeans. A very popular value-added product is ethanol from corn and soy biodiesel from soybeans. The students will be the experts from the books they made in the Do section of this lesson.

TO MARKET, TO MARKET *by Anne Miranda*

Sit in a circle on the floor and pass the book To Market, To Market by Anne Miranda around the circle for students to read two pages at a time.

Why was the woman in the story such a "shopping disgrace"?

She bought the real live animals instead of the agricultural products. The animals messed up her kitchen and were not a source of food for her. Her home had turned into a "zoo."

How did she solve her shopping and hunger problems?

She bought vegetables and made hot soup for lunch. Everyone ate the hot soup.

E Now, let's try writing this old familiar poem using agricultural products from each of the animals identified in the book.

You may work together to create new sentences while students read the same two pages over again. You can choose to assign the students to work in pairs to come up with one of the new verses substituting agricultural products for the animals they come from. See the example below and note that the page about the goose is replaced with turkey and the page on the dairy cow has two kinds of cows, dairy and beef.

"To market, to market, to buy bacon from a pig. Home again, home again, jiggy jig."

"To market, to market, to buy a dozen eggs. Home again, home again, it's time to rest my legs."

(Substitute turkey for goose.)

"To market, to market, to buy a plump turkey. Home again, home again, I could have bought turkey jerky."

"To market, to market, to buy a catfish. Home again, home again, time to cook up a good dish."

"To market, to market, to buy some lamb chops. Home again, home again, this dinner is going to be tops."

"To market, to market, to buy a gallon of milk. Home again, home again, m-m-m it goes down as smooth as silk."

(Same page as the dairy cow)

"To market, to market, to buy some roast beef. Home again, home again, all you do is heat and serve, what a relief."

"To market, to market, to buy chicken strips. Home again, home again, yum, we can dip the tips."

"To market, to market, to buy cheese from a goat. Home again, home again, with my shopping tote."

"Now it's time to make breakfast, lunch and supper that's quite yummy. There's nothing better than farm fresh food for my tummy."

You can skip the disastrous middle part of the story and pick up the story when she buys the vegetables. You can serve the vegetables with the agricultural products in the new story or you can chop up the leftovers and add them to your soup.

STONE SOUP by Marcia Brown

You may want to read another classic story called Stone Soup by Marcia Brown. Discuss how value was added to the soup, how many people it took to make the soup, and how everyone wanted to try the new value-added agricultural product.

If you would like to make Hot Soup that goes with either one or both of these books, please go to the Optional Activity Ideas section of this lesson. You will also find a yummy salsa recipe and learn how to make a fiber value-added agricultural product, handmade paper.

Science in Personal and Social Perspectives:

Types of resources

Social Studies:

Individual development and identity; People, places and environment; Production, distribution and consumption ▼

If you have a processing plant in your community, you may want to tour it or have someone that works there talk to your class about it. Local farmers or representatives from agricultural organizations are also excellent resources to make this topic come alive where you live. Be sure to check out other lesson ideas and agriculture product lists found in the Resources section of this lesson.

E *For another evaluation strategy, refer to “Make your own value-added agriculture product” in the Optional Activity Ideas section of this lesson.*

OPTIONAL ACTIVITY IDEAS

Try making some of these delicious, healthy, value-added agricultural recipes. You may want to divide the class into work stations as each group of students makes part of the recipe and brings it together in one big mixing bowl or pot.

VALUE-ADDED FOOD PRODUCTS

Our version of *HOT SOUP*

1. Use a large cooking pot on a camp stove or burner.

You may also use a Crock-Pot®.

2. Start heating a little over a half pot full of chicken, beef or vegetable broth or soup base.

3. Add salt, pepper, and other spices and herbs such as garlic, basil, and so on.

4. Have the students wash their hands and any of the following vegetables. Then have them prepare the vegetables and add them to the pot. Add the more dense vegetables first and then the softer, smaller ones. The smaller you cut the carrots and potatoes, the faster they will cook.

Vegetable ideas: carrots, potatoes, celery, cabbage, onions, corn, beans, peas pods, beets, tomatoes, peppers, okra

5. Serve the soup in paper cups with plastic spoons.

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Enjoy!

It is a good idea to make this recipe at the beginning of the day or session so that it can cook while you do other things. Connect the soup ingredients and how it is made with To Market, To Market by Anne Miranda and Stone Soup by Marcia Brown. This is a great way to increase vegetable consumption!



SUMMER GARDEN SALSA

3 large tomatoes, seeded and coarsely chopped

1 small fresh jalapeno chile, seeded and minced (*optional*)

1 clove garlic, minced

¼ cup finely chopped onions

2 tablespoons finely chopped cilantro

2 tomatillos, husks removed, finely chopped

Juice from 1 small lime

¼ teaspoon salt

¼ teaspoon freshly ground black pepper

In a large bowl, combine all of the ingredients. Stir together until well blended. Cover and chill for 30 minutes or more before serving.

Keeps for up to 4 days in the refrigerator. Makes about 2 cups.

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Although you can prepare this salsa and eat it right away, you may want to prepare the salsa at the beginning of the day or session so that it has time to cool and blend flavors in a refrigerator or cooler. Divide the students into small groups to wash and prepare the salsa ingredients. Plastic knives and cutting boards or plastic plates work well. It's hard to avoid double-dipping and portion control with this delicious salsa. Put a little bit of the salsa on a small paper plate with some white corn chips so that everyone can have his/her own portion.

OPTIONAL ACTIVITY IDEAS

continued

**VALUE-ADDED
FIBER PRODUCTS**

Discuss agricultural crops that are used to make fiber products such as paper, clothes, houses, furniture, and so on. Then try making this greeting card.

Consider asking the art teacher to lead this activity. Please read through the instructions and consider the size and age of your group to determine the quantity and kind of supplies you will need. You may want to create a few stations that the students can work around.

Examples of stations could be:

- 1.) Blender mixing
- 2.) Screen drying
- 3.) Paper towel drying
- 4.) Card finishing supplies

GREETING CARDS THAT KEEP ON GROWING!

STATION 1: Blender; water; colorful tissue paper, construction paper, or newspapers (avoid shiny papers); large tablespoon or serving spoon; small paper cups, one per student; plastic spoons, one per student; flower seeds, large enough so you can find them, enough so that each student has the potential to grow six to a dozen flowers

STATION 2: Drying screen such as a window screen from a lumber yard, hardware store or craft shop (10½" by 12" is good); sink or tub large enough to put the screen over the top; Sponges cut into fourths; Absorbent paper towels

STATION 3: Two layers of absorbent paper towels laid out on a hard surface; absorbent paper towels for dabbing

STATION 4: Heavy stock paper or index cards folded to make a greeting card, stapler and staples, pens or fine-tip markers, dried flowers or leaves or picture of flowers, clear-drying glue

INSTRUCTIONS

1. Fill the blender two-thirds full with lukewarm water. Have the students tear paper into small pieces and add it to the water in the blender. Let the paper soak up water for a minute. Blend on low for 10 seconds and on high for 30 seconds.
2. Spoon the pulp into small paper cups. Repeat step number one until everyone has his/her own paper cup full of pulp.
3. Have the students hold out their plastic spoons and pour a significant number of seeds in each spoon. Have the students gently stir the seeds into their pulp.
4. Place the screen on top of the sink or tub and hold it down as groups of students pour their cups of pulp on top of the screen.
5. Have the students press their pulp flat onto the screen. They may use their fingers, the back of their spoons, or their paper cups like rolling pins. Have them use the sponges or paper towels to press on the top of their flower seed papers to absorb some of the moisture.
6. Once their flower seed papers seem dry enough to hold their shape, have the students lift off their papers and place them on flat, double paper towels. They should continue to press out the extra water.
7. Have the students move the flower seed paper off the damp paper towel to a dry place. They should let it dry while they make the rest of the card.
8. Have the students write a verse or message and their name on the inside or back of the greeting card. Along the bottom edge of the card, in small letters, they should write "Please plant the cover of this card, water it, and watch your flower bouquet grow."
9. Have the students staple the flower seed paper once or twice to the front of the card. They can add color and contrast to the front of the card with glued-on flowers, leaves, or little pictures of flowers they've drawn or cut from a magazine.
10. Each student can deliver his/her card and watch it grow!

OPTIONAL ACTIVITY IDEAS

continued

Have the students become scientists or chefs and come up with a fantastic recipe or food or fiber product made from what is being grown on Iowa farms and in Iowa gardens. The students can create a recipe or description of their product and a simple billboard or magazine advertisement to sell it. They could also try creating a 30-second radio advertisement about it.

**MAKE YOUR OWN
VALUE-ADDED
AGRICULTURAL PRODUCT**

RESOURCES

The following resources will lead you to thousands of valuable products made from Iowa's major agricultural commodities.

Go to [agaware.org](http://www.agaware.org) to link to product lists and pork, beef, dairy, turkey, eggs, sheep, corn, and soybean commodity organizations and other agriculture education organizations and institutions.

Anderson, Janet and Linda Naeve. "Adding Value to Garden Produce." *Growing in the Garden: Outdoor Classrooms for Young Gardeners and Garden Journal*. Ames, Iowa: Iowa State University Extension 4-H Youth Development, 2000. 4H-905BLDR and 4H-905B.

Brown, Marcia. *Stone Soup*. N.Y.: Aladdin Paperbacks, 1947. ISBN 0-689-71103-4.

Iowa Agriculture Awareness Coalition. "Cheeseburger Storybook." "Corn and Soybeans Give Me Gas." *The imAGination Station*. 1996. <http://www.agaware.iastate.edu>

ISU Extension to Value Added Agriculture. *Food and Value Added Agriculture: 1998 Directory for Iowa*. 101 EES Building, Haber Road, Ames, IA 50011-3071.

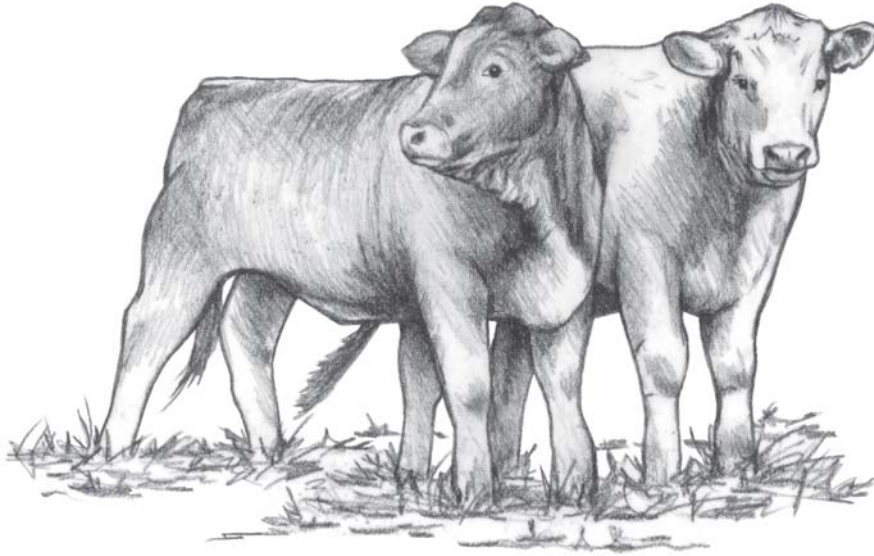
Miranda, Anne. *To Market, To Market*. N.Y.: Harcourt Brace and Company, 1997. ISBN 0-15-20035-6.

Nechaev, Michelle Wagner. *The Hungry Farmer*. Cypress, CA: Creative Teaching Press, Inc., 1998. ISBN 1-57471-340-x.

Project Food, Land, and People. "Tomatoes to Ketchup," "Chickens to Omelettes," and "Lunchtime Favorites." *Project Food, Land and People: Resources for Learning*. Chandler, AZ: Project Food, Land and People, 1998. [foodlandpeople.org](http://www.foodlandpeople.org)

MY LIFE WITH AGRICULTURE

BEEF CATTLE



Hamburger
Steak
Baseball

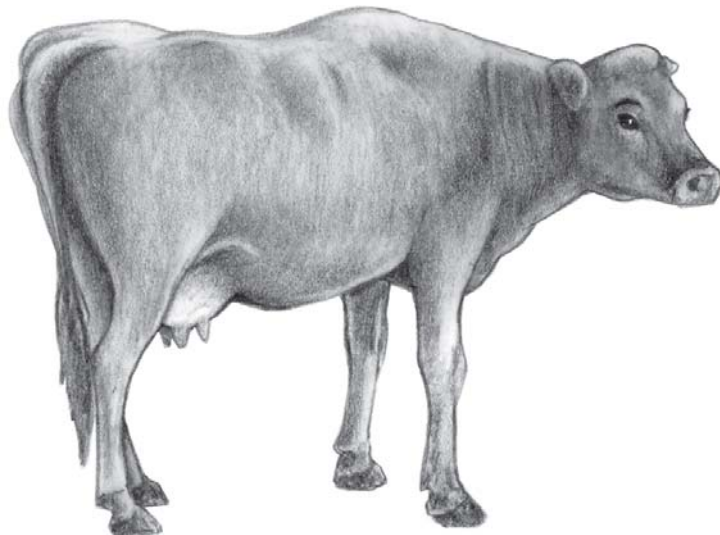
Baseball glove
Leather handbag or billfold
Drum heads

Parts of shoes
Leather recliner
Paintbrushes

Crayons
Toothpaste
Soap

MY LIFE WITH AGRICULTURE

DAIRY CATTLE



Milk
Yogurt
Cheese

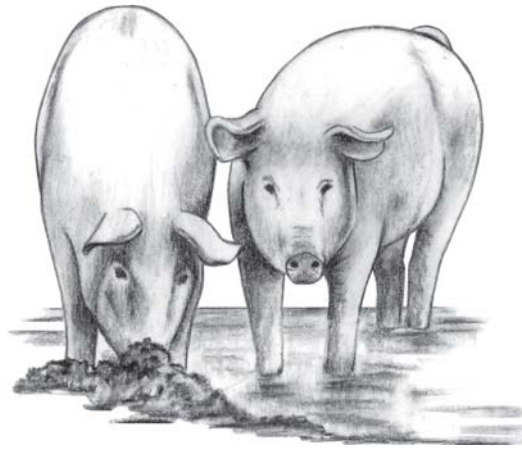
Ice cream
Leather gloves
Saddle

Boots
Chewing gum
Medicine

Glue for toys
Gummed tape
Pet food

MY LIFE WITH AGRICULTURE

PIGS



Ham
Pork chops
Pork roast

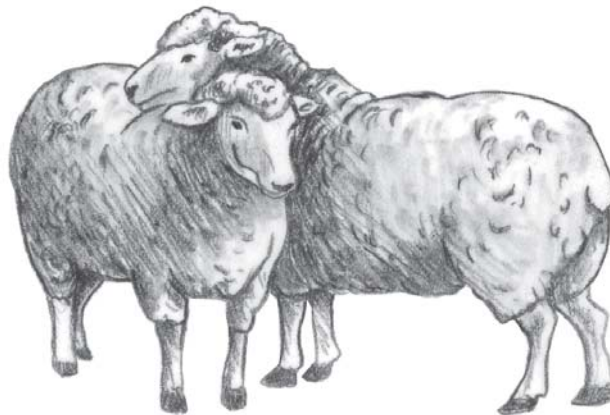
Bacon
Parts of shoes
Gloves

Hair brush
Cosmetics/make-up
Film

Medicine
Heart valves
Doggie chews

MY LIFE WITH AGRICULTURE

SHEEP



Roast leg of lamb
Lamburgers
Casings for sausage

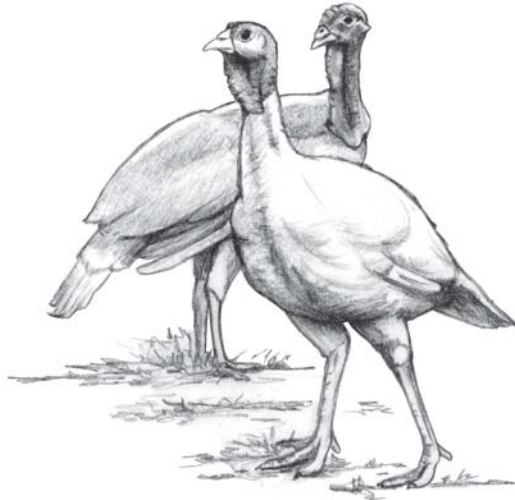
Rugs
Glove and coat linings
Lanolin in hand cream

Slipper linings
Seat covers
Wool blankets

Wool sweater
Guitar strings
Tennis racket strings

MY LIFE WITH AGRICULTURE

TURKEYS



Turkey bacon
Roast turkey
Turkey drumstick

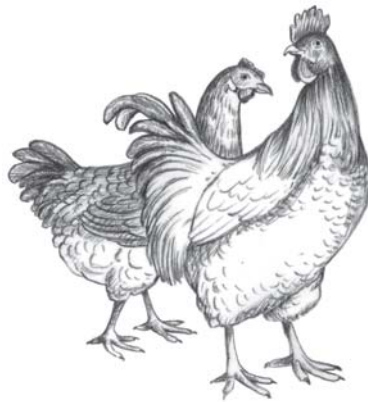
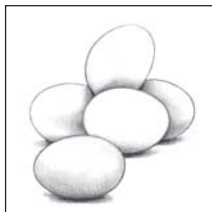
Turkey hotdogs
Feathers for decoration
Quivers on arrows (bow and arrows)

Fertilizer for lawns and gardens
Foams used in fighting fires
Pet food

Filling for pillows
Filling for comforters
Filling for clothes

MY LIFE WITH AGRICULTURE

LAYING HENS AND EGGS



Scrambled eggs
Deviled eggs
Cakes and cookies

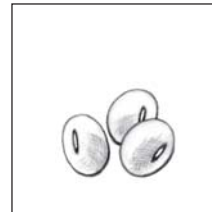
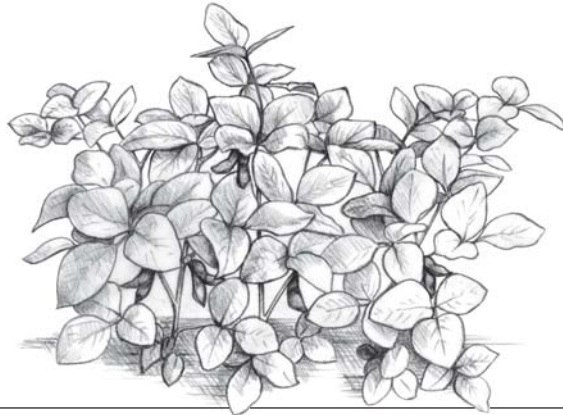
Pies
Medicine
Cosmetics/make-up

Shampoo and cream rinse
Feathers for stuffing bedding, clothes
Chicken for soup or broth

Soaps
Paint
Pet food

MY LIFE WITH AGRICULTURE

SOYBEANS



Soy nuts for snacks

Cooking oil
Soymilk
Cereal

Candy

Sandwich spreads such as
cheeses, mayonnaise
and peanut butter

Medicine

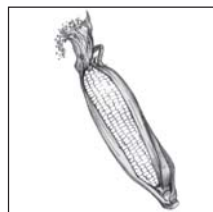
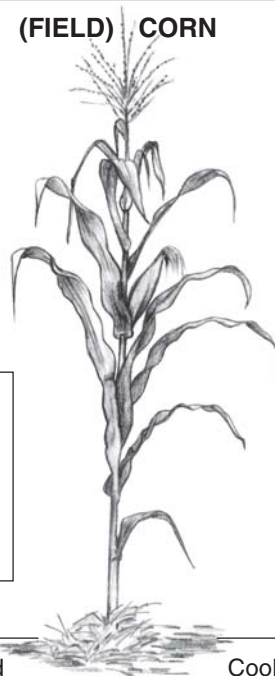
Oriental foods such as
soy sauce, soy sprouts
and tofu

Candles

Cosmetics/make-up
Cleaning products
Soy biodiesel fuel

MY LIFE WITH AGRICULTURE

(FIELD) CORN



Soda / Pop (corn syrup)

Juice (corn syrup)
Cereal

Cornbread

Tortillas
Corn chips

Cooking oil

Animal feed

Baby diapers and plastic bags

Batteries

Golf tees

Ethanol

