



Who Works in Food Processing?

Middle School Food and Agricultural Literacy Curriculum

Precepts

- I. Professional Growth
12. Make clear decisions in my professional life.

National Standards

- CS.02.03.01.a. Explore various career interests/ options.
- CS.03.01.01.a. Use basic technical and business writing skills.
- CS.09.02.01.a. Demonstrate basic computer and software systems skills.
- NL-ENG.K-12.4 – Communication Skills
- NL-ENG.K-12.12 – Applying Language Skills
- NT.K-12.5 – Technology Research Tools

Student Learning Objectives

- As a result of this **unit** the students will...
- Explore the eight pathways of the Agriculture, Food and Natural Resources (AFNR) career clusters.
- As a result of this **lesson** the students will...
- Examine three career opportunities available in the food products and processing systems area.

Content Outline

- I. **Understand that many processes go into getting the food to your plate.**
- II. **Examine three career opportunities available in the food products and processing systems area.**
 - A. Create a brochure based on three careers in **food products** and **processing**.
 1. Agricultural Sales
 2. Agricultural Communications Specialists
 3. Agricultural Educators
 4. **Food** Scientists
 5. Meat Processors/Toxicologists
 6. Biochemists
 7. Nutritionists

Time

Instruction time for this lesson: 45 minutes.

Resources

National FFA Organization. (2009). Career explorer. Retrieved from http://www.ffa.org/index.cfm?method=c_job_CareerSearch — National FFA Organization. (2009). LifeKnowledge Precepts and Signs of Success — States' Career Clusters Initiative. (2009). Agriculture, Food and Natural Resources Model. — Retrieved July 22, 2009, from States' Career Clusters Initiative Web site:<http://www.careerclusters.org/resources/ClusterDocuments/agdocuments/1AGModel.pdf>

Tools, Equipment, and Supplies

Paper plates – one per student
Crayons or markers to draw on plate
MS.CAS.1.5.AS.A – one per student or group
MS.CAS.1.5.AS.B – one per student or group
Access to a computer lab with Internet and a printer
MS.CAS.1.5.AS.C – one per student
MS.CAS.1.5.ASSESS.A – one per student
Magazines – for cutting out pictures
Glue

Key Terms

The following terms are presented in this lesson and appear in **bold italics**:

Food

Products

Processing

8. Dietitians
9. **Food** Brokers
10. **Food** Inspectors
11. **Food** Scientists
12. Meat Cutters
13. Meat Graders
14. Meat Science Researchers
15. **Food** Meal Supervisors
16. Cheese Makers
17. Microbiologists
18. Produce Buyers
19. Bacteriologists
20. **Food** & Drug Inspectors
21. Bioengineers
22. Biochemists
23. **Food** & Fiber Engineers



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24. **Food** Processors
25. Storage Supervisors
26. Fieldsman
27. Quality Control Specialists

- B. Discuss how decisions made today affect our professional lives.

Interest Approach

Before class starts, set out one paper plate and various colored crayons or markers per student.

Welcome back. I trust you are all having a great day. Many of us have already noticed the plates and writing utensils in front of us. When I say EAT, take the next five minutes and draw your favorite meal on the paper plate. Please use colors and be as creative as you can in your drawings. The meal should include the main course, at least two sides, and a dessert. What questions are there? EAT!

Monitor the room and encourage students as they complete their drawings. Count down as time is running out.

Nice job on your meals. Now that we have all thoughtfully drawn our favorite meals, let's take a closer look at one item on your plate. Pick one of your items and think through how many processes it went through before it got to your plate.

An example may be: Wheat being raised then taken to a **processing** plant and turned to flour, then mixed with the correct ingredients to make the perfect buns to be used on my hamburger. Of course they were packaged, shipped, and then finally put to good use on a tasty burger.

Take the next few minutes to complete the assigned task. Please list all of the processes on an open spot on your plate or on the back side if you need more room.

Count down when time is up.

Share the process you listed with your neighbor and work together to perfect the lists.

Summary of Content and Teaching Strategies

Objective 1. As a result of this unit the student will examine three career opportunities available in the **food products** and **processing** systems area.

Let's take a closer look at this system. In order to do that, we are now going to create a tri-fold brochure with career preparation requirements for the **food products** and **processing** systems cluster. Please choose three careers in this area and create the following.

Option 1 – Distribute **MS.CAS.1.5.AS.A** printed front/back if students will be completing the assignment by hand.

Option 2 – Distribute **MS.CAS.1.5.AS.A** and **MS.CAS.1.5.AS.B** if you will be using the computers. Using Microsoft Word is just one option. If a publishing program or other software is preferred, teach the class how to use it and distribute **MS.CAS.1.5.AS.A** as a sample.

Distribute **MS.CAS.1.5.AS.C** for either option. Read through the directions together and answer any remaining questions. The website directions are on top of **MS.CAS.1.5.AS.C**. Direct them to the FFA career research page or to another page that you like.

What you hear GO, you will quickly and quietly move to the research area and take 10-15 minutes to find three careers in the **food products** and **processing** systems and create your brochure. The brochure should have all of the information on the sample, **MS.CAS.1.5.AS.A**. Use the other worksheet, **MS.CAS.1.5.AS.C**, to help determine careers in the **food products** and **processing** career pathway. What questions do you have? GO!

Review/Summary

Continue with the Eye Witness News e-Moment® for review. Once they have interviewed their partner ask for a few volunteers or select a couple to come on your show live to demonstrate their knowledge. Set up the moment with the following instructions.



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Great job on the brochures. I look forward to reading all of them. Before leaving class today, we're going to be on TV! As new experts in the **food products** and process systems career area, each of us will be interviewed about a specific career. Oh, by the way, each of us will also be the news reporter. So grab your microphone and ask your neighbor the following questions:

What career in this area would you like the most? Why?

What does a typical day look like for someone in the career you researched?

What kind of education or training do they need?

Thank you for those great news reports. How do career decisions affect our professional lives? When I say PROFESSION, turn to your neighbor and discuss how the decisions we make today will affect our lives when we are 25 years old, 35 years old, and 65 years old. The decisions you make now can have both good and bad consequences for your future. PROFESSION.

Allow students to discuss with a partner.

As you leave the classroom today, tell me one way decisions we make right now will affect our lives and careers as we get older.

Stand by the door and listen to their answers.

Application

Extended classroom activity:

Have students interview someone in this career field and create a PowerPoint or video about their career.

FFA activity:

Have the students present summaries of careers they've researched at the next FFA meeting.

SAE activity:

Shadow a professional in the **food** process industry or do additional research using the scientific method.

Evaluation

MS.CAS.1.5.ASSESS.A

Answers to Evaluation

Answers will vary



Food Products
and
Processing

Draw or glue pictures here
(3-5 pictures)

Three Careers

Name

Date



Career #1

Title _____

Source _____

What it is like to do this job?

How much money do they make?

What do they do in a typical day?

What kind of education is required to do this job?

What would I like/dislike about this job?

Career #2

Title _____

Source _____

What it is like to do this job?

How much money do they make?

What do they do in a typical day?

What kind of education is required to do this job?

What would I like/dislike about this job?

Career #3

Title _____

Source _____

What it is like to do this job?

How much money do they make?

What do they do in a typical day?

What kind of education is required to do this job?

What would I like/dislike about this job?



It is recommended to test these directions on your version of Word prior to the lesson!

How to make a brochure using Microsoft Word

1. Open Microsoft Word
2. Select "New Document"
3. In Template search box type "2 fold brochures"
4. Select "Business brochure" (8 1/2 x 11-inch, landscape, 2 fold)
5. Click it to open
6. Download Document when prompted
7. Remove template information and insert required information in proper places

The required information is on MS.CAS.1.5.AS.A



Below is a list from the National FFA Career Explorer Website. Follow these steps in the order they are listed.

1. Go to http://www.ffa.org/index.cfm?method=c_job.CareerSearch
2. Type a career name from the list below
3. Click Search Career Explorer
4. The following list will come up
5. Choose three careers from the list below to use on your brochure

Agricultural Sales	Agricultural Communications Specialists	Agricultural Educators
Food Scientists	Meat Processors/Toxicologists	Biochemists
Nutritionists	Dietitians	Food Brokers
Food Inspectors	Food Scientists	Meat Cutters
Meat Graders	Meat Science Researchers	Food Meal Supervisors
Cheese Makers	Microbiologists	Produce Buyers
Bacteriologists	Food & Drug Inspectors	Bioengineers
Biochemists	Food & Fiber Engineers	Food Processors
Storage Supervisors	Fieldmen	Quality Control Specialists



Name _____

1. List three careers in the food products and processing category.

Career 1 _____

Career 2 _____

Career 3 _____

2. Select one of the careers you listed in question one and write a three-sentence essay explaining what the career would entail.
