

Farm to Plate

Media Type: Video
Duration: 73 minutes

Goal: Students will learn the different processes and practices food goes through to get from the farm to the table.

Description: Students will explore the concept of farm-to-table to understand the production process. Students will learn about the different food production practices and understand different facts about their food and how it is made. Students will also learn of many misconceptions in the food industry.

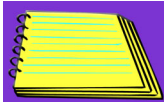
Objectives:

1. To build agricultural awareness in the food industry.
2. To identify the steps foods goes through in the production process from farm-to-table.
3. To learn about the different food production practices.
4. To understand how food is purchased.

Horizontal Alignment

Core-Subject Area	Foundation Concept	Basic Understanding
Language Arts	<i>Application of Writing Skills</i>	<ul style="list-style-type: none"> • Composition mechanics • Descriptive, informative, creative and persuasive writing • Organizing logical arguments • Brainstorming • Utilizing reference materials • Vocabulary enhancement
	<i>Analysis of Text & Information</i>	<ul style="list-style-type: none"> • Drawing inferences and generalizations • Critical thinking • Creative thinking • Expression of thoughts and ideas • Communication skills • Developing listening and comprehension skills • Literary interpretation • Creating visual representations
Science	<i>Scientific Thinking & Investigating</i>	<ul style="list-style-type: none"> • Real-world investigations and applications • Researching and proving theories • Collecting data • Technology-based research • Evaluating conclusions • Compare/contrast findings
	<i>Scientific Laws & Principles</i>	<ul style="list-style-type: none"> • Food safety and sanitation

Farm to Plate



Lesson Plan

Class 1: Begin class by distributing the *Farm to Plate Vocabulary Handout* as well as the *Worksheet*. Show the *Farm to Plate - How Food is Made* segment. Students should complete the corresponding *Assessment*. Assign the *How It's Made Activity* and allow the remainder of the class for students to work.



Video
9 min.

Class 2: Students should present the *How It's Made Activity* to the class. Distribute the *True or False Activity* for students to begin completing prior to viewing the segment. Show the *Farm to Plate - Sustainability* segment. Follow the segment with its *Assessment*. Students should use the remainder of the class to complete the *True or False Activity*.



Video
8 min.

Class 3: Students should begin the *True or False Activity* for the classes segment. Show the *Farm to Plate - Animal Management & Health* segment. Students should complete the corresponding *Assessment*. Students should use the remaining class time to complete the *True or False Activity*.



Video
14 min.

Class 4: Students should begin the *True or False Activity* for the classes segment. Show the *Farm to Plate - Animal Welfare* segment and the *Farm to Plate - Specialty Production Methods* segment. Students should complete the corresponding *Assessments*. Allow students the remaining class time to complete the *True or False Activity*. Distribute the *Organic Regulation Flyer Project*.



Video
16 min.

Class 5: Students should begin the *True or False Activity* for the classes segment. Show the *Farm to Plate - Genetically Modified Organisms* segment and the *Farm to Plate - Food Safety* segment. Students should complete the corresponding *Assessments*. Allow the remainder of the class for students to complete the *True or False Activity*.



Video
13 min.

Class 6: Remind students to continue using the *Worksheet* and *Vocabulary Handout*. Show the *Farm to Plate - How Food is Purchased* segment. Follow the segment with its *Assessment*. Distribute the *Food Insecurities Student Handout*. Assign the *Feed the World* and *Food Merchandising Projects* and allow the remainder of the class for students to work.



Video
13 min.

Class 7: Distribute the *Trust but Verify Activity* and allow the entire class for students to work.

Class 8: Distribute the *Policies Project* and allow the remainder of the class for students to work.

Class 9: Allow the entire class for students to work on their *Projects/Activities*.

Class 10: Distribute the *Farm to Plate Final Assessment* and allow time for students to complete it. Students should share their *Feed the World Projects* with the class and turn in all completed work.



Lesson Links

"Farm to Plate" Approach to Food Safety

- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2094869/>

Food Production Daily

- <http://foodproductiondaily.com>



Career & Technical Student Organizations

FFA

- Food Science and Technology

Farm to Plate



Career Connections

Using the *Career Connections Activity*, allow students to explore the various careers associated with this lesson. See the *Activity* for more details. *If student licenses have been purchased:* Students will select the interviews to watch based on your directions. *If only a teacher license is purchased:* Show students all the career interviews and instruct them to only complete the interview form for the required number of interviews.

- iCEV50129, Carolyn Cooksie, Associate Administrator/Operations Management, U.S. Department of Agriculture, Farm Service Agency
- iCEV51093, Mike Reeves, Mobile Dairy Instructor, Southwest Dairy Farmers
- iCEV50681, Greg Grupe, Farm Manager, Betteravia Farms



Lab Activities

How It's Made

Directions:

Using the Internet, library or any other available resources, students will gather information and create a poster on the production process of any commodity not mentioned in the presentation. For example: pork, bread or potatoes. Students will describe how the commodity of choice makes it to the table, from production to consumption. Remind students to include all processing, distribution and retail steps in order and to be as detailed as possible. Students should attach a citation sheet listing all sources used and present their posters to the class and be prepared to answer questions.

True or False

Directions:

Students will write down at least six facts they know and think to be true about each days topic. Students should consider each of the following questions and answer those which you feel are applicable: can you define and explain the topic; how do you think it affects the food industry; what are some of the benefits; what are some of the drawbacks; what do you perceive to be true about today's topic and what are some misconceptions individuals may have. As students watch the presentation they should circle the statements which are true. Once the presentation is completed, they should write an argument to explain why each statement is true or false.

Trust but Verify

Directions:

Students will research the trends and issues important in the food science industry. Students will gather information which will compare and contrast issues affecting the food science industry, including employment, safety, environmental and animal welfare. Using the information, students will create a report on these trends and describe how "Trust but Verify" pertains to the food science system. Reports should include the following: provide a definition of "Trust but Verify" and describe what it means to the students when it comes to the food science system; describe some of the hot topics in the food science system and what people may think about these topics; describe why trusting but verifying issues related to the food science industry is important in todays society; any additional information which would explain their point of view and a citation sheet detailing all sources used.

Farm to Plate



Projects

Feed the World

Directions:

Through modern food production we can protect our valuable natural resources, produce more food and reduce food waste in an effort to produce enough food for our growing population. Using the Internet, library or any other available resources, students should research at least three modern food production techniques, such as: cutting waste, earth-friendly farming or food biotechnology. Students should create a Microsoft® PowerPoint® presentation on each of the techniques researched, making sure to include the following: how the techniques will help conserve our natural resources; how the techniques will help produce more food; how the techniques will reduce food waste and a citation slide listing all sources used. Students should share their presentations with the class and be prepared to answer questions.

Policies

Directions:

The world of food policy making and regulations is very complex. It is populated by a wide variety of producers, consumers and intermediaries, many of them playing more than one important role. The range and nature of the economic activities surrounding food draws many different departments of government into the support and regulation of the food system. Students will research the history and policies related to food science issues and write a one to two page report including: defining trends in food production as well as the supply and demand for food products; describing how these affect the policies which are made for the food science industry and any other information you deem necessary. Students should attach a citation sheet listing all resources used.

Organic Regulation Flyer

Directions:

Using the Internet, library or any other available resources, students will research and identify specific regulation for organic products. Students should include at least one regulation for meat, grains and produce, along with a description and how they impact the organic farming industry. After completing their research, students will create a flyer with pictures which represents the information they have found. Remind students to attach a citation sheet listing all sources used.

Food Merchandising

Directions:

Using all available resource, students will research the methods for merchandising red meat and explain when the methods were introduced, how they are used and their importance to the red meat industry. After completing their research, students should create a poster board presentation. Remind students to cite all sources used. Students should present their presentation to the class.