In Unit One, students are introduced to the big picture of labor market realities—which industries are growing, which are shrinking, and technology’s impact on the market. They interpret graphs and charts depicting recent employment trends in Food Production, and learn about a wide range of careers in the sector at various stages within the food system. They also learn about the history of industrialized Agriculture, how food gets from the farm to our plates.

Note: Food Production jobs, particularly those in Agriculture, are less abundant in New York City, compared to other industries. To account for this reality, the Food Production CareerKit uses a state-wide focus, employing information and examples across various regions of New York State.

1. **WHAT IS THE FOOD PRODUCTION SECTOR?**

An introduction to the field, students read a description of the Food Production sector, learning which careers and types of businesses are included, and the job outlook in this field.

2. **LABOR VOCABULARY:**

   **WHAT ARE WE TALKING ABOUT WHEN WE TALK ABOUT LABOR?**

Students learn the language of labor—careers, jobs, industries, sectors—what does it all mean?

2.1 • **Context Clues: Developing a Food Production Vocabulary**

   Students learn the language of the Food Production sector. Which terms are important to know for people who work in Food Production careers?

3. **INTERPRETING BAR GRAPHS:**

   **JOB LOSSES AND GAINS ACROSS SECTORS**

Students predict then analyze a graph showing the job losses and gains by sector and consider which fields are ones to watch.
3.1 • Interpreting Pie Charts: Where Are the Food Manufacturing Jobs?
Students learn about the distribution of Food Manufacturing jobs by subsectors, first predicting, then interpreting a pie chart to check their predictions.

4. • USING SENTENCE STEMS: A BRIEF HISTORY OF AGRICULTURE
Students practice using sentence stems to develop and answer questions about a text while learning how methods of food production have evolved throughout history to the present day.

5. • THE FOOD SYSTEM AND SUPPLY CHAIN SERIES
Students learn about the interconnectedness of the food system and supply chain, how these systems make feeding people possible and what careers are involved at each stage.

5.1 • Exploring the Food System
Students are introduced to the steps it takes to get food from the farm to our tables.

5.2 • The Supply Chain Journey of a New York Empire Apple
An extension from the previous lesson, students use their new knowledge of the food system to consider the supply chain involved in the lifespan of a New York Empire Apple.

5.3 • The Hands That Feed Us: Food Production Career Brainstorm
Students brainstorm careers that exist at the different stages of the food system, the duties these workers perform and some of the skills necessary for workers to have.

6. • HOW DOES TECHNOLOGY AFFECT TODAY’S LABOR MARKET?
Students learn how technology both positively and negatively impacts the workplace, including the number and type of jobs available, the job search process and the need to stay current on technology to remain an informed worker.

6.1 • Technology’s Impact on Food Production Employment
Students read an article about technological advances in the Food Production sector and how they impact employment in the sector, while practicing annotation.
7 · Employers Types in Food Production

In groups, students read about different types of Food Production employers, learn about real life examples of each type of employer, and then brainstorm new examples of these employer types based on their own lives, communities, and experience.

8 · TASC Essay Series: New for New York’s Workers

Students practice writing informational and argumentative essays, both of which appear on the TASC exam. Each essay prompt is modeled after TASC exam prompts and activities include various levels of scaffolding, including model essays for students to analyze, developing guiding questions for reading the texts, essay templates, and graphic organizers for essay planning.
What is the Food Production Sector?

Students read a description of the Food Production sector as a whole, learning about common careers in the sector.

PREP

For the purposes of this CareerKit, the Food Production sector is comprised of both Agriculture and Food Manufacturing jobs. Careers in these industries are sometimes listed together as part of a broader definition of the food system. However, at times, Agriculture is grouped with other industries that work with natural materials, such as Forestry or Hunting. Similarly, Food Production is sometimes grouped with other types of Manufacturing, such as textile, chemical or electronic production. When exploring these industries in databases and online, you may need to search in more than one category to find all careers relevant to the Food Production sector as defined here.


2 Once in Career Cruising, navigate to the Careers section. This is a resource for the teacher to learn background information about the Food Production sector.
3. Click on **Career Clusters**.

4. Navigate to the **Agriculture, Food & Natural Resources** cluster and read about the Food Production sector, under the Overview, Significant Careers and Wages & Trends tabs. Not all careers in this Career Cluster will be related to the production of food and not all Food Production careers can be found here. Some Food Manufacturing careers can be found in the **Manufacturing** Career Cluster. Some of these careers include those in Mechanical, Electrical, Packaging, Welding, and Refrigeration fields.
MATERIALS

- *Food Production Sector Profile* reading
- Chart paper and markers

DISCUSS

When you think of the Food Production sector, which careers come to mind?

› Farmers, bakers, winemakers, tortilla makers, people who operate, maintain, and/or repair machines in food processing factories, food safety inspectors.

What else?

› Delivery truck drivers, farmer’s market workers, food scientists, people who take care of animals on farms, food packagers/handlers.

Where do people in Food Production work?

› Farms (both rural and urban), farmer’s markets, food processing plants, warehouses, nonprofit organizations, schools, home kitchens, bakeries.

EXPLAIN

1. We’re going to learn a lot about working in the Food Production sector and also about being a customer making food choices. Let's begin by thinking about which careers and employment settings are included in the Food Production sector. Distribute *Food Production Sector Profile*.

2. Ask students to read the article, then turn to a partner and share two things they learned and one question they have.

3. Ask students to read the article a second time, and this time, annotate the article, underlining what seems most important and circling anything that is confusing.

4. When students are finished, ask volunteers to share what they thought were the most important ideas in the profile.

› *Some examples might include:* Food Production jobs include those who grow and raise food and also process food. There are good opportunities in New York for careers in Food Production. Many Food Production careers require physical labor and do not require a lot of formal education.

5. Ask students to share the parts of the article they found confusing, then assist students in clarifying those parts using context clues or their own existing knowledge. If questions remain, write them on the board or on a piece of chart paper, explaining that we will try to answer these questions more fully as we continue to learn more about careers in Food Production.
Ask students to recall some examples of places where Food Production workers are employed and list them on the board.

- Farms, ranches, dairies, greenhouses, nurseries, orchards, hatcheries, laboratories, food manufacturing factories and warehouses.

Divide the students into three groups and assign each group one of the Food Production employment settings. Try to select from their list the three you think might yield the most results for the brainstorm, such as farms, ranches, or Food Manufacturing factories.

Distribute chart paper and markers to each group. Each group should list as many careers as they can that work in one of those settings. They can include positions that do not directly work with food, such as managers, bookkeepers, or administrative assistants. They should write their lists on chart paper.

Post the chart paper on the walls and have students rotate between the groups, noting the careers included on each list.

Have students return to their seats and write 5-8 questions they have about working in the Food Production sector.
Food Production Sector Profile
Source: New York City Labor Market Information Service, City University of New York

**What is the Food Production Sector?**

Establishments in Food Production can be organized into two groups, those that:

1. **Grow crops and raise or catch animals for food, also known as agriculture.** The crops include fruits, vegetables and grains. The animals include fish, chicken, cows, goats and pigs.

2. **Manufacture food for sale,** such as flour, sugar, cookies, cakes, snack foods and pet food. This includes turning crops into ingredients that will be used in recipes, such as turning wheat into flour, or turning products such as flour into items that can be eaten, such as bread. Most Food Production workers are employed in Food Manufacturing factories.

In this sector, food products are mostly produced by one business and sold to another business. They are not usually sold directly to customers. Establishments such as restaurants, cafeterias and bars that prepare and serve food directly to customers are part of the Hospitality, Recreation and the Arts sector, and are not included in Food Production. Similarly, supermarkets and grocery stores that sell produce and food products directly to customers are part of the Retail sector, not Food Production.

**New York Industry Highlights**

- About 23%, or 7 million acres, of New York State’s land area is farmland. There are nearly 36,000 family farms. The State is a leading producer of food such as apples, maple syrup, cabbage, snap beans, grapes and pears. But dairy farms, which raise and tend to cows and produce milk, make up the largest segment of the state’s agricultural sector. The milk is used by food manufacturers in New York State, who make products such as yogurt and cheese.

- Across New York State in 2016, there were 2,579 establishments that grew crops and raised or caught animals for food. They employed 25,816 workers who had an average annual salary of $33,742.

- Across New York State in 2016, there were 2,312 establishments that manufactured food. They employed 55,644 workers who earned an average annual salary of $44,265.

- Establishments that manufacture food, grow crops and raise or catch animals for food are expected to increase employment in most regions of New York State through 2022.

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1 This figure includes a small number of establishments (197) involved in forestry and logging employing an average of 643 people in 2016.
**Jobs in the Sector**

Entry-level careers in Food Production do not generally require a lot of education beyond a high school diploma or equivalent, however certificate programs are required for some jobs and can help applicants stand out as well-qualified candidates. People who have experience in the restaurant industry or on a family farm are looked upon favorably as entry-level employees in this sector, since they are accustomed to physically challenging labor, and may have prior knowledge of food and farm safety procedures. Examples of entry-level careers in this sector include Packers and Packagers, Animal Farmworkers, Crop Farmworkers, Food Batchmakers, Food Inspectors, Bakers, and Packaging and Filling Machine Operators. The average annual salary of these workers in New York State is between $25,850 and $31,190. However, someone with mechanical or electrical certificates from a continuing education program can earn up to $50,000 annually as Maintenance and Repair workers or Industrial Machinery Mechanics, both in Agricultural and Food Production settings. There are also entry-level careers available in administration, sales and the transportation of agricultural and manufactured food products.

Mid-level careers in Food Production, including technical, managerial and administrative careers, are generally significantly higher paying than entry-level labor jobs and often require an Associate’s or a Bachelor’s degree and/or 3+ years of relevant work experience in a Food Production setting. People in mid-level careers in Food Production can be found working as Food and Agricultural Technicians, Managers of Agricultural or Food Manufacturing workers or settings, advanced Mechanical Technicians or in administrative roles such as Bookkeepers.

For people who are interested in pursuing a Bachelor’s or Master’s degree in a STEM (Science, Technology, Engineering and Math) field related to Food Production, there are high-level career opportunities in the sector that will continue to grow alongside the advancement of technology in the industry. Workers in high-level Food Production careers generally specialize in the science of food, crops, soil and animals or the design and engineering of Agricultural or Food Production equipment and technology. In addition, there are teaching and mentoring careers available in Agriculture and Food Studies education programs in schools, colleges and nonprofit and community-based organizations for those with significant higher-education and/or teaching credentials.

**Requirements and Skills**

People that work for establishments that grow crops and raise or catch animals for food usually work outdoors in all kinds of weather. They work in settings such as farms, ranches, dairies, greenhouses, nurseries, orchards, or hatcheries. Knowing a lot about the plants they grow or the animals they tend can help them do their job better. Farm laborers typically work with their hands and use tools such as wheelbarrows and shovels. They are physically active at work, bending, lifting and carrying heavy loads. Agricultural workers have to know a lot about and follow safety procedures because some workers are exposed to pesticides used to spray crops and machinery such as tractors, both of which can be dangerous if not used properly.

People who work for establishments that manufacture food for sale, usually work indoors in Food Manufacturing facilities. They have to be good at following instructions, so that
each batch of food they manufacture is the correct quality and quantity. They also have to understand and follow health and safety regulations to keep themselves safe, the equipment clean and the food safe for people to eat. For example, bakers work with ovens, large mixing machines and dough cutters that can cause injuries if not used properly because they are hot, heavy and sharp. Depending on the type of food being processed, workers may be required to wear masks, hairnets, or gloves to protect the product from possible contamination. Some workers wear ear protection to protect themselves against the noise of loud food processing machines. Many workers in this industry also lift and move heavy loads, such as bags full of ingredients, food or production equipment. They also spend a lot of time on their feet.

Workers in both areas of Food Production can work part or full-time and must be prepared to work early mornings, late evenings, weekends, and holidays. The amount they work may also depend on the season. For example, some Food Manufacturing facilities are only open a few months a year depending on the product they produce. They may operate 24 hours a day during these months requiring workers to work one of the various shifts, including overnight and early morning shifts. Farmworkers may also have seasonal schedules, meaning they work longer periods during planting or harvesting times or when animals must be sheltered and fed. They may not work at all during the winter and experience periods of unemployment between jobs. Some workers, such as migrant farmworkers, also move from location to location as crops ripen in different locations.
Labor Vocabulary: What Are We Talking About When We Talk About Labor?

Students learn and practice using terms common to the consideration of careers, laying the groundwork for future reading, discussions and career research.

PREP

- Become familiar with the terms on the Labor Terminology information sheet.

MATERIALS

- Labor Terminology information sheet
- Labor Terminology worksheet
- Labor Vocabulary Questions worksheet

EXPLAIN

1. Explain that you are going to talk about careers. Ask students what words come to mind when they think about careers. Discuss the meanings of these words.

2. Distribute the Labor Terminology worksheet and ask students to work in pairs to write what they think each of the terms means.

3. Discuss the definitions, using the Labor Terminology information sheet as a guide. Ask students where and when they have heard each term in the past, for example in the news, in readings for school, etc. Feel free to alter the language of the definitions to make them most meaningful to students. Ask students to take notes on the definitions.

4. Distribute the Labor Vocabulary Questions worksheet and ask students to complete it, in pairs during class or alone for homework.
# Labor Terminology

Read the term in the left-hand column. Then write what you think the term means in the center column. As the class discusses each definition, take notes and write the definition in the right-hand column.

<table>
<thead>
<tr>
<th>Term</th>
<th>What I Think it Means</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td></td>
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<tr>
<td>Occupation</td>
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<tr>
<td>Profession</td>
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<tr>
<td>Job</td>
<td></td>
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<tr>
<td>Employment</td>
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<tr>
<td>Career</td>
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<tr>
<td>Labor Force</td>
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</tbody>
</table>
Labor Terminology Information Sheet

**Industry**
An industry is a group of organizations that do the same type of work. It is a way of grouping employers. All of the employers in healthcare, for example, hospitals, nursing homes and physical therapy practices, provide services to keep people healthy. The word “sector” means the same thing as “industry.”

**Occupation**
An occupation is a group of jobs that involve performing the same type of activities. It is a way of grouping workers. For example, people who work as nursing assistants or home health aides all help people who are sick. You can do this type of work in different places for example, in a patient’s home, in a hospital, or in a nursing home.

**Profession**
A profession is a group of jobs that requires advanced degrees and qualifications, such as being a doctor, a nurse, a lawyer, or a teacher.

**Job**
A paid position with a particular employer. The job-holder is the employee.

**Employment**
A relationship between an employer and an employee in which the employee is paid to do work for the employer. Employment can be part-time or full-time. It also can be temporary or permanent.

**Career**
One job or a series of related jobs that a person has over a period of several years. For example, a person could be a teacher for a long time and have a career in education. Or he could have a job as a home health aide and after several years of experience and more education, he could advance to a job as a medical assistant. This would be a career in healthcare. This person has a career in healthcare. A person can have more than one career over a lifetime.

**Labor Force**
The United States labor force refers to all the people in this country who are 16 years of age or older who are either able to work, are looking for work or are working. Labor force can also mean all of the people who work for a particular employer or in a specific city, for example, Target’s labor force or New York City’s labor force. Workforce and labor force mean the same thing.

By Lesley Hirsch and Alison Richardson, The New York City Labor Market Information Service of the CUNY Graduate Center, 2015
Labor Vocabulary Questions

Use the vocabulary definitions from the Labor Terminology worksheet to answer the following questions.

1. What is the difference between a job and a profession?

2. Does a person with a profession likely earn more than a person with a job? Why or why not?

3. For each of the following, circle the correct definition:
   1. An employee is a worker / boss
   2. An employer is a worker / boss

   Is the boss always the same as the employer? Why or why not?

4. Healthcare, retail and construction are examples of industry sectors. Give an example of a career within each of these industry sectors:
   a. Healthcare
   b. Retail
   c. Construction

5. What is one industry that you might be interested in working in and why?
Developing a Food Production Vocabulary

Students use context clues to determine the meaning of Food Production vocabulary, then answer questions and write original sentences using the new terms.

PREP

- Be prepared to explain the vocabulary terms listed on the definitions handout.

Note: It can be helpful to prepare at least one additional sample sentence for each vocabulary word to offer students during the clarifying discussion.

MATERIALS

- Developing a Food Production Vocabulary worksheet
- Food Production Vocabulary Definitions handout

EXPLAIN

1. Ask students to brainstorm words that relate to Food Production. Remind students that the Food Production sector includes both the growing/raising of food and the making/manufacturing of food for consumption. Write student responses on the board as they brainstorm.
   › Farmer, food scientist, ingredients, soil, nutrition, calories, organic, natural.

2. Food Production has changed in the past 20 years, mostly due to increased use of technology in the Food Production process. Today we’re going to learn some vocabulary words that Food Production professionals often use. Distribute the Developing a Food Production Vocabulary worksheet and ask students to work in pairs to complete it.

3. When students are finished, have them discuss their answers as a class. Clarify students’ understanding of the terms and offer additional information from the Food Production Vocabulary Definitions and/or sample sentences that you’ve prepared.

4. After the discussion, distribute the Food Production Vocabulary Definitions to students and clarify any remaining questions.

5. Ask students to write one original sentence for each of the vocabulary words. Each sentence should include the vocabulary word and enough detail to demonstrate their understanding of the term.
Developing a Food Production Vocabulary

For each word, read the sentence and try to guess the meaning of the underlined vocabulary word from the context. Explain the meaning in your own words.

1. **Agriculture**
   With more than 36,000 farms covering over 7 million acres of land, New York State is one of America’s leading states in **agriculture**.
   Meaning of the word: ______________________________________________________
   ______________________________________________________

2. **Food Processing**
   Frozen and canned vegetables would not be available to us in a supermarket if it weren’t for **food processing** companies.
   Meaning of the word: ______________________________________________________
   ______________________________________________________

3. **Organic**
   **Organic** food has become popular in recent years, as more people have become informed about the dangers of pesticides and hormones used in some farming practices.
   Meaning of the word: ______________________________________________________
   ______________________________________________________

4. **Sustainable**
   This well is not a **sustainable** source of water because eventually it will dry up.
   Meaning of the word: ______________________________________________________
   ______________________________________________________
**5 Preservative**

Aside from fresh fruits and vegetables which can be kept fresh by refrigeration alone, most foods we eat contain some type of **preservative**.

Meaning of the word: ____________________________


**6 Additive**

Many popular sodas and sports drinks use **additives** such as dyes to make the drinks bright colors.

Meaning of the word: ____________________________


**7 Automation**

Many people are worried that **automation** in Food Manufacturing factories will decrease the amount of jobs available for human workers.

Meaning of the word: ____________________________


**8 Quality Control**

**Quality control** is one of the most important departments of any manufacturing business. Without it, unsafe products could be sold to customers causing the potential for harm.

Meaning of the word: ____________________________
Food Production Vocabulary Definitions

1. **Agriculture**
   The science, art, and business of farming: cultivating land, raising crops, and feeding, breeding, and raising livestock.

2. **Food processing**
   Any deliberate change in a food that occurs before it’s available for us to eat. It can be as simple as freezing or drying food to preserve nutrients and freshness, or as complex as formulating a frozen meal with the right balance of nutrients and ingredients.

3. **Organic**
   Grown or raised without the use of artificial chemicals.

4. **Sustainable**
   Able to be used without being completely used up or destroyed.

   Sustainable agriculture is the production of food, fiber, or other plant or animal products using farming techniques that protect the environment, public health, human communities, and animal welfare.

5. **Preservative**
   Natural or man-made chemicals that are added to foods to keep them from spoiling and to protect us from foodborne illnesses (food poisoning).

6. **Additive**
   Something (such as a chemical) that is added in small amounts to a substance.

   Food additives are added to food to preserve flavor or enhance its taste, appearance, or other qualities. Some food additives are harmless, while others are not good for our health.

7. **Automation**
   The method of making a machine, a process, or a system work without being directly controlled by a person.

8. **Quality Control**
   Quality control is a process through which a business seeks to ensure that product quality is maintained or improved and manufacturing errors are reduced or eliminated.
Job Losses and Gains Across Sectors*

Students predict, then read a graph detailing how various industries fared in New York City* in 2004 and 2014.

PREP

- Read the graph, *Job Losses and Gains*

MATERIALS

- *Job Losses and Gains Graph*
- *Prediction Guide: Rising and Falling Industries* worksheet

EXPLAIN

1 Before planning a career, it helps to know which industries are growing, which are shrinking, and which are staying level. At any point in time, the number of jobs in some industries is increasing, and in others, decreasing.

First off, what do we mean by industry?

› An *industry* is a collection of related jobs. For example, what industry a substance abuse counselor and a sanitation collector belong to? *Food Production.*

If a particular industry is growing, what does that mean for job seekers—people looking for jobs?

› *There are jobs that need to be filled.*

If it is shrinking, what happens to jobs?

› *There are fewer jobs. Some people might lose their jobs and there won’t be many new openings.*

Which industries do you think are growing in New York City* right now?

2 Distribute the prediction guide, one per pair, and explain that in partners, students are going to predict which industries increased in 2014, which decreased and which remained level.

3 When students are finished, distribute *Job Losses and Gains Graph* and ask them to read it carefully.

* Regional adaptations can be found at www.collectedny.org
**Prediction Guide: Rising and Falling Industries**

With a partner, decide whether you think each of the industries below increased, decreased or remained level between 2004 and 2014, marking a check in the corresponding boxes below. Discuss the reasons for your choices.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Increased</th>
<th>Decreased</th>
<th>Stayed Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Production</td>
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<tr>
<td>Public Administration</td>
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<tr>
<td>Financial Services</td>
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<td>Information</td>
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<td></td>
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<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other Services</td>
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</tr>
<tr>
<td>Trade, Transportation and Utilities</td>
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<tr>
<td>Professional and Business Services</td>
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<tr>
<td>Leisure and Hospitality</td>
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<td></td>
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<tr>
<td>Education and Health</td>
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</table>
### Department of Labor and CareerKit Sectors

The data on labor statistics included in the CareerKits comes from the Department of Labor, which collects information on hundreds of jobs and businesses. The table below describes the intersection of Department of Labor and CareerKit sectors, which are categorized similarly in many cases, though some differences exist. When considering which sectors to study with students based on the availability of local jobs, use this table alongside the Job Losses and Gains graph.

<table>
<thead>
<tr>
<th>U. S. DEPARTMENT OF LABOR SECTORS, REFLECTED IN THE JOB LOSSES AND GAINS GRAPH</th>
<th>CAREERKIT LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction</strong></td>
<td>Organizations that build things. This includes organizations that build houses, office buildings, sewer pipes, power lines, highways and bridges. It includes organizations that employ people with general skills such as managing a building project and specialty skills such as carpenters, electricians and plumbers.</td>
</tr>
<tr>
<td><strong>Food Production</strong></td>
<td>The CareerKits divide Food Production into two sectors: Food Production, which includes organizations that make products such as clothing, machines, electronics and cars, and Food Production, which includes organizations that grow, raise and produce products such as apples, bacon, yogurt and milk.</td>
</tr>
<tr>
<td><strong>Mining and Logging</strong></td>
<td>Organizations that prepare natural resources for use. Some examples of natural resources are coal, metals, minerals, oil, gas and trees.</td>
</tr>
<tr>
<td><strong>Education, Healthcare and Social Assistance</strong></td>
<td>Organizations that offer childcare, education and training as well as healthcare and social assistance. This includes daycare centers, schools, colleges, hospitals, shelters and soup kitchens.</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>Sometimes called “public administration” or “the public sector,” the Government sector includes local, state, and federal agencies. This includes organizations that are in charge of public housing, trash collection and national security as well as prisons, the police and the fire department, among others.</td>
</tr>
<tr>
<td><strong>Entertainment, Food and Hospitality</strong></td>
<td>Organizations that provide art, fun, food and places to stay overnight. This includes organizations involved in theater, dance and music, as well as museums, parks, bowling alleys, restaurants and hotels.</td>
</tr>
<tr>
<td><strong>Professional and Administrative Services</strong></td>
<td>Organizations that provide support services to other organizations. This includes services such as accounting, advertising, billing, security, mailing packages and cleaning.</td>
</tr>
<tr>
<td><strong>Banking, Insurance and Real Estate</strong></td>
<td>This sector includes organizations that deal with money. This includes banks as well as insurance and mortgage companies. It also includes organizations that rent property, vehicles or machinery, such as buildings, cars, refrigerators, televisions and bulldozers.</td>
</tr>
</tbody>
</table>

Continued…
### Information
Organizations involved in producing, processing and distributing different types of information. This includes publishers of books, newspapers and computer software as well as producers of movies, music, radio and television programs.

Some of these careers are included in the Technology CareerKit.

### Trade, Transportation and Utilities
The CareerKits divide this sector into Retail and Transportation & Warehousing. Retail includes businesses that sell products such as clothing, cars, telephones and furniture. Transportation & Warehousing includes airlines, taxi and limousine companies, shipping and trucking. Some utilities are addressed in other sectors, such as phone/internet in Technology and others, and water and sewage treatment are included in the Food Production CareerKits.

<table>
<thead>
<tr>
<th>Transportation and Warehousing</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Food Production</td>
</tr>
</tbody>
</table>

### Other
This catchall includes organizations that do things not captured by the other sectors. This sector includes car, computer and shoe repair shops, beauty salons, laundromats, parking lots and religious organizations.

| Food Production |
Job Losses and Gains Graph: How Did You Do?*

Read the graph below* noting the employment numbers for each industry sector in 2004 and 2014.

* New York State regional graphs can be found at www.collectedny.org
DISCUSSION

Before we think about how the data compares to your predictions, let’s discuss how to read this graph.

- According to the title, what is this graph about?
- What do the words going down the left side of the page tell you?
- What do the numbers across the bottom of the page tell you?
- What do the dark blue and light blue lines represent?
- What do the heavy black vertical lines represent?
- What do the fine black vertical lines represent?
- Where on this graph is the key? What does it tell you?
- Why are there two years shown on this graph?
- What does it mean when a dark blue line is longer than its partner light blue line?
- What does it mean when a light blue line is longer than its partner dark blue line?
- The heavy black vertical lines represent an increase of 200,000 jobs. How much of an increase does each fine black vertical line represent? How did you arrive at that answer?
- Ask students to find the corresponding industry sectors from the graph listed on their worksheets and discuss how these numbers compare to their predictions.

PAIR ACTIVITY

In pairs, write three statements about the graph, two that are true and one that isn’t. When you are finished, share with another pair. Each pair should determine which of the other pair’s statements are true and which is false.

FOLLOW-UP DISCUSSION

1. Which sector showed the most job growth from 2004 to 2014? How do you know?
2. Which sector showed the least job growth from 2004 to 2014? How do you know?
3. Why are the industries listed in this order?
4. How is the information in this graph by relevant to a job-seeker?
Interpreting Pie Charts: Where Are the Food Manufacturing Jobs?

Students learn about the distribution of Food Manufacturing jobs by subsectors, first predicting, then interpreting a pie chart to check their predictions.

PREP

- Read the pie chart, *Food Manufacturing Jobs by Subsector*.

NOTE: *This activity presumes that students have experience reading pie charts and calculating percents.*

MATERIALS

- *Prediction Guide: Where Are the U. S. Food Manufacturing Jobs?* worksheet
- *U. S. Food Manufacturing Jobs by Subsector* pie chart

EXPLAIN

1. The Food Production sector is made up of Agricultural businesses that grow plants and raise animals to be used for food, and Food Manufacturing businesses that prepare, process, and/or package ingredients into food products to be sold for consumption. Food Manufacturing jobs are often grouped according to the kind of product they make, for example, meat and poultry, dairy, or beverages. These categories are called **subsectors**. The duties and responsibilities of a Food Manufacturing job are different depending on the food product the company manufactures. Food Manufacturing employees often take great pride in the product they create for people and their families. While thinking about what kind of Food Manufacturing job you might be interested in, it helps to know in which subsectors jobs have been plentiful. In this activity, you will work in pairs to practice reading a pie chart and to find out which Food Manufacturing subsectors have had the most jobs in recent years,

2. Distribute the *Prediction Guide: Where Are the U. S. Food Manufacturing Jobs?* worksheet, one per pair, and explain that with their partner, students are going to predict which subsectors of Food Manufacturing had the most jobs in 2015. Explain to students that often labor statistics take a long time to calculate and analyze. This particular labor information is provided by the U.S. government and 2015 is the most recent year that is available to the
public. Looking at the data for recent years can help us get a sense of where the most jobs are now, though it is subject to change. Review the instructions as a class, including an explanation of the relationship between parts per 100 and percents.

3 Circulate to help students make percent predictions and label the pie chart. Alternately, students can simply predict which areas will have the greatest and least jobs in the future.

4 After students have created their pie charts, distribute the *U. S. Food Manufacturing Jobs by Subsector* pie chart. Have students correct their answers using the pie chart, emphasizing that the goal was not only to guess correctly, but also to learn something they did not know about Food Manufacturing jobs.

**DISCUSS**

- **Which areas had the most jobs? Which areas had the least jobs? Why do you think that is?**

- **What does the text below the chart tell you? How does it relate to the pie chart? What can you learn from it?**
  - *Where the information is from and how many businesses the information includes. You can learn the source of the information and that it does not include all Food Manufacturing businesses in the country.*

- **How can information like this help you with your education or career?**
  - *The pie chart shows which fields have had the most jobs in the recent past. This can help you narrow down your search for the kinds of Food Manufacturing jobs you might be interested in.*

- **What are some ways you might be able to find out current information about where the most Food Manufacturing jobs are and where they might be in the future?**
  - *Talk to people who currently work in the Food Manufacturing industry. Call a Food Manufacturing professional association or your city/region/state’s economic development bureau.*
Section 3.1

Prediction Guide: Where Are the U. S. Food Manufacturing Jobs?

Which subsectors of Food Manufacturing do you think have recently had the largest percentage of jobs? Which had the smallest? Make a prediction by labeling the graph using the list of possible subsectors, then answer the questions below in numbers and percents.

In 2015, the U.S. Food Manufacturing sector employed more than 1.5 million people, or just over 1 percent of all U.S. nonfarm employment. In over 34,000 food manufacturing plants located throughout the country, these employees were engaged in transforming raw agricultural materials into products for intermediate or final consumption.

According to your prediction:

1. Out of every 100 new Food Manufacturing jobs, how many were Meat and Poultry jobs? _____ (______%)

2. Out of every 100 new Food Manufacturing jobs, how many were Animal Food jobs? _____ (______%)

3. Out of every 100 new Food Manufacturing jobs, how many were Grain and Oilseed jobs? _____ (______%)

4. Out of every 100 new Food Manufacturing jobs, how many were Beverage jobs? _____ (______%)

Source: USDA, Economic Research Service using data from U.S. Census Bureau, 2015 Annual Survey of Manufactures
In 2015, the U.S. Food Manufacturing sector employed more than 1.5 million people, or just over 1 percent of all U.S. nonfarm employment. In over 34,000 food manufacturing plants located throughout the country, these employees were engaged in transforming raw agricultural materials into products for intermediate or final consumption. Meat and poultry plants employed the largest percentage of Food Manufacturing workers, followed by bakeries, and fruit and vegetable processing plants.

Using Sentence Stems:
A Brief History of Agriculture

Students practice using sentence stems to develop and answer questions about a text while learning how methods of food production have evolved throughout history to the present day.

PREP

- Read *A Short History of Agriculture* article
- Be prepared to explain vocabulary terms: *mechanization, subsistence*

MATERIALS

- *Farms Past and Present* handout
- *A Brief History of Agriculture* article
- *Write Your Own Quiz: Agricultural History* worksheet
- A computer with projector is useful but not necessary

EXPLAIN

1. Project images from or distribute copies of *Farms Past and Present*. Ask students to compare these images of typical U.S. farms from the 19th and 21st centuries. What do they notice? What is different? What is similar? Ask students to share their observations with the class.

   - *Note that the 21st century farm is bigger, more mechanized, more specialized (one crop).*

2. After students share their observations, ask volunteers to share questions they have after viewing the images.

3. Explain that many of the differences in the farms are due to the mechanization (or, use of machines) of Agriculture and Food Production, a process that has transformed the way most of the world’s food is produced. In order to understand how the Food Production sector works, what careers are available, and how we interact with it as consumers of food, it is important to understand its history.
Lesson Guide

Section 4

NOTE
For guidance on teaching annotation, see “How to Teach Annotation” in the User’s Guide, found at www.tinyurl.com/cunycareerkits.

1. Distribute A Brief History of Agriculture article. Ask students to read and annotate the article in pairs, marking anything they find interesting, important, surprising or confusing. They can circle any unfamiliar words and write any questions they have in the margin.

2. When students are finished, distribute Write Your Own Quiz: Agricultural History handout and ask students to use information from the text to develop questions for a quiz their partner will take. Remind students that the questions must be able to be answered by reading the text alone and that their goal is to write questions that will challenge their partner.

3. When students are finished, ask them to exchange papers and answer each other’s questions.

4. When students are finished, ask them to exchange papers with their partners and correct their partner’s answers.

5. When students are finished, facilitate a brief discussion in which you pose the following and any additional questions you or the students might have.

   - Did you learn anything new about Agriculture from this activity?
   - Did you learn anything that was interesting or surprising?
   - What was it like to write your own quizzes? What was it like to answer your partner’s questions?
   - What questions do you still have about this reading?
   - How do you think this new knowledge about the history of Agriculture might help us better understand careers in the Food Production industry?
Section 4

Farms Past and Present

Top photo: http://slideplayer.com/slide/10804079/38/images/19/The+goal+of+yeoman+farms+was+economic+independence.jpg
Bottom photo: https://upload.wikimedia.org/wikipedia/commons/e/e1/John_Deere_combine_and_tractor_at_work.jpg
A village woman shields herself with a rain cover made of palm leaves as she sows a rice paddy field near Bhubaneshwar, India, in this August 2011 photo.
https://newsela.com/read/lib-agriculture-overview/id/32531

**A Brief History of Agriculture**

By Encyclopaedia Britannica, adapted by Newsela staff
Adapted from https://newsela.com/read/lib-agriculture-overview/id/32531 and https://newsela.com/read/lib-agriculture-history/id/32537

When humans gave up wandering and permanently settled in places, agriculture was born. Agriculture is another word for farming. The word agriculture is Latin for “cultivation of the fields.” Cultivation is the process of preparing land for the use of growing crops. It includes raising both plants and animals. It made things much easier for many people, so it became the preferred way of life. The people who work at agriculture came to be called farmers.

Society was different before there were farmers. Nearly everybody spent a lot of time gathering plants for food, hunting or fishing. Sometimes there was plenty of food. Other times there was very little. Slowly, people discovered the advantages of caring for animals in flocks and herds. They learned to grow plants for food, medicine, clothing and shelter in areas set aside for that purpose.

Agriculture meant fewer people were needed to grow food and other resources. Some people were free to do other things besides farming and hunting. Many of them chose to live in towns and cities. They made a variety of goods, which they
could trade with the farmers for food. This began the division of labor into farming and industry. This partnership still exists throughout the world.

**The Changing Farming Industry**

Today, about 1 in 5 people is a farmer around the world. Most of them only raise enough plants and animals to provide for their families, otherwise known as subsistence farming. They usually have little or nothing left over to sell or trade for other goods. Subsistence farming is common in crowded, poorer countries.

In wealthier countries such as the United States, Australia and Canada, there are many larger farms in addition to small, family farms. Many are run by large companies using the latest technology. Such farms are the biggest agricultural producers. These large farms usually specialize in one crop and often are run by giant corporations. The goal in agriculture has almost always been increased production with fewer workers.

In the early 1900s, people and animals did the work on American farms. Today, machines accomplish in hours what took many of those people and animals days to complete. There are still family farms, but there are fewer every year. There are also small-scale agricultural systems in many less-developed countries, but the trend almost everywhere is toward larger farms that provide more products and for less money.

Sustainable agriculture uses farming methods that protect the environment, people and animals. It has become important in many countries.

**Mechanization**

Agriculture developed more rapidly in the 1900s than in all previous history. By the year 2000, global agricultural production was 1.6 times greater than it was in 1950. Much of this growth was due to improved breeding methods. Mechanization, or the use of machines, on the farm also played a large role.

The full influence of mechanization began shortly after 1850. That was when a variety of machines came rapidly into use. Inventors in Europe and the United States produced machines that separated grain. Improvements were made in plows and harvesting machines were built. The first successful engine powered by gasoline was developed.
Equipment has now been developed for almost every operation on the farm. In the United States, many crops are planted and harvested by machine. Large devices shake fruit and nuts from trees. With the help of computers, equipment is now available to put just the right amount of fertilizer in just the right place. Machines can now count out and plant just the right number of seeds for a row.

**The Challenge of Feeding The World**

There are more than 820 million people in the world who do not get enough to eat. Most live in Africa, south Asia and Latin America. Producing enough food to keep up with the growing global population is a big challenge. By 2030, an additional 2 billion people will be living on the planet. They will need to be fed, using the same resources we have now.

In 2015, nearly 13 percent of Americans didn’t have enough food at some time during the year. Distributing food from regions that have extra to areas that do not have enough seems an ideal solution. It is more difficult than it seems, though. The extras are often given to people in need within the countries that produce them. Crops are sold to other countries for profit and transporting them can be very expensive.
Write Your Own Quiz: Agricultural History

Use the sentence stems below to develop questions about the article, *A Brief History of Agriculture*. The goal is to make a quiz to test your classmate’s knowledge. Do not write the answers to the questions. That will be your partner’s job.

1. What does agriculture ____________________________?

2. When did agriculture ____________________________?

3. In your own words, explain ____________________________.

4. How is ____________________________ different than ____________________________?
Section 4

5. How many ________________________________?

6. Why do you think ________________________________?

7. How do you think ______________________________ affects ______________________________?

8. How is ______________________________ similar to ______________________________?

9. How has ______________________________ changed agriculture?
The Food System and Supply Chain Series

Students learn about the interconnectedness of the food system and supply chain, how they make feeding people possible and what careers are involved at each stage.

**ACTIVITIES IN THIS SERIES**

- **5.1 • Exploring the Food System**
- **5.2 • The Supply Chain Journey of a New York Empire Apple**
- **5.3 • The Hands That Feed Us: Food Production Career Brainstorm**
Exploring the Food System

As a way to think about the interconnectedness of the food system, students discuss one meal and how the ingredients in that meal ended up on a plate. In groups, they participate in a gallery walk reading brief descriptions about each stage of the food system. Finally, groups work together to put the stages of the food system in order from farm to table. As an optional extension activity, groups can create diagrams of the food system together.

This activity was adapted from the following sources:
http://thefoodproject.org/sites/default/files/Your%20Favorite%20Meal.pdf
https://s3.amazonaws.com/assets.cce.cornell.edu/attachments/18532/What-is-a-Food-System.pdf?1479081741

PREP

- Read about and become familiar with the stages in the food system as described below in Stages of the Food System teacher resource.
- Write out or print and attach the descriptions of the food system stages, with each stage on its own piece of chart paper.

TEACHER RESOURCE

Stages of the Food System

Growing/Raising involves many of the activities that take place on a farm, at an orchard, or in bodies of water. It requires natural resources, such as soil, water, climate, seeds, and human labor and human-made resources such as machinery, fuel, fertilizers and pesticides. All of these resources are known as the “input” that makes growing and raising possible. A farmer owns or rents land to plant crops or tend animals. The inputs required vary depending on what is being grown or raised and the type of agricultural system being used. For example, many of the pesticides and fertilizers common in most agriculture are not allowed in organic agriculture.

Harvest is the process of gathering crops that are grown during the growing stage of the food system. Some crops are harvested by workers. Harvesting crops by hand is very hard labor. Other fruits and vegetables are harvested...
with machines. Mechanical harvesters that require fuel to run harvest most grain and cereal crops. Depending on what is harvested, different resources may be needed. Some of the inputs required for this step in the system are human labor, fuel, mechanical equipment, and packing materials.

**Storage** refers to keeping a supply of a certain crop for future use. Storage is required for all crops that are not sold soon after harvest. Different crops can be stored for different lengths of time. Most fruits and vegetables are highly perishable, meaning they will go bad quickly, unless processed or preserved so that they stay edible. Exceptions to this include apples, root vegetables (potatoes, yams, carrots, turnips, rutabagas, parsnips), bulbs (onions, shallots, garlic), and cabbages (red and green), all of which store well for extended periods of time, if the proper temperature and humidity are maintained. Grains and cereals store well for years without energy input, such as refrigeration. Apples are often kept in controlled atmospheres to make them available many months after they are harvested. Storage is also required of food after it is sold. For example, we store food on a daily basis in our refrigerators. The inputs required for storage include energy to maintain the cool environment, packaging, buildings and land.

**Distribution/Transportation** is the process of dividing into portions, packaging, and delivering food to various places. Farm products can be taken from where they were grown and delivered to supermarkets, other food stores, or farmers’ markets for sale as a whole fresh product—like many fruits and vegetables. Farm products can also be transported to a site where they will be transformed in some way, combined with other ingredients, processed and made into food products, packaged and then distributed. Most of what we find in grocery stores today has been transported great distances and has undergone some degree of processing. We currently transport food by truck, train, boat, and plane. A few foods (tomatoes and bananas primarily) that will be transported a significant distance are usually harvested before they are fully ripe so that they will withstand the bumps along the way.

**Transformation/Processing** involves changes made to a crop. Much of the food we eat on a regular basis is transformed in some way before we eat it. Think of the bread on your sandwich, the juice you had with breakfast, tomato sauce and the pasta it covers, or the cheese you had on a cracker (and the cracker itself). During processing, food is changed in some way to enhance flavor, make it last longer than the processed raw foods it came from, or create new products altogether. There are many different ways to process a food. Turning fresh strawberries into jam, making juice from fresh apples, pre-cutting and cooking potatoes for frozen French fries are all ways to process food. It may include drying, cooking, freezing and canning, or adding
preservatives to make it stay fresh for a long time. Processing may make a food more nutritional, and in many cases may decrease nutritional content. Depending on the type of food and processing technique, a variety of inputs are necessary for this step in the food system. They include labor, machinery, water, fuel for cooking and freezing, sugar, and preservatives.

**Packaging** is a way to protect food from spoilage on its way to our grocery stores. Almost everything we purchase at the grocery store is packaged in some way. Strawberries are put into plastic quart containers, bread is packaged in plastic or paper bags, pasta is kept in cardboard boxes, etc. Packaging is also a way to divide up the goods in a standard way so that people can purchase a known quantity quickly. It can provide a place for advertisement of the goods contained within. Some of the inputs necessary to make packaging are paper, plastic, cardboard, aluminum, glass, ink, and machinery.

**Marketing, Sales and Purchasing** is the process of figuring out the consumer’s wants or needs, advertising and selling the product, and having it bought by consumers. A significant portion of the money we spend on each food item goes to marketing teams who determine what people want from the food they eat. Marketers determine how to make food appealing to consumers. The inputs for this step in the system are people’s labor and time, in addition to advertising and packaging.

**Disposing and Composting** is the stage in which food that is not eaten is thrown away or used for another purpose. Most food waste ends up in the trash, taking up room in landfills. Typically, sanitation workers pick up our trash and take it to the landfills. Disposing of trash in this way can be dangerous for the environment because we are running out of landfill space and also, some food waste releases harmful gases into the atmosphere when they break down over time. Composting, on the other hand, is a natural process of recycling organic material such as food scraps and leaves into a rich natural helper for soil that gardeners fondly nickname “Black Gold” because of its power to assist the healthy growth of plants and crops. Composting is also a way to reduce the amount of trash going to the landfill. It is amazing to think of the amount of food waste that goes into trash bags, but it can be turned into free fertilizer when used properly as compost. It’s easy to compost all the food waste in your own home and either use it to grow your own food or many cities, such as New York City, now have free compost pick-up along with regular trash and recycling programs. The inputs of this stage are human labor, land, trucks, and tools/materials necessary to pick up and dispose of food waste. Examples of outputs at this stage of the food system are compost, fertilizer, and gases.
Section 5.1

MATERIALS

- *Pasta Salad with Vegetables* image
- *Stages of the Food System* teacher resource
- Chart paper and markers
- Post-its
- This activity is best with a computer and projector

EXPLAIN

1. Project or distribute copies of *Pasta Salad with Vegetables* image.
   - **Say:** Describe what you see here. Encourage students to be as thorough as possible, and to make guesses about ingredients if they’re not sure.
   - A plate of pasta with spinach, red bell peppers, dried tomatoes, some kind of sauce, shaved cheese.

2. Are any of the ingredients in this meal made up of other ingredients?
   - The pasta, sauce and cheese.

3. **Ask students:** Which of these ingredients comes from a farm?
   - Ask them to think about what they know about this ingredient.
     - Where might it come from?
     - What do they think this place looks like?
     - Where is it?
     - Who works on this farm?
     - Describe some images of farmers you have seen, in real life, movies or television.

   Write down descriptions of farms and farmers on the chart paper or the board under the headings “Farms” and “Farmers.”

<table>
<thead>
<tr>
<th>FARMS</th>
<th>FARMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Debrief: Where do these ideas about farms, farmers and farm workers come from? Are these impressions based on first-hand experience, TV, movies, etc.? Do we have positive or negative impressions of farms, farmers and farming? Where do these ideas come from?

The farm or the field is where our food begins its journey to us, but there are many other steps involved in the process of getting food from the farm to our tables. And all of these steps are connected to each other. This is called the food system. Today we are going to learn about the different stages of the food system.

- How does food get from a farm to our table?
- Can you think of what some of the other stages our food has to go through after it leaves the farm and before it arrives on our tables to eat?

Write the students’ brainstorm on the board or on chart paper.

(cleaned and bundled, put into packages, transported to a warehouse or a store, sold by a store or online retailer, prepared at home for eating. (Answers will vary and students do not need to be able to come up with them all.)

Before we learn more about the different stages in the food system, let’s talk about what a system is. A system is a group of connected parts that function together as a complex, unified whole. In a system, a change in one part of a system has an impact, either directly or indirectly, on the other parts of that system. Systems generally need “inputs” to function and they generally produce “outputs.” For example, the part of the food system that grows the food requires the inputs of seeds, soil, water, sunshine, fertilizer/compost, human work, machinery and energy to run the machinery. The outputs are the crops that are produced as food for humans, and waste that may be put back into the soil or disposed of in another way.

Note: Make sure students understand the concepts of inputs and outputs in this particular context before moving on. The descriptions of stages of the food systems use this language, so it will be important for students to have a firm understanding of the concepts.

Now we’re going to learn more about the different stages in the food system and try to put them in the order they happen from farm to table. Ask students to form groups of 3 or 4, depending on class size. While groups are forming, hang chart paper with the stages of the food system around the classroom. Mix up the order so that students will need to use their reasoning skills to determine the correct order of stages that move products from farm to table.
8 Explain that each group will process through each station to read about the different stages of the food system. This is known as a gallery walk. The goal is to work together to understand what happens at each stage of the food system and ultimately put the stages of the food system in the order in which they occur from the farm to our tables. As they read, they should take notes about what they read in order to discuss each stage and determine the order of the stages with their groups.

9 After reading and taking notes, students should discuss the main idea of each reading. When students are satisfied they have learned all they need to know from the gallery walk, they may gather as a group to discuss what they think the order is.

10 While students do the gallery walk, the teacher should distribute post-its (8 per group) to each group’s seated area. Then the teacher should write the word FARM on far left end of the board and TABLE on the far right end.

11 On the post-its at your table write down each stage of the food system—one stage on each post-it.

12 One person from each group should come to the board and place the post-its in the order in which the stages happen starting at FARM and ending at TABLE. Groups or the teacher might want to label their continuum on the board (for example, Group 1, Group 2, etc.), so everyone knows which work belongs to which group.

13 Discuss the farm to table timelines on the board. Ask: Do you notice any differences in how the groups chose to order the stages of the food system? If applicable, discuss as a class possible reasons for ordering the stages differently and ask students to use examples from the descriptions on the chart paper to support their opinion. Ask students if they can think of any stages that could happen more than once within the farm to table journey of a food product.

Yes, distribution, storage, marketing/promotion/sales.
Project or write the following John Muir quote on the board:

“When we try to pick out anything by itself, we find it hitched to everything else in the universe.”
- John Muir, Founder of the Sierra Club, an organization that protects national parks

Ask students to find a partner and discuss:
• What did Muir mean?
• Do you agree with Muir’s statement?
• How does it relate to the food system?
• What is one example of how food is connected to “everything else”?

Ask volunteers to share their partner’s responses with the class. Ultimately emphasize that the food system illustrates Muir’s quote because it contains many interconnected parts that all affect each other.

OPTIONAL EXTENSION ACTIVITY:
• Groups can work together to create a visual representation or diagram of the stages of the food system using chart paper. Encourage students to be creative, using text and illustration to depict the interconnectedness of the food system. The diagrams can be hung in the classroom and used as references throughout the exploration of the Food Production sector.
Section 5.1

Pasta Salad with Vegetables

Photo © Robyn Mackenzie / Bigstock
The Supply Chain Journey of a New York Empire Apple

An extension from the previous lesson, students use their new knowledge of the food system to consider the supply chain involved in the lifespan of a New York Empire Apple. *It is necessary to have done the previous lesson in order for students to be able to successfully complete this lesson.

This activity is adapted from The Foodspan Curriculum from the Johns Hopkins Center for a Livable Future. Additional activities can be found at http://www.foodspanlearning.org/

PREP

- Cut out Empire Apple Supply Chain Cards.
- Determine how many groups you will have, depending on class size. Make one set of cards for each group. There should be 12 cards in each set.

MATERIALS

- Empire Apple Supply Chain Cards
- Empire Apple Supply Chain handout

EXPLAIN

1. Now we are going to use our new knowledge of the stages of the food system to learn about how one specific food item moves through our food system’s supply chain. What do you think a supply chain is?

   A series of processes involved in producing and distributing any product. In Food Production, the supply chain follows the stages of the food system.

2. Divide students into groups and distribute one set of Empire Apple Supply Chain Cards to each group.

3. Ask each group to line up the cards in what they think is the correct order of the journey of an Empire Apple from farm to table. Explain to students that they might notice a few extra steps included here that are part of a stage of the food system. The supply chain for different food products can vary and each stage often includes many different steps. Here we are getting a closer look at those steps for the Empire Apple.
Have a volunteer from a few groups explain how their group ordered the steps. Distribute the *Empire Apple Supply Chain* handout and discuss each of the steps as a class.

Ask students to compare their lists to the handout and discuss:

A. What is different? Why?
B. What surprised you about the completed chart?

Have students write a journal entry in response to the prompts:

- How does the food system affect me?
- Why does the food system matter to me?
- How can I use this new information in my own life?

If time allows, have students share their responses.
### Empire Apple Supply Chain Cards

<table>
<thead>
<tr>
<th>Section</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>Growing</td>
<td>Apples grow in orchards</td>
</tr>
<tr>
<td></td>
<td>Harvesting</td>
<td>Apples are picked by hand</td>
</tr>
<tr>
<td></td>
<td>Washing, grading, waxing</td>
<td>Apples are cleaned and inspected for level of quality. A wax coating helps keep apples crisp</td>
</tr>
<tr>
<td></td>
<td>Packaging</td>
<td>Apples are packaged in different ways depending on if they are whole or how they have been processed.</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
<td>Some apples may be canned or made into applesauce, pie filling, etc.</td>
</tr>
<tr>
<td></td>
<td>Distributing</td>
<td>Apples are transported up to thousands of miles in refrigerated trucks</td>
</tr>
<tr>
<td></td>
<td>Packing</td>
<td>Apples are sorted and packed into 40-pound cartons</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td>Apples are sold in stores</td>
</tr>
<tr>
<td></td>
<td>Composting</td>
<td>Discarded apples can be composted and used to help grow more apples</td>
</tr>
<tr>
<td></td>
<td>Disposing</td>
<td>Throughout the supply chain, some apples and parts of apples are discarded</td>
</tr>
<tr>
<td></td>
<td>Consuming</td>
<td>Apples are eaten</td>
</tr>
<tr>
<td></td>
<td>Preparing</td>
<td>Consumers can prepare apples in many ways. Apples can be eaten whole, added to salads, cooked in pies, etc.</td>
</tr>
</tbody>
</table>

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Empire Apple Supply Chain

Growing
Apples grow in orchards

Harvesting
Apples are picked by hand

Washing, grading, waxing
Apples are cleaned and inspected for level of quality. A wax coating helps keep apples crisp

Packaging
Apples are packaged in different ways depending on if they are whole or how they have been processed.

Processing
Some apples may be canned or made into applesauce, pie filling, etc.

Distributing
Apples are transported up to thousands of miles in refrigerated trucks

Preparing
Consumers can prepare apples in many ways. Apples can be eaten whole, added to salads, cooked in pies, etc.

Consuming
Apples are eaten

Disposing
Throughout the supply chain, some apples and parts of apples are discarded

Composting
Discarded apples can be composted and used to help grow more apples

Adapted, with permission, from Discovering the Food System. www.hort.cornell.edu/foodsys/.
Photo credit: Apple and Pear Australia Ltd. Flickr. Creative Commons CC BY 2.0.
The Hands That Feed Us: Food Production Career Brainstorm

At least one in six members of the U.S. workforce are employed in the food chain. Students will use their new knowledge of the food system to brainstorm the various jobs that exist along the food chain, the duties these workers perform and some of the skills that might be necessary for them to have.

* This activity is adapted from The Foodspan Curriculum from Johns Hopkins Center for a Livable Future. Additional activities can be found at http://www.foodspanlearning.org/

PREP

- Review the stages of the food system from previous lessons.
- This is a brainstorming activity. You are not required to know which careers exist in each part of the food system. The goal is for students to activate their background knowledge about Food Production careers and generate ideas.

MATERIALS

- Sticky notes (medium-large size preferable, 10-15 per group; have extras on hand)

EXPLAIN

1. At least one in six members of the U.S. workforce are employed in the food chain, from farm fields to food manufacturing, distribution and sales. Today we’re going to try and name some of these jobs using what we already know from our own experience.

2. Ask students to recall the stages of the food system and list them on the board. Alternately, if students made diagrams of the food system from the first lesson in the series, you can use those to review the stages.

3. Ask students to form groups of 3-4 people and brainstorm jobs at each step of the food supply chain on a sheet of paper. Students can refer to the list on the board or their diagrams to help generate ideas. After each job, students should also come up with at least two duties someone with this job might be responsible for and two skills they might need to have. It’s ok to guess if they are not sure.
Distribute 10-15 sticky notes to each group. Have students write each job and its corresponding duties and skills on a sticky note, then post their sticky notes on the board in order from farm to table, using the list on the board or their diagrams as a guide.

**DISCUSS**

- Facilitate a discussion in which students discuss their brainstorms as a class, learning from and expanding on each other’s ideas. The goal is to get them thinking and imagining what working in Food Production might be like as an introduction to the in-depth information they will encounter throughout the CareerKit. Some sample questions include, but are not limited to:
  - Are there any jobs that are missing?
  - Which jobs require the most number of people to accomplish?
  - Which jobs involve the most physical labor?
  - Which do you think involve the most skill?
  - Which do you think might require the most training or education?
  - What do you think are the risks or challenges of these jobs?
  - Would you add or take away anything from our brainstorm?
  - Do you think you might be interested in any of these careers? Why or why not?
  - Like in most industries and businesses, there are dozens of other careers in Food Production besides those who handle the product directly, in this case the product is food. One example might be an Administrative Assistant. What do Administrative Assistants do?

  > Answer phones and emails, take messages, keep office organized, help set up or clean up from meetings, schedule meetings, book travel, keep business records.

- What are some other jobs that might exist in Food Production that don’t directly handle or grow food?

  > Office Manager, Accountant, HR Manager, IT, Bookkeeper, Sales
How Does Technology Affect Today’s Labor Market?

Students read an article and consider the positive and negative effects of technology on the workplace across labor sectors.

MATERIALS

- Technology Opinionnaire
- Technology in the Workplace reading
- Chart paper & markers

INTRODUCE

1. Distribute the Technology Opinionnaire. Ask students to read each statement, and circle whether they agree or disagree. Then they should choose one of the statements to explain (in writing) their reasoning.

2. Write on the board:

   How has technology changed the labor market?

3. Distribute Technology in the Workplace, and ask students to read and annotate it, making sure to take notes about how technology has changed how people look for jobs, what kinds of jobs are available, and what their lives are like at work.

4. Put students in groups. Tell them to turn over the article (so they’re not looking at it), and make a list on chart paper of all the ways they can remember from the article how technology has changed the world of work. Groups share findings with the class.

5. When the groups are finished, ask them to look back at the article, and see if they missed anything. If they did, they can add to their lists.

6. Point students back to their opinionaires. Ask if anyone has changed their mind. For example, did anyone who started out feeling positively about technology start to feel more negatively, or the other way around?
Technology Opinionaire

For each of the statements below, circle whether you agree or disagree.

1. Overall, technology is improving our world today more than technology is hurting our world.
   Agree / Disagree

2. Technology these days makes it easier to find a career.
   Agree / Disagree

3. I would rather be looking for a job in today's job market than I would 20 years ago.
   Agree / Disagree

Choose one of the above statements, and explain why you agreed or disagreed:
Technology in the Workplace

Technology has affected the world of work since the rise of factories in the 19th Century. For example, a machine called the cotton gin, that removes seeds from cotton after it is picked, made cotton Food Production quicker and easier. When we talk about technology today, we usually mean hardware, such as hard drives and monitors; software, such as word processing programs; the internet; or networks, which allow computers to communicate with one another. Technology also refers to data collection, analysis and storage. It affects today’s labor market in many ways: the way we find work, the types of jobs we do, the education and skills we need, the way we do work, and the way companies operate.

1. **The way we find work**
   Long ago, people often looked for jobs in local newspapers, but today they use technology. Job search websites such as Monster, Indeed.com and Glass Door have become popular. People use social media sites like LinkedIn and Facebook to make themselves known, connect to others and find opportunities. Employers use these sites too, to find employees and research job applicants.

2. **The type of jobs we do**
   Advances in technology have made some jobs disappear and others appear. For example, because companies like Netflix can offer movies on the internet, there are fewer video rental stores. We used to see a travel agent, baggage collector, porter and ticket agent when we traveled by plane or train. There are fewer of those jobs now that we use websites to book our tickets, and electronic machines to get our tickets and to check our bags. Advances in technology create new jobs too, like ‘app developers’, social media specialists, and health information managers.

3. **The education and skills we need**
   A lot of work relies on technology. We use it to do simple tasks like answering phone calls. More and more employers rely on people to do more difficult work that requires innovative thinking, flexibility, creativity, and social skills. You need a person to plan the layout of products in a store so customers can find them easily and you need a person to provide hands-on care for sick patients. You need technology, for cashiers to use during transactions and to store medical information of patients. In this technology driven labor market, individuals who want...
to get, keep and advance in a good job need to make sure that they have the education and skills that employers are looking for. This means knowing how to use technology and learning the skills that must be done by people.

4. **The way we do work**

Technology has also changed the way we work, by:

- **Making workers more productive**—Using technology can help you do your job better. You can complete more tasks, do them faster and sometimes more accurately. For example, with programs like Word, you can create and edit a letter more quickly than if you were to do it by hand or on a typewriter.

- **Reducing the tasks workers do themselves**—Some tasks that workers used to do themselves are now done by technology. For example, lawyers can use computer programs to search through thousands of documents to find certain information. This allows them to spend more time doing work computers can’t do, such as developing arguments for the courtroom.

- **Replacing some workers**—More and more, we rely on machines to do work without any help from humans. This is called automation. Many people wonder if machines or even robots will one day replace workers. Right now, machines can assemble car parts, answer customer calls and check passengers in at airports. Robots can work together to fulfill warehouse orders. Experts disagree on what kind of impact automation will have on work in the future.

- **Making some workers more mobile**—Mobile phones, computers and the internet have allowed employees to do work from almost anywhere at almost any time. For example, some office workers can work from home for a local company or for a company based in another country. And, they can check email after the official end of the workday. Because of videoconferencing, we can even have meetings with people who are in different places around the world.

- **Directly connecting people who need goods or services to people who can offer it**—Businesses like Uber, Airbnb and Ebay allow sellers to connect with customers in moments. They offer transportation, accommodations and products to potential buyers through the internet.
5. **The way companies operate**

With technology, organizations can produce goods and provide services more quickly, more accurately, on a larger scale and in new and improved ways. They can reach more customers. And, they can use huge amounts of information about individuals—known as ‘big data’—to help them sell more to customers. For many organizations, the way they use technology is what sets them apart from the rest.

Technology has changed the world of work in these five ways, but not all types of technology have the same impact. Some technologies totally transform the way people and organizations work. The internet is a good example; it changed everything. Other technologies that may transform our lives include driverless cars and advanced robots that can work alongside or replace employees altogether. And, some jobs seem to be effected by technology more than others. For example, jobs that involve activities such as data entry, assembly line work or routine design work have all become reliant on technology.

Technology has had many positive effects, but it has also had some negative. For example, the internet has allowed a wide range of individuals to access an incredible amount of information quickly, but it has made security and privacy an important issue. Hackers now can get confidential information that they were not intended to have. Governments are catching up to these changes by making new laws and regulations to keep people more safe.

Jobseekers and employees in today’s labor market must make sure they are tech-savvy. This can include:

- knowing how to operate a computerized cash register
- being proficient in Microsoft Office including Word and Excel programs
- operating medical technology that can require ongoing training as the technology evolves

Employees can raise their awareness by staying current with technological trends in their field, by reading online or print materials about their industry. Jobseekers can prepare for interviews doing job research and getting training. Jobseekers who are not tech-savvy may be at a disadvantage to their more tech-savvy peers.
Technology’s Impact on Food Production Employment

Students read an article about the impact of technology on the Food Production sector, then develop text-based and speculative questions based on this information.

PREP

- Read the article, *The Impact of Technology on Food Production* and annotate it by underlining parts of the article that mention specific ways technology has impacted Food Production careers, in preparation for class discussion.
- Be prepared to explain vocabulary: **precision, genetic, yield**

MATERIALS

- *The Impact of Technology on Food Production* article

EXPLAIN

1. Ask students how they think technology has changed the workplace.
   - *Most businesses use computerized technology, such as warehouses tracking items in transit, builders using computerized building plans, or cashiers using computerized cash registers. Even many factories use digital equipment these days to cut and assemble products.*

2. Ask students how they think technology has impacted Food Production careers. Write their responses on the board.
   - *Examples: Jobs that used to be performed by people on an assembly line are now done by machines and computers, farmers can farm more land more quickly and efficiently using GPS (Global Positioning System) and other technology tools, ingredients can be mixed by machines instead of by hand, consumers have better access to information about where their food comes from and how to get the kinds of food they want, farm tasks (like milking cows) have been automated allowing for greater productivity.*

NOTE: This activity can be used as a follow-up to the *Technology in the Workplace* activities.
3 Distribute *The Impact of Technology on Food Production* article and ask students to read and annotate it. They should underline parts of the article that discuss the specific ways technology is impacting Food Production careers.

4 Ask students to share these details with the class.

5 Divide students into pairs and ask each pair to write 3 questions that can be answered by the article and 3 speculations about Food Production careers and technology beginning with “I wonder…” For example:

- *I wonder if someday all our food will be produced by robots.*
From farm to table, much about food production has changed over the past decades—for both farmers and consumers. Like any other business, farmers must adapt to a changing world. Today, we know that each U.S. farmer feeds more people worldwide than ever before at 155 people per farmer. In 1960, that number was 25.8 people. By 2050, the same farmer will need to feed 232 people. With limited resources, it will take innovation and a variety of technologies to meet the world’s food demand. This includes using new technologies.

One such technology is called precision agriculture. With precision agriculture, control centers collect and process data to help farmers make the best decisions about planting, fertilizing and harvesting crops. Sensors placed throughout the fields are used to measure temperature and humidity of the soil and air. In addition, pictures of fields are taken using satellite imagery and robotic drones. The images show how the crops are growing, and, when combined with predictions of weather, give a realistic idea of weather conditions 48 hours in advance. As a result, researchers are able to predict future conditions and help farmers make informed decisions about their crops.

Photo: http://www.multirotor.net/images/header-images/agriculture-precision-farming.jpg

The Impact of Technology on Food Production

Adapted from:
http://www.foodinsight.org/newsletters/future-food-food-production-innovation-and-technology
https://www.greenfacts.org/en/agriculture-iaastd/l-2/3-biotechnology-for-development.htm#0
http://www.dummies.com/home-garden/green-living/examining-genetically-modified-food/
In addition, advances in livestock (animals raised for food, such as cows, pigs, sheep and goats) production, from climate control to the nutritional qualities of animal feed, have improved animal health and welfare, and boosted agricultural output (the amount of food or ingredients produced from animals). Refrigeration and modern packaging technologies increase the safety of our food, the distance across which it can be transported, and its freshness over time.

Among the most widely used and often-debated food technologies, is food and agricultural biotechnology. Food biotechnology is the science of using living organisms to make or change a product. Some conventional biotechnologies are well-accepted, such as the natural process of fermentation, which breaks down sugars into ethyl alcohol, a substance essential for making bread or alcoholic beverages. However, modern biotechnology changes the genetic composition (DNA structure) of plants and animals to create varieties with preferred characteristics such as redder tomatoes or sweeter corn. These are known as genetically modified organisms. Genetically modified organisms (GMOs) are living things whose genetic makeup has been changed to contain genes injected from other living things. Crops can be genetically modified so that they resist insects, herbicides, and disease or so that they contain extra nutrients or even vaccines. Animals can be genetically modified to produce lower-fat meat, resist certain diseases, or create less waste.

Biotechnology has always been on the cutting edge of change. However, change happens quickly in the field of biotechnology. Development and use of new biotechnologies have happened faster than studies can determine the true benefits or harms these technologies could have. Supporters of GMOs believe they are safe and can help address the global hunger crisis of our ever-expanding population. Critics of GMOs believe they are dangerous for our health, the environment, and our ability to produce enough nutritious food in the future. Modern genetic engineering began with scientific discoveries in the 1950s through 1970s, and as a result, long-term consequences are not yet known. Today's Food Production industry continues to struggle with the question of the potential benefits and harms of GMOs and other food-related technologies.
Employer Types in Food Production*

Students learn about classifications of employers—corporations, not-for-profits, owner operated or self-employed businesses, cooperatives and civil service.

PREP

- Be prepared to discuss the following terms, defined below: Corporation, Nonprofit, Self-employed, Cooperative and Civil Service, also known as the Public Sector.

MATERIALS

- Sample Employer Types worksheet
- My Local Employers worksheet

EXPLAIN

1. Sometimes the word employer refers to an individual, but it is also used to describe a company or organization. We are going to look at five different types of employers that exist in the Food Production sector—corporations, nonprofit organizations, owner-operated or self-employed businesses, cooperatives, and civil service.

2. Distribute Sample Employer Types worksheet. Have students get into pairs and complete the worksheet together.

3. When they are finished, have students share their answers with the class.

4. After each workplace type is reported back, discuss the corresponding definition on the following page to clarify and answer any questions. The definitions are intended for use by the teacher.

5. Distribute the My Local Employers worksheet and have pairs work together to list employers that they think belong in each category.
   - Students can complete them based on their existing knowledge or use the following websites for research:
     - www.greatnonprofits.org and www.nycworker.coop
   - If they use websites for research, discuss the importance of paraphrasing.
   - Another option is to have them complete this worksheet individually for homework.
Workplace Types

• **A Corporation** is a business that sells goods or services. Many corporations have one person in charge at the top, the CEO or President, then a layer of middle managers who supervise people with lower levels of responsibility. If a corporation makes a large profit, that money might go to the high level managers, or they may choose to share it among the employees. Many, though not all, corporations have a hierarchy with some people holding more power to make decisions than others.

• **Nonprofits** or **Not-for-profits** generally prioritize providing services over making money. For example, they might provide shelter or counseling to homeless or low-income people, people with disabilities or other groups of people who need assistance. They are governed by a Board of Directors, a group of people interested in the success of the organization, which guides the decision-making. Users or clients often do not pay for the services. Instead, the organizations apply for and receive grants from the government or private funders. This is money that does not have to be repaid and often comes with requirements on the services provided, such as a certain number of people served or certain results of the services provided.

• **Self-employed** businesses are often a business of one, for example, a handyperson who makes repairs in people’s homes or someone who does hair in their own or other people’s homes. They set their own hours, prices, get their own clients and run the business themselves. They might hire someone to help with certain aspects, such as a bookkeeper to help manage the finances or an assistant to help them provide the service.

• **Cooperatives** are businesses that are owned by a group of people together, instead of having one owner or president. They make decisions about the business together and have equal decision-making power. Profits earned often go back in to supporting the business or go to the worker-owners themselves. There are many new cooperatives in New York City.

• **Civil service** is also known as the public sector or the government. Civil servants are public employees who work in a variety of fields such as teaching, sanitation, health care, management, and administration for the federal, state, or local government. There are standardized prerequisites for employment such as minimal age and educational requirements and residency laws. Employees enjoy job security, promotion and educational opportunities, comprehensive medical insurance coverage, and pension and other benefits often not provided in comparable positions in private employment.
Sample Employer Types*

Read the descriptions of employers below and determine whether each one is a corporation, a nonprofit organization, cooperative, self-employed or civil service.

1. Welch’s is a company—famous for its grape juice—that produces a range of products made from Concord grapes. Welch’s was started over 140 years ago when Thomas Bramwell Welch decided to serve grape juice instead of wine at his church. After its debut at the Chicago World’s Fair in 1893, Welch’s Grape Juice went on to become the well-known brand it is today. At the heart of Welch’s is its 1,000 family farms that grow their grapes. Each of the farmers owns part of the Welch’s company and benefits directly from the sale of the products. Being a farmer-owner also means they are involved in the decision making processes of the company. Welch’s has grown to a major national and international company with many production plants, including one in Westfield, New York.

   Business Type ________________________________

2. Amy’s Kitchen is a family-owned company that manufactures organic and non-GMO convenience and frozen foods. Founded in 1987 by CEO Andy Berliner and Rachel Berliner, and incorporated since 1988, Amy’s Kitchen took its name from their then-newborn daughter, Amy. All of Amy’s 250+ products are vegetarian and made with organic ingredients. The company makes over 130 gluten-free products. The company employs over 1,900 people and operates processing plants in Santa Rosa, California, White City, Oregon, and Pocatello, Idaho. A new processing plant is being built in Goshen, New York. Amy’s Kitchen reported gross sales of over $300 million on CNBC’s “How I Made my Millions” in 2012.

   Business Type ________________________________

*RAENs will provide regional adaptations.
New York State Department of Agriculture and Markets, through its various divisions and programs, promotes New York agriculture, fosters agricultural environmental stewardship, and safeguards the State’s food supply. They are headquartered in the state capital, Albany, NY and have offices in various cities and regions throughout the state.

Business Type ____________________________

Soul Fire Farm is a family farm in Albany, NY that is committed to providing food and farming education to people of color and other marginalized groups. Soul Fire provides weekly doorstep deliveries of in-season, farm fresh, certified naturally-grown food to hundreds of individuals who might not otherwise have access to them. They provide this produce at subsidized rates and accept SNAP so that no one is denied access to life-giving food due to their economic status. Through their Black Latinx Farmer Immersion program, they annually train over 100 predominantly Black, Latinx, and Indigenous people to take leadership as farmers and food justice organizers in their communities. Soul Fire also collaborates with regional and national food justice networks to help end injustice in the food system. Members of Soul Fire Farms speak at conferences, publish articles, and facilitate workshops for activists to share tangible methods for ending racism in the food system. They teach organizing skills to youth who are interested in fighting food injustice in their own communities, knowledge of how to grow and prepare their own food, and experience connecting to the natural world. They also host on-farm educational and community-building events for hundreds of participants and organize with their partner farms in Haiti and Puerto Rico. The money Soul Fire uses to operate its farm and programs comes from grants from foundations and organizations, as well private donations from individuals.

Business Type ____________________________

Auria Abraham, also known as the Sambal Lady, was born and raised in a small town called Seremban in Malaysia. Auria grew up in the kitchen with her mother, who cooked delicious dishes with Chinese, Indian, Malay, and Portuguese influences. After coming to the United States to study music, Auria found herself longing for the comfort of the food back home. More than anything, she missed her Mom’s sambal. So she started Auria’s Malaysian Kitchen. Based in Flatbush, Brooklyn, the company specializes in Malaysian cuisine and a traditional condiment called Hot Chili Sambal. It was a first step towards her overall mission to help people discover Malaysian cuisine.

Business Type ____________________________
# My Local Employers

List as many local employers as you can in the boxes below, providing the name and what they provide. Use businesses near class, near your home, and ones you are familiar with. If no employers come to mind for a category, do some research. Use readings from class or search online.

<table>
<thead>
<tr>
<th>Corporation</th>
<th>Nonprofit Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Product or Service:</td>
</tr>
<tr>
<td></td>
<td>Name:</td>
</tr>
<tr>
<td></td>
<td>Product or Service:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cooperative</th>
<th>Self-Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Product or Service:</td>
</tr>
<tr>
<td></td>
<td>Name:</td>
</tr>
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<td></td>
<td>Product or Service:</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Civil Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Product or Service:</td>
</tr>
</tbody>
</table>
Students practice writing informational and argumentative essays, both of which appear on the TASC exam. Each essay prompt is modeled after TASC exam prompts and activities include various levels of scaffolding, including model essays for students to analyze, developing guiding questions for reading the texts, essay templates, and graphic organizers for essay planning. It is not necessary to do all the activities in this series or to do them in order.

*Note:* These activities, especially the writing strategies, can be adapted for use with non-TASC essays.

**ACTIVITIES IN THIS SERIES**

- **8.1 • TASC Informational Essay: Sick Leave in New York City**  
  (Scaffolding Level: High)

- **8.2 • TASC Argumentative Essay: A New Minimum Wage**  
  (Scaffolding Level: High)

- **8.3 • TASC Informational Essay: NY Paid Family Leave Law**  
  (Scaffolding Level: Medium)
TASC Informational Essay: Sick Leave in New York City

Students read and analyze two sample informational TASC essays. Then they read and analyze two articles about the recent law passed in NYC requiring companies to pay sick leave to their employees, use a graphic organizer and an essay template to plan their essays, and finally write an informational essay on the topic.

PREP

- Read Sample TASC Informational Essays handout and be prepared to discuss it.
  1. Be prepared to discuss what makes a “good” TASC informational essay.
  2. Know the difference between a TASC informational and argumentative essay.
  3. Understand the TASC scoring rubric.
- Read TASC Informational Essay Prompt: Paid Sick Leave handout.
- Be prepared to explain paid sick leave.
- Read Template for Informational Essay worksheet. Be prepared to discuss the parts of the informational essay.

MATERIALS

- Sample TASC Informational Essays handout
- TASC Informational Essay Prompt: Paid Sick Leave handout
- Paid Sick Leave articles (New Law Guarantees Paid Sick Leave for some 200,000 New Yorkers and Why Paid Sick Leave?)
- Paid Sick Leave Graphic Organizer worksheet
- Template for TASC Informational Essay handout
Section 8.1  Lesson Guide

EXPLAIN

1. Tell students that they will be writing a sample TASC informational essay. Ask them to talk with a partner and brainstorm what makes a “good” TASC essay. What does the essay need to have in order to receive a high score?

2. After a few minutes, ask them to discuss their ideas, listing them on the board. Discuss the differences between an argumentative and an informational essay.

3. Tell students that they will now look at two sample TASC informational essays. One received a score of 3 and one received a score of 2. Review with students what a passing score is (2).

4. Distribute Sample TASC Informational Essays handout. Read the prompt for the model essays and make sure students understand it. Have students read the essays silently, then talk in pairs about the two essays—which one is stronger and why do they think so? Circulate as students are working to get a sense of their thought processes.

5. Refer the students to the questions at the end of the handout and ask them to discuss those questions in pairs. Again, circulate to provide guidance and support. After 5-10 minutes, bring the class together and discuss.
   - For each essay, was there a clear introduction?
   - What the question answered?
   - Was each paragraph about one main idea?
   - Was there a clear conclusion?

6. As you discuss, write some basic criteria for the informational essay on the board:
   - answers the question
   - has a clear introduction and conclusion
   - organized paragraphs
   - uses information from the text given

7. Tell students that now they will read two short articles about paid sick leave. Make sure students understand what paid sick leave is. Distribute TASC Informational Essay Prompt: Paid Sick Leave handout and ask students to read only the prompt, silently.

8. Once students have read the prompt, ask them to respond to the multiple-choice question below and then discuss. Review the question and make sure students can state in their own words what the prompt is asking them to do. (You may want to write this on the board).
Distribute the paid sick leave articles. Have students read the titles of the two articles. Since the first part of their “job” is to explain the new sick leave law, which article is more likely to have that information? (*New Law Guarantees Paid Sick leave for Some 200,000 New Yorkers*). Ask students to read only this first article and underline the parts that explain what the law actually is.

Once students have read and underlined, ask them to work in pairs to compare their underlines, and discuss any questions they have. Students may have questions about the following sentences: *Eliminated the phase-in period that would have delayed coverage for some workers. Removed exemptions for the manufacturing sector.*

Bring the class together and discuss the two italicized sentences above to make sure students understand what they mean. Let students know that they need to summarize the information about the new law in their own words for the essay they are writing. Have students work together as a class to use their underlines as a guide as to what to include in this summary. You, the teacher, will be the “scribe” and write the summary on the board while they dictate what to write. Negotiate this process until you have a 3-4 sentence summary of the information written in a way that someone who did not read the article would understand.

Have students read the second article: *Why Paid Sick Leave?* Ask students to underline the places where they find reasons to offer paid sick leave, and evidence that supports those reasons (you may want to discuss what is meant by “evidence”—if there is a study or statistics, that usually constitutes evidence).

Distribute the *Paid Sick Leave Graphic Organizer* worksheet. Fill out the organizer for the first “Reason for sick leave from the article” together as a model, asking students to guide you from their underlines.

Ask students to work individually or in pairs to fill in the rest of the graphic organizer. You may want to lead the class in writing some sentences that they will be able to use in their essays using sentence starters, for instance:

- One reason a sick leave law was needed is…
- One benefit of the new sick leave law is… For example…

Tell students that now that they have gathered the information they need from the two texts, it’s time to write the essay. Distribute the *Template for TASC Informational Essay* handout and ask students to look it over. Point out that there are four main “parts:
16 Review with students which categories of information are needed to address the prompt:

1) What is the new sick leave law?
2) What are the benefits?

These are two different categories of information. Help students see that their essay is now mostly written—they have only to take the summary they wrote for Article 1 and the reasons/benefits from Article 2 and put them together so that the middle of their essay is written.

17 Have students write their two middle paragraphs using the information they have gathered on their templates. As an alternative, if you wish, work together as a class to write an introduction, using the template as a guide, then have the students write the rest of their essays while you walk around to give guidance and support.
Sample TASC Informational Essays

Read the essay prompt and both essays. Discuss the questions below with a partner.

**Essay Prompt**

Proponents of students in the workforce say that employment teaches time management and responsibility while providing income and useful experiences. Opponents say that mixing school and jobs adds stress and adult temptations to a student’s life while reducing the time available for study and extracurricular activities. Is it possible to create a balance?

Read both texts and then write an informational essay detailing a plan that a high school student could use to balance school and a part-time job. Be sure to use information from both texts in your essay.

**ESSAY A**

Many high school students are interested in starting to work part time while they are still in school. Whatever the reason it is important for students who want to mix work and school to make a good plan so they can manage a balance in their responsibilities as well as have some time for fun and enjoying their high school years.

Students who take a part-time job obviously have the benefit of extra money in their pocket. While it is fun to think about the clothes and music they can buy with extra money it is also true that many students who are going on to college or technical school do actually save some of the money they earn to help with future expenses. This leads to a second benefit that the article “Benefits of Part-Time Work” points out. These students are learning about how to manage their money and plan for the future, and that helps them mature.

On the other hand there are definitely drawbacks to taking a job while still in high school. The important thing is that students do not try to work more hours than they can handle. Students who try to work more than 20 hours a week start to see less benefits and more problems according to the article “Employment Disadvantages.” Their grades may suffer, and some of them may even drop out of high school. Sometimes these students feel they are failing and their self-esteem suffers.

If a student really does want to work while in high school, they need to take all these things into consideration and create a workable plan that they can manage. Most important, they have to decide on how many hours they can devote to a job and still keep their focus on high school classes high. They also need positive ways
to deal with the extra stress that adding another responsibility to their schedule will absolutely bring.

It is important for high school students to think carefully about the positive benefits and negative consequences that can come from taking a job while still in school. If they do, they can maximize the positives and avoid the problems.

**ESSAY B**

There are many things to consider if you are a high school student who wants a part-time job. Since the main focus needs to be on school at this time, it is important to not take on too much or their grades, not to mention social life, will probably suffer.

Even though many adolescents think they are mature enough to handle the extra responsibilities a job will bring, the facts show they may be wrong. Many possible negatives can happen when a student works more than 20 hours a week. First is just the stress of adding work hours to the day. If students aren’t realistic about what they can do, they can start to get lower grades in school leading sometimes to dropping out.

But, if a job workload is manageable, then students have things to gain from working. Money and independence as well as work experience gives the student more maturity. They can use the extra money to fund their entertainment, but they can also save for their futures.

Deciding whether or not to take a job while you are a high school student is just one of the difficult decisions that you will have to make.

**DISCUSSION QUESTIONS**

For each essay:

- Is it organized? Is each paragraph about one main idea? Provide an example.
- Was the question satisfactorily answered? Explain why.
- Do the introduction and conclusion summarize the main points of the essay? How so?
- How does the writer provide evidence that supports her claims? Is there sufficient evidence?
- Does the writer draw information from the source texts?
- Which essay, A or B, is better? Why do you say so?
TASC Informational Essay Prompt: Paid Sick Leave

WHAT’S MY JOB?

Read the essay prompt below, then answer the multiple-choice question that follows.

Until recently, many low-income workers did not receive paid sick leave. Recently, however, Mayor Bill de Blasio signed into law a bill that required companies to pay sick leave to their employees. Read the two texts provided, then write an informational essay in which you explain the new law regarding sick leave in New York City and the ways this law can benefit workers, their families, and the general public.

According to the prompt above, your job as a writer is to:

A. Compare the advantages and disadvantages of the sick leave law

B. Argue for a sick leave law that will provide employees across the United States with paid sick leave.

C. Explain the NYC sick leave law and how it benefits people.

D. Explain the history of the current NYC sick leave law.
New Law Guarantees Paid Sick Leave For Some 200,000 New Yorkers

By Rebecca Fishbein in News, March 20, 2014 5:35 PM

Mayor de Blasio signed the expanded Paid Sick Leave bill into law today, paving the way for thousands of New Yorkers who once had to choose between losing a paycheck and being ill at work to receive sick pay.

The bill, which is the first de Blasio has signed into law, requires businesses with 5 or more employees to grant those employees five days of paid sick leave; a previous bill voted on by City Council during Bloomberg's mayoral reign only required businesses with 20 or more employees to offer paid sick time. De Blasio proposed an expansion of the bill in January and it was approved by City Council last month.

In addition to minimizing the number of employees required per business, the expanded bill eliminated the phase-in period that would have delayed coverage for some workers, removed exemptions for the manufacturing sector and added grandparents, grandchildren and siblings to the family members permitted to take family time. The administration estimates that the expanded bill will offer coverage to 200,000 New Yorkers who do not currently have paid sick time. The law goes into effect on April 1.
Why Sick Leave?

By Austin Frakt,
adapted from the New York Times

Maybe the person working near you, the one who dragged himself to work and is now coughing and sneezing, couldn’t afford to stay home.

Each week about 1.5 million Americans without paid sick leave go to work despite feeling ill. At least half of employees of restaurants and hospitals—two settings where disease is easily spread—go to work when they have a cold or the flu, according to a recent poll.

To address that issue, Chipotle began offering paid sick leave to all its employees in the United States this year. The restaurant chain is hoping to reduce the spread of infectious disease. Though many other industrialized countries already require employers to offer paid sick leave to all employees, the United States does not.

Paid sick leave slows the spread of disease. Cities and states that require employers to offer paid sick leave—Washington, D.C.; Seattle; New York City; and Philadelphia, as well as Connecticut, California, Massachusetts and Oregon—have fewer cases of seasonal flu than other cities and states. According to one estimate, an additional seven million people contracted the H1N1 flu virus in 2009 because employees came to work while infected. The illnesses led to 1,500 additional deaths.

Another study found that employees who work while sick are more likely to have heart attacks than those who take time off.

Children benefit from their parents’ paid sick leave, too. Paid sick leave makes it possible for parents who are workers to take their children to the doctor when they are sick. Additionally, the babies of new mothers who can spend more time at home with their newborns are more likely to be breast-fed or to receive recommended medical checkups and immunizations.
## Paid Sick Leave Graphic Organizer

<table>
<thead>
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<th>Reason for sick leave from the article</th>
<th>In my own words</th>
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**Evidence from the article that supports this reason**

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Template for TASC Informational Essay

**ESSAY TEMPLATE: INFORMATIONAL ESSAY**

**PARAGRAPH ONE: Introduction**

- **The topic in general and how it affects people**
  (Examples: The rise of 3-D printing is bringing change to many businesses… Global warming is a problem that affects us all… More and more, we have been hearing in the news about the effects on young children of watching television.)

- **Why the topic is important**
  (The availability of 3-D printing is creating jobs in some sectors and creating job loss in other sectors… Global warming is a danger both for our present and our future… Television is an important topic because it affects our children’s health and well-being…)

- **A BRIEF preview of what the reader will learn by reading your essay.**
  (3-D printing makes some products stronger, longer lasting and less expensive, but also leads to a loss of jobs in some fields… The dangers of global warming include x, y and z, but there are also solutions… The harmful effects of television watching include x, y and z)

**Helpful phrases:**

- *An important topic today is…*
- *A much-discussed topic today is…*
- *A problem today is…*

**PARAGRAPH TWO: ONE category of information**

- **For example:** If you are supposed to write about advantages and disadvantages, make one body paragraph about advantages and one body paragraph about disadvantages.

- **For example:** If you are supposed to write about problems and solutions, make one body paragraph about problems and one body paragraph about solutions.

- **For example:** If you are supposed to write about different kinds of dangers arising from a particular cause (global warming, pollution, etc.), make one body paragraph about one type of harm and the second paragraph about another type of harm.

Start with a topic sentence that tells the reader in general what the paragraph is about:

(There are a number of advantages to working part time while in high school… Global warming causes several problems… One of the main types of harm done to young children who watch television is…)

Include specific examples from the article. Remember to include the specific information and the source:

(According to the article (title of article), students who work part-time learn how to manage their time successfully… The Alliance of Concerned Scientists found that crop production had declined by 30 percent… For example, a study done by The Alliance of Concerned Parents states that young children who watch more than three hours a day of TV have trouble learning to read…)
### PARAGRAPH THREE: SECOND category of information

- **For example:** If you wrote about advantages in Paragraph Two, write about disadvantages in Paragraph Three.
- **For example:** If you wrote about problems in Paragraph Two, write about solutions in Paragraph Three.
- **For example:** If you wrote about ONE kind of harm or danger in Paragraph Two, write about ANOTHER kind of harm or danger in Paragraph Three.

Start with a topic sentence that tells the reader in general what the paragraph is about:

(Although there are advantages, there are also drawbacks to working part time while in high school... While global warming causes a variety of problems, there are several solutions... Another of the main types of harm done to young children who watch television is...)

Include specific examples from the article. Remember to include the specific information and the source:

(For example, a study done by The Alliance of Concerned Parents states that young children who watch more than three hours a day of TV have social problems... According to the article (title of article), students who work part-time often see their grades suffer... The Alliance of Concerned Scientists states that taking public transit instead of driving saves a pound of carbon a day...)

### PARAGRAPH FOUR: Conclusion

- Two or three sentences that return to your topic and say again
  1. why it is important
  2. SUMMARIZE the causes/solutions/ types of good or harm
  3. how things in general will be better if people do things the way you have recommended in your essay.

**Helpful phrases:**

*In conclusion…*

*To summarize…*
TASC Argumentative Essay: A New Minimum Wage

Students read and analyze two sample argumentative TASC essays. Then they read and analyze two articles about raising the minimum wage, use a graphic organizer and an essay template to plan their essays, and finally write an argumentative essay on the topic.

PREP

• Read Sample TASC Argumentative Essays handout and be prepared to discuss it.
  1. Be prepared to discuss what makes a “good” TASC argumentative essay.
  2. Know the difference between a TASC informational and argumentative essay.
  3. Understand the TASC scoring rubric.
• Review the TASC Argumentative Essay Prompt included in Step #9 below.
• Be prepared to explain paid sick leave.
• Read New Minimum Wages in the New Year and John Boehner on the Minimum Wage articles.
• Read Template for TASC Argumentative Essay worksheet. Be prepared to discuss the parts of the argumentative essay.

MATERIALS

• Sample TASC Argumentative Essays handout
• TASC Argumentative Essay Graphic Organizer worksheet
• New Minimum Wages in the New Year article
• John Boehner on the Minimum Wage article
• Template for TASC Argumentative Essay handout
**EXPLAIN**

1. Tell students that they will be writing a sample TASC argumentative essay. Ask them to talk with a partner and brainstorm what makes a “good” TASC essay. What does the essay need to have in order to receive a high score?

2. After a few minutes, ask them to discuss their ideas, listing them on the board. Discuss the differences between an argumentative and an informational essay.

3. Tell students that they will now look at two sample TASC argumentative essays. One received a score of 3 and one received a score of 2. Review with students what a passing score is (2).

4. Distribute *Sample TASC Argumentative Essays* handout. Read the prompt for the model essays and make sure students understand it. Have students read the essays silently, then talk in pairs about the two essays—which one is stronger and why do they think so? Circulate as students are working to get a sense of their thought processes.

5. Refer the students to the questions at the end of the handout and ask them to discuss those questions in pairs. Again, circulate to provide guidance and support. After 5-10 minutes, bring the class together and discuss.

   - For each essay, was there a clear claim?
   - What was it?
   - Were there reasons given to support the claim—what were they?
   - Were the paragraphs organized? What makes you say so?
   - Which one had a more formal tone?

6. As you discuss, write some basic criteria for the TASC argumentative essay on the board:

   - a claim, supported in the form of reasons and examples
   - organized paragraphs
   - a formal tone

7. Tell students that they are also given two articles to read when they take the test, and they are expected to use information from the articles in their essay. Ask students to point out any places in either essay that mention another article.
8. Point out that in the passing essay, it wasn’t necessary to quote from the essay—they just needed to use some information from it when they write. Tell students that the TASC essay is timed. They don’t have time to carefully read the article, so they should just skim and find a piece of information they can use.

9. Introduce the topic: *Raising the minimum wage*. Write the following question on the board:

   Should the federal government raise the minimum wage to $15 for all workers?

Make sure all students understand what is meant by the minimum wage.

10. Tell students that since this is their first time writing a TASC essay, it will be simpler if everyone chooses the “pro” side—for the minimum wage, rather than against it. Ask students to turn the question on the board into a claim for the “pro” side. For example, if the question was, “Should students study for the TASC exam before taking it?”, you could turn it into a claim for the “pro” side by stating, “Students should study for the TASC exam before taking it.” Ask students to turn the question on the board into a “pro” claim.

11. Remind students that for the TASC essay they need a claim and they need reasons. They now have the claim, so they need to think about the reasons. Ask students to brainstorm:

   • What are some reasons to have a minimum wage?
   • What are the benefits?
   • What are the disadvantages of NOT having a minimum wage?

12. Once you have one or two reasons written on the board, talk about examples. Let’s say that a student has said that a minimum wage guarantees that people can buy necessities for their families. Ask them for an example. It can either be a personal example such as, “I make less than minimum wage and I can’t buy meat to feed my family more than once a week.” Or it can be a general example such as, “If people don’t have enough money, they can’t afford basic necessities for their families.”

13. Once there have been a few ideas thrown out and you have written them on the board and discussed them, distribute the *TASC Argumentative Essay Graphic Organizer* worksheet, review it, and draw a large version of the graphic organizer on the board. Then have students work in small groups to flesh out their reasons and examples using the organizer.
As students discuss, walk around and listen in on their conversations. When you hear a good reason or example, go to the board and write it on the large template on the board. This helps students see that their ideas are good enough to include in their essay.

Bring the class together and review some of the good ideas and examples written on the template. Tell the students that these graphic organizers will help them when they start writing the essay. Remind them that for the TASC argumentative essay, they have to read two articles and include some of the information from the articles in their essay.

Distribute the New Minimum Wages in the New Year article. Ask students to read the title and information just below it.

- What does the title suggest about whether the article is “pro” or “con” for a higher minimum wage?
- Who is the writer of the article and where does it come from? Discuss students’ answers.
- What is meant by ”Editorial Board?” Discuss the implications.

Point out a few features of the article: (1) the paragraphs are numbered so it is easier to keep track of information and (2) some of the more difficult words and phrases are footnoted at the bottom of the page. If students need the support, briefly demonstrate how they can use the footnotes to understand footnoted phrases and words.

Ask students to read the article silently. Remind them that they are looking for information they can use in their own essays. Ask them to look for two things: (1) what is the claim and (2) what are the reasons the writer gives to support his claim? They should mark these two things when they find them in the article.

When students are finished reading, bring the class together and discuss:

- **Where is the claim?** (It is only explicitly stated in the last sentence, but there may be hints of it beforehand.)
- **What reasons are given in support of the claim?** (Again, this is only explicitly given in paragraph 5. See whether students can find the reasons. If not, you may want to direct them to paragraph 5.)

Students may struggle with the following complex sentence: These state and local increases, though important, are no substitute for a robust federal minimum because they don’t affect places that will never act on their own to lift minimum wages.
Read this above sentence out loud several times. Because it is long, read it with pauses to give students time to digest what they’re listening to. You may also want to write it on the board and work with students to simplify it, for instance:

It’s helpful that some states have raised the minimum wage on their own, but we need the federal government to raise the minimum wage, because some states will never do it on their own.

Tell students this is one argument the writer is making for why there needs to be a federal minimum wage. Ask students to reread Paragraph 5 and see if they find another one, for instance:

…it takes nearly $20 an hour to meet living expenses for one adult and one child.

AND

“Even in states that have raised their minimum wages, the levels are still not high enough to meet living expenses for typical workers and families.”

Have students choose ONE of these reasons to use in their essay. Write one or two sentence starters on the board:

According to the article ______________, ______________.

As the article ______________ states, ______________.

Model how to fill one or two of these in, then have all students fill in one sentence starter with the reason they will use in their essay.

Remind students again they will have to read two articles for the TASC argumentative essay. Distribute John Boehner on the Minimum Wage article. Ask students to read the title.

• Who is John Boehner?
• What is the Speaker of the House of Representatives? How might that position be relevant to the article?
• Tell students that John Boehner was a Republican. Based on this, do they think he would be for or against a minimum wage?

Ask students to read until they identify his position on the minimum wage, then raise their hands when they know. Once this is established, ask students
to read until they find a reason that Boehner gives for not raising the
minimum wage. They should underline any reasons that they find, then confer
with a partner about these reasons.

25 Bring the class together and ask students to tell you the places where they
found Boehner’s reasons in the text. Make sure everyone can put these into
their own words.

26 **FOR MORE ADVANCED STUDENTS:** Discuss the concept of
counterargument. Ask students how they might argue AGAINST Boehner’s
reason that a minimum wage will actually cost jobs. **What are some
counterarguments they could give to this idea?**

27 Have students return to their graphic organizers and add in the information
from the article that they will use in their essays, then tell them it is time
to write. If students need the support, you may want to write a “meat-and-
potatoes” introduction on the board:

```
An important issue today is _____________. Some people feel
____________. Others believe _____________. My own opinion is
____________.
```

28 Once they have written their introductions:

**LESS ADVANCED** students should aim to write a four-paragraph essay:

- **Paragraph One:** Introduction
- **Paragraph Two:** Reason 1 with example
- **Paragraph Three:** Reason 2 from the article, with example
- **Paragraph Four:** Conclusion

**ADVANCED STUDENTS:** If students are advanced, you can use this as an
opportunity to have them write a true TASC argumentative essay, which
should include a counterargument.

29 Distribute the *Template for TASC Argumentative Essay* handout, and ask
them to read through it. **What information from the first template or the
articles would they include in this template?** Once you have provided some
guidance about this, get students writing the rest of their essays (assuming
the introduction has been written as a class as above).

30 Walk around as students are working to provide guidance and support. When
students are finished writing, collect the papers. Reading them will help you
decide what to teach next.
Sample TASC Argumentative Essays

Read the essay prompt and both essays. Discuss the questions below with a partner.

**Essay Prompt:**

**SHOULD LIBRARIES BE FREE?**

There is an ongoing debate in the public domain as to whether free public libraries are still practical in today’s world. What are the implications for society of a “free” public library system? Has the time come for cities to consider requiring patrons to pay a fee to use library services?

Weigh the claims on both sides, and then write an argumentative essay supporting either side of the debate in which you argue for or against the free library system. Be sure to use information from both texts in your argumentative essay.
Although libraries once were important to communities, they have lost that importance and therefore should no longer be free to the public. Fees should be established for the services that the libraries provide. Tax payers should not bear the burden of operating libraries that they no longer use.

The article titled “Can We Afford ‘Free’ Libraries?” states that “the library is losing some of its relevance.” This is true. People now have computers they can use to Google anything they want. They no longer have to go to a library to look through old books and newspapers to find the information they need. They can also use computers to purchase books for themselves and their children from Amazon. They can build their own libraries without having to drive or walk to the community library to look for books that may end up not even being there. The article also says that tax payer’s money should go to other more important services, like EMT and fire departments. Saving people’s lives is far more important than giving them a place to hang out. As the article points out, taxes should be used for these services because they “could save valuable jobs and services.”

It’s true that a library also employs people and provides services. Like the first article says, libraries do give people a place to meet, they help educate people, and they preserve history. But why must all taxpayers pay for these, especially if they don’t use the services? Therefore, libraries should charge membership fees to belong. If people don’t want to pay the fees, they can go to schools.

In conclusion, I feel that libraries should no longer be subsidized by tax payer money. Libraries are a thing of the past. “The nonprofit public library is well over 100 years old.” People who want a library should pay for it, and people who don’t use libraries should use their money to support other community services.

**DISCUSSION QUESTIONS**

- Is it organized? Is each paragraph about one main idea? Provide an example.
- Was the question satisfactorily answered? Explain why.
- Do the introduction and conclusion summarize the main points of the essay? How so?
- How does the writer provide evidence that supports her claims? Is there sufficient evidence?
- Does the writer draw information from the source texts?
- Which essay, A or B, is better? Why do you say so?
- Is there a counterclaim?
ESSAY B

Yes, libraries should still be free to everyone. Some people cannot afford internet or computers and can’t learn information they need to know unless they have a library where they can do that. Other people need help with their taxes. Some people need a place to meet their friends where it’s quiet and you can work.

Everyone has to pay a lot of taxes. Too much, I think. So we should get something from all those taxes that we pay.

Libraries help to make people smarter, like the article says. They help people self-educate and stop “brain drain.”

Libraries also are a place where history can be saved. Like, important things about your community can be found out by going to the library. If we didn’t have libraries, people will not have a place to learn those things for free. They would have to pay for them and not everyone has the money to pay for those services. They are a hub of community activity because they are a place where people can meet and learn things, like how to get ready for a test or how to babysit.

People’s taxes are needed for other services, too, like EMT and fire services; that is true. But that doesn’t mean taxes can’t still keep libraries open and free to the public. So I say, keep libraries free to keep people smart.

DISCUSSION QUESTIONS

- Is it organized? Is each paragraph about one main idea? Provide an example.
- Was the question satisfactorily answered? Explain why.
- Do the introduction and conclusion summarize the main points of the essay? How so?
- How does the writer provide evidence that supports her claims? Is there sufficient evidence?
- Does the writer draw information from the source texts?
- Which essay, A or B, is better? Why do you say so?
- Is there a counterclaim?
- Which essay, A or B, is better? Why?
### TASC Argumentative Essay Graphic Organizer

<table>
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<th>Claim:</th>
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<th>Reason One:</th>
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<th>Reason Two:</th>
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| Reason from the article: |
New Minimum Wages in the New Year


Sam Hodgson for The New York Times

1. In five states and nine cities—including California, New York, Oregon and Washington, D.C.—voters and lawmakers will consider proposals in 2016 to gradually raise minimum wages to $15 an hour.

2. The ballot initiatives and pending legislation will build on momentum from this year, in which 14 states and localities used laws, executive orders and other procedures to lift wages for all or part of their work forces to $15 an hour.

3. In New York City, for instance, the minimum wage for workers in fast food and state government will rise to $10.50 on New Year’s Eve, and to $15 by the end of 2018. In the rest of New York, the minimum for those workers will reach $15 an hour in mid-2021. In Los Angeles County, including the city of Los Angeles, the minimum wage for most workers will rise to $10.50 by mid-2016 and to $15 by mid-2020. Seattle and San Francisco are also phasing in citywide minimums of $15 an hour, while five other cities—Buffalo and Rochester in New York; Greensboro, N.C.; Missoula, Mont.; and Pittsburgh—are gradually raising their minimums to $15 for city workers.

4. Minimum-wage raises are examples of states and cities leading in the absence of leadership by Congress, which has kept the federal minimum at $7.25 an hour since 2009. State and local increases are also potent shapers of public perception. It was only three years ago that a walkout by 200 or so fast-food workers in New York City began the Fight for $15, now a nationwide effort to raise pay and support unions. Two years ago SeaTac, Wash., home to an international airport, voted in the nation’s first $15-an-hour minimum for some 6,500 workers in the city, on and off airport property. Since then, $15 an hour has gone from a slogan to a benchmark.
5. These state and local increases, though important, are no substitute for a robust federal minimum because they don’t affect places that will never act on their own to lift minimum wages. Currently, 21 states do not impose minimums higher than the federal rate, and that includes the poorest states, like Alabama and Mississippi, where it takes nearly $20 an hour to meet living expenses for one adult and one child. Even in states that have raised their minimum wages, the levels are still not high enough to meet living expenses for typical workers and families.

6. Sooner or later, Congress has to set an adequate wage floor for the nation as a whole. If it does so, the minimum should be $15.

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1. Pending—something that is pending is waiting to happen.
2. Momentum—momentum is energy that gets built up more and more until it starts movement or action.
3. Localities may mean towns, cities or counties.
4. Phasing in—gradually introducing.
5. Potent shapers of public perception—“potent” means “powerful” or “effective.” This phrase means that the actions being described (cities that have raised the minimum wage) can be powerful in shaping or influencing public perception—in other words the way people perceive or think about the issue.
6. A “slogan” can be something people chant, such as “We want jobs.” A “benchmark” is more like a standard or expectation for someone or something to meet.
7. “Robust” means “healthy” or “strong.”
8. Wage floor—the lowest amount of hourly pay a worker could receive.
John Boehner, Speaker of the House of Representatives, on the Minimum Wage

Growing up in Reading, Ohio, I had every type of job you can imagine—mopping floors, washing dishes, tarring roofs, and driving a bulldozer, to name a few. I’ve got 11 brothers and sisters, and today they’re on every rung of the economic ladder. As a nation, our goal should be to help every individual get on and climb that ladder so they can live the American Dream.

Raising the minimum wage is one of those ideas that sounds good but will actually hurt the very people it’s supposed to help. Before I was elected to Congress, I spent 15 years running a plastics and packaging company. Operating a small business, I learned firsthand a basic principle of economics: that when you raise the price of something, you get less of it. And if you raise the cost of hiring workers, fewer will be hired.

Don’t take my word for it; the experts say the same thing. Janet Yellen, head of the U.S. Federal Reserve, said that “almost all economists” agree that raising the minimum wage would hurt employment. A recent report from the non-partisan Congressional Budget Office says it would cost the economy up to 1 million jobs.

Here’s what happens when the government mandates that businesses pay workers more: Businesses have to find a way to offset the additional cost. Sometimes that means letting a worker go or not hiring a new worker. Sometimes it means offering workers fewer hours on the job.

And it isn’t just workers who lose out. Some businesses will also compensate for the additional cost by charging higher prices for their goods and services. Forcing consumers to pay higher prices doesn’t help American families and it isn’t good for the economy.

Ultimately, while raising the minimum wage may mean higher pay for some, it will mean fewer jobs overall and higher prices for many families.

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1 Non-partisan. This means an organization that does not belong to either political party—neither the Republicans nor the Democrats.
2 Mandates—requires
3 Compensate—make up for, or balance out
# Template for TASC Argumentative Essay

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<thead>
<tr>
<th>ESSAY TEMPLATE: ARGUMENTATIVE ESSAY</th>
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<tr>
<td><strong>PARAGRAPH ONE:</strong> Introduction</td>
</tr>
<tr>
<td>• The topic</td>
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<tr>
<td>• Why the topic is important</td>
</tr>
<tr>
<td>• Your claim about the topic</td>
</tr>
<tr>
<td>An important issue today is __________. Some people feel that __________. Others believe __________.</td>
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<td>My own opinion is that __________.</td>
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<tr>
<th><strong>PARAGRAPH TWO:</strong> Reason One to support your claim</th>
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<tr>
<td>Further explanation/examples/evidence to support this reason (Check that your whole paragraph is ONLY about Reason One)</td>
</tr>
<tr>
<td>One reason I believe __________ is that __________.</td>
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<tr>
<td>The article __________ states that __________.</td>
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<td>This article gives the example of __________.</td>
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<tr>
<th><strong>PARAGRAPH THREE:</strong> Reason Two to support your claim</th>
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<tr>
<td>Further explanation/examples/evidence to support this reason (Check that your whole paragraph is ONLY about Reason Two and that Reason Two is DIFFERENT from Reason One)</td>
</tr>
<tr>
<td>Another reason I think __________ is that __________.</td>
</tr>
<tr>
<td>As the author of __________ shows, __________.</td>
</tr>
<tr>
<td>In my own experience, __________. For instance, __________.</td>
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</table>
PARAGRAPH FOUR: Counterclaim

Mention ONE reason from the text that goes AGAINST your claim and explain why you disagree with it.

Although __________________________ provides some evidence that ___________________________,
I do not believe this is enough to justify the claim that ___________________________.
Instead, ____________________________.

PARAGRAPH FIVE: Conclusion

Two or three sentences that return to your claim and say again (1) why it is important (2) how things in general will be better if people do things the way you have recommended in your essay.

In conclusion, ____________________________ (restate your claim in different words and why it is important.)
TASC Informational Essay: NY Paid Family Leave Law
Scaffolding Level: Medium

Students read and analyze articles about New York’s paid family leave law, create guiding questions from an essay prompt, use a graphic organizer or essay template to plan their essay, and then write a TASC informational essay on the topic.

PREP

- Read New York State Passes 12-Week Paid Family Leave Law and New Family Leave Law Helps Working Parents and Families articles
- Read TASC Informational Essay Prompt: Paid Family Leave handout and be prepared to lead students through turning the essay prompt into guiding questions.
- Decide which essay planning strategy you want to introduce or implement (graphic organizer, template, outline, etc.).

MATERIALS

- TASC Informational Essay Prompt: Paid Family Leave handout
- New York State Passes 12-Week Paid Family Leave Law article
- New Family Leave Law Helps Working Parents and Families article
- Paid Family Leave Graphic Organizer worksheet
- Template for TASC Informational Essay handout

EXPLAIN

1. Ask students to turn to a partner and discuss the following questions:
   - Do workers have a right to take time off to care for a new child in their family or a sick relative?
   - If not, why not? If so, should it be paid or unpaid time?

2. Ask pairs to summarize their conversations and share highlights with the class.
Today we are going to practice writing an informational essay. This is one kind of essay that appears on the TASC exam. Distribute *TASC Informational Essay Prompt: Paid Family Leave* handout and ask students to read just the prompt (the first paragraph). Make sure students understand what paid family leave is.

Ask for a volunteer to read Step 1 and, using the example as a guide, support students through creating 2 guiding questions based on the prompt that they will use to guide their reading, planning and essay writing. These questions should closely resemble the following:

- What is the 12-week paid family leave?
- How can this law benefit workers, families and the general public?

Students should understand that their “job” is to answer these questions in their essay.

When the class has decided on 2 guiding questions and written them into the worksheet, ask for a volunteer to read Step 2, then ask:

Since the first part of their “job” is to explain the new family leave law, which article is more likely to have that information? (*New York State Passes 12-Week Paid Family Leave Law*).

Distribute this article only and ask students to read it and underline the parts that explain what the law actually states.

Once students have read and underlined, ask them to work in pairs to compare their underlines, and discuss any questions they have.

Let students know they need to summarize the information about the new law in their own words for the essay they are writing. Have students work together as a class to use their underlines as a guide as to what to include in this summary. You, the teacher, will be the “scribe” and write the summary on the board while they dictate what to write. Negotiate this process until you have a 3–4 sentence summary of the information written in a way that someone who has not read the article would understand.

Have students read the second article: *New Family Leave Law Helps Working Parents and Families* article. Ask them to underline the places where they find information about who the law will benefit and reason why it will benefit them. They should also underline evidence that supports those reasons (you may want to discuss what is meant by “evidence”—if there is a study or statistics, that usually constitutes evidence. In this case, it might also be anecdotal evidence from the mother being interviewed).
9 Next ask a student to read Step 3. Distribute the *Paid Family Leave Graphic Organizer* handout. Fill out the organizer for the first “Reason” together as a model, asking students to guide you from their underlines.

10 Ask students to work individually or in pairs to fill in the rest of the graphic organizer. You may then want to lead the class in writing some sentences that they will be able to use in their essays using sentence starters, for instance:

- *One reason a paid family leave law was needed is…*
- *One benefit of the new paid family leave law is… For example…*

11 Next ask students to read Step 4 and discuss briefly why each piece of advice is important. Give students time to write their essays.
TASC Informational Essay Prompt: Paid Family Leave

Essay Prompt
New York, in addition to California, New Jersey and Rhode Island, is one of four states that has passed a bill granting workers up to 12 weeks of paid family leave. Read the two texts provided, then write an informational essay in which you explain the new law regarding paid family leave in New York and the ways this law can benefit workers, their families, and the general public.

STEP 1
In the box below, you will turn the essay topic—what you are going to write about—into one or more questions. For example, if the essay assignment read, “Write an informational essay explaining what the TASC exam is and how to prepare for it,” you then turn the assignment into the following 2 questions: What is the TASC exam? How can students prepare for it? These questions will be your guiding questions for your reading. Your essay will be focused on answering those two questions.

GUIDING QUESTIONS: TURN TOPIC INTO QUESTIONS

STEP 2
Read and annotate the two texts: New York State Passes 12-Week Paid Family Leave Law and New Family Leave Law Helps Working Parents and Families. As you read, underline parts that relate to the guiding questions, and try to answer them. Write any questions or comments you have in the margins.
STEP 3
Plan your essay. Think about ideas, facts, definitions, details, and other information and examples you want to use. Think about how you will introduce your topic and what the main topic will be for each paragraph. A graphic organizer is one way to plan your essay.

STEP 4
Now write your informational essay. Be sure to:

• Introduce the topic to be examined.

• Develop the topic with specific facts, details, definition, examples and other relevant information from both passages.

• Organize the information and evidence effectively.

• Use words, phrases, and/or clauses to connect and show the relationship among your ideas.

• Establish and maintain a formal style.

• Provide a concluding statement or section that follows from and supports the information presented.
New York State Passes 12-Week Paid Family Leave Law

By Lisa Lewis and Nicole Zolla April 5, 2016

On April 4, 2016, New York Governor Andrew Cuomo signed legislation adopting a 12-week paid family leave policy for New York employees (the “Paid Leave Law”). Once fully implemented, the Paid Leave Law will provide New York employees with up to 12 weeks of paid family leave for the purpose of (1) caring for a new child, (2) caring for a family member with a serious health condition, or (3) relieving family pressures when a family member, including a spouse, domestic partner, child or parent, is called to active military service.

Paid leave to care for a new child will be available to both men and women and will include leave to care for an adoptive or foster child. An employee may take paid leave to care for a new child any time within the first 12 months after the child’s birth or 12 months after the placement for adoption or foster care of a child with the employee. Paid leave to care for a family member with a serious health condition, includes leave to care for a child, parent, grandchild, grandparent, spouse or domestic partner. The legislation allows employers to establish rules limiting employees from receiving paid leave benefits for the care of the same family member at the same time as another employee.

Employers should note that the new paid family leave policy will be implemented gradually. Starting on January 1, 2018, employees will be eligible for eight weeks of paid leave, earning 50% of their weekly pay (capped at 50% of the statewide average weekly pay). The number of weeks of leave and amount of pay increases yearly until, by 2021, employees will be eligible for the full 12 weeks of paid leave, earning 67% of their weekly pay (capped at 67% of the statewide average weekly pay).

In order to be eligible to receive paid leave benefits, employees are required to have worked for their employer for at least six months. Paid leave benefits will be available on the first full day that leave is required for eligible employees (unlike New York State disability benefits where there is a waiting period before employees start receiving benefits).

Significantly, the paid family leave will be funded by a weekly payroll tax of about $1 per employee, deducted from employees’ paychecks. Based on this insurance model, employers will not have to face the direct financial burden of funding the paid leave benefits provided under the new law. Nonetheless, employers should begin to prepare for other administrative costs associated with the new law, including costs for implementing changes to internal policies and costs related to employee absences during their paid family leaves.

Since the Paid Leave Law was just signed into legislation and the first phase of implementation is not scheduled to begin until 2018, there has not yet been any significant guidance issued on the new law. We will continue to monitor for additional analysis or guidance issued by the State, if any, and will provide employers with updates on implementation as more information develops.
New Family Leave Law Helps Working Parents and Families

By Dina Bakst

Adapted from https://www.usnews.com/opinion/economic-intelligence/articles/2016-02-09/new-yorks-paid-family-leave-proposal-sets-a-strong-example-for-the-nation

Only 12 percent of workers in the U.S. have access to paid family leave through their employers. This means while a growing number of companies are rolling out paid leave policies for their employees, the vast majority of American workers are on their own, with no financial cushion or job security when a new baby is born or family member becomes seriously ill. This stands in sharp contrast to the rest of the world: The U.S. is the only high-income developed nation in the world not to offer any paid leave. This is shameful.

Thankfully, New York is now joining the handful of other states—California, New Jersey and Rhode Island—who have enacted their own paid family leave programs. These laws allow workers to continue to earn a portion of their pay while taking time away from work when serious family and medical needs arise.

New York Governor Andrew Cuomo has passed a bill guaranteeing 12 weeks of job-protected paid leave for all New Yorkers—the most generous state law in the nation. Paid family leave would offer crucial financial security when it is most needed. Paid leave has proven to help women remain attached to the workforce and increase their earnings over time. In fact, when women take family leave, they are 39 percent less likely to receive public assistance or food stamps. And when fathers take leave, they are not only less likely to turn to public assistance, research reveals women’s wages rise by nearly seven percent. Better wages and economic conditions leads to stronger families—and a stronger economy.

Paid leave also improves health outcomes for mothers and babies, including adequate time to recover from childbirth and establish breastfeeding, increased birth weight, faster recovery times and shorter hospital stays. With the support of loved ones, paid leave also allows ill and aging individuals to recover at faster rates and spend less time in hospitals and other long-term care facilities.

Paid leave also has numerous benefits for employers, including reduced turnover as well as increased employee loyalty, morale and productivity. It would also help small businesses retain talented employees by providing a benefit they wouldn’t be able to afford on their own. Although some may view paid leave as another tax on employers, this is simply not true: paid family leave in New York would be funded solely by employee payroll contributions, estimated to be less than the cost of a cup of coffee. And in a business survey of California’s paid family leave law, 91 percent of employers reported the effect of the policy was either not noticeable or positive.
Paid Family Leave Graphic Organizer

Use the boxes below to outline your main idea, supporting details, and evidence for your essay. Use this outline to guide your essay writing.

**Introduction/Main Idea:**

**Reason 1:**

**Evidence 1:**

**Conclusion:**

**Reason 2:**

**Evidence 2:**

**Reason 3:**

**Evidence 3:**
Template for TASC Informational Essay

**ESSAY TEMPLATE: INFORMATIONAL ESSAY**

**PARAGRAPH ONE: Introduction**

- **The topic in general and how it affects people**
  (Examples: The rise of 3-D printing is bringing change to many businesses... Global warming is a problem that affects us all... More and more, we have been hearing in the news about the effects on young children of watching television.)

- **Why the topic is important**
  (The availability of 3-D printing is creating jobs in some sectors and creating job loss in other sectors... Global warming is a danger both for our present and our future... Television is an important topic because it affects our children’s health and well-being...)

- **A BRIEF preview of what the reader will learn by reading your essay.**
  (3-D printing makes some products stronger, longer lasting and less expensive, but also leads to a loss of jobs in some fields... The dangers of global warming include x, y and z, but there are also solutions... The harmful effects of television watching include x, y and z)

**HELPFUL PHRASES:**

*An important topic today is...*
*A much-discussed topic today is...*
*A problem today is...*

**PARAGRAPH TWO: ONE category of information**

- **For example:** If you are supposed to write about advantages and disadvantages, make one body paragraph about advantages and one body paragraph about disadvantages.

- **For example:** If you are supposed to write about problems and solutions, make one body paragraph about problems and one body paragraph about solutions.

- **For example:** If you are supposed to write about different kinds of dangers arising from a particular cause (global warming, pollution, etc.), make one body paragraph about one type of harm and the second paragraph about another type of harm.

**Start with a topic sentence that tells the reader in general what the paragraph is about:**
(There are a number of advantages to working part time while in high school... Global warming causes several problems... One of the main types of harm done to young children who watch television is...)

**Include specific examples from the article. Remember to include the specific information and the source:**
(According to the article (title of article), students who work part-time learn how to manage their time successfully... The Alliance of Concerned Scientists found that crop production had declined by 30 percent... For example, a study done by The Alliance of Concerned Parents states that young children who watch more than three hours a day of TV have trouble learning to read...)
**PARAGRAPH THREE:** SECOND category of information

- **For example:** If you wrote about *advantages* in Paragraph Two, write about *disadvantages* in Paragraph Three.
- **For example:** If you wrote about *problems* in Paragraph Two, write about *solutions* in Paragraph Three.
- **For example:** If you wrote about *ONE kind* of harm or danger in Paragraph Two, write about *ANOTHER kind* of harm or danger in Paragraph Three.

Start with a topic sentence that tells the reader in general what the paragraph is about:

*(Although there are advantages, there are also drawbacks to working part time while in high school... While global warming causes a variety of problems, there are several solutions... Another of the main types of harm done to young children who watch television is...)*

Include specific examples from the article. Remember to include the specific information and the source:

*(For example, a study done by The Alliance of Concerned Parents states that young children who watch more than three hours a day of TV have social problems... According to the article (title of article), students who work part-time often see their grades suffer... The Alliance of Concerned Scientists states that taking public transit instead of driving saves a pound of carbon a day...)*

**PARAGRAPH FOUR:** Conclusion

- Two or three sentences that return to your topic and say again
  1. why it is important
  2. SUMMARIZE the causes/solutions/types of good or harm
  3. how things in general will be better if people do things the way you have recommended in your essay.

**HELPFUL PHRASES:**

*In conclusion...*

*To summarize...*