Objectives:

Students will...

• Organize the steps of egg and poultry production in the correct sequence.
• Identify careers related to each step of production.

Get Ready:

Before you go...

• Play An Egg-Citing Poultry Adventure before visiting the classroom.

Get Set:

Materials you'll need...

• Chicken and Turkey Production Process handout, one per student
• Egg Production Process handout, one per student
• Steps of Production handout, one per student
• Scissors, one per student
• Glue stick, one per student
• Individual computers or tablets with internet connection for every three students

OR

• Computer, projector, and screen to play An Egg-Citing Poultry Adventure at www.myamericanfarm.org

STANDARDS:

CCSS.ELA-LITERACY.RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

CCSS.ELA-LITERACY.RI.4.5: Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
Let’s Go!

Your time with students will look something like this...

1. Welcome students and introduce yourself. Explain that the purpose of this lesson is to better understand how poultry farmers deliver eggs and meat from their farms to our grocery stores. To learn more about the poultry industry, we’re going to play a game of “Higher or Lower.”

2. Tell students to listen to some fictional statistics from the poultry industry. They must guess if the actual statistic is higher or lower. Tell students to stand if they believe the number is higher and remain seated if the number is lower. Read the following statistics and allow students time to respond before revealing the correct answer.
   i. Turkey sandwiches account for 60% of all turkey eaten. (Lower, 48% of all turkey is eaten in turkey sandwiches.)
   ii. In a commercial facility, hens lay an average of 365 eggs each year. (Lower, one hen lays approximately 300 eggs each year.)
   iii. Americans consume more chicken than anyone else in the world, 74 pounds per person. (Higher, it's 92 pounds per person.)
   iv. The average American eats 150 eggs a year. (Higher, the average American eats over 200 eggs a year.)
   v. Approximately 60 percent of broiler chickens are produced on family-owned farms. (Higher, 95 percent are produced on family farms.)

3. Explain that the poultry industry, which produces both meat and eggs, plays an important role in the availability of safe, nutritious, and affordable food. Due to the industry’s size, there are numerous jobs related to poultry production.

4. Explain that the online game, *An Egg-Citing Poultry Adventure*, will introduce students to the steps of egg and meat production in the poultry industry while challenging students to solve real-world math problems. Instruct students to play the game in groups of two to three.
   i. If students don’t have access to individual technology, play the game as one group. All students can work out their answers on scratch paper, while one student is chosen to select the best answer in the game.

5. After 20-30 minutes of playing *An Egg-Citing Poultry Adventure*, recapture students’ attention to review and explain the in-class activity. Invite students to summarize the production process they experienced while playing the game.

6. Explain that the next activity will challenge them to recall the production process in detail. The first handout, *Steps of Production*, includes all the production steps featured in *An Egg-Citing Poultry Adventure*. The steps for chicken and turkey and egg production are intermixed. Students must cut apart the cards, read each card carefully, and sort them into two groups — meat production steps and egg production steps. There will be six cards in each group.

7. Next, students will sequence the cards on the *Chicken and Turkey Production Process* and *Egg Production Process* handouts. Emphasize the importance of reading through all the steps once they are sequenced but before gluing in place. Allow students 5-10 minutes to complete the sequencing activity.
8. Review the answers with the class. Invite students to share their answers. At each step of production, take a few moments to brainstorm related careers. Students may capture their ideas on the student handouts. For related career ideas, see the included answer key.

Break it Down:

Ask students...

1. What two food products are produced in the poultry industry? (meat and eggs)
2. What about the poultry production process surprised you? (Answers will vary.)
3. What types of careers are related to the poultry industry? (Answers will vary.)
4. What types of skills would be necessary for a job in the poultry industry? (Answers will vary but emphasize that there are jobs for diverse skill sets.)
5. Explain to students that job opportunities in the poultry industry are worldwide. Many poultry companies have production in more than one country. Both meat and egg consumption are increasing, and so are the opportunities to work in the poultry industry. There may be a spot for you!
Chicken and Turkey Production Process

Broiler Breeder Farm

Hatchery

Processing Plant

Grow Out House

Grocery Store

Home
Egg Production Process

- Egg Laying House
- Egg Collection
- Inspecting and Packing
- Egg Cleaning
- Grocery Store
- Home
Steps of Production
Cut apart each step. Glue to the related production handout in the correct sequence

- The breeder hen will lay fertilized eggs when kept with a rooster.
- Families enjoy poultry meat prepared in many ways. Always cook poultry meat to at least 165°F.
- On some farms, eggs are still collected by hand, but on many farms the process is automated by conveyor belts.
- Poultry is often taken to stores in trucks with refrigerators. Poultry needs to be kept cold so it won’t spoil.
- Chicks and poults are moved to barns where they freely roam, eat, and drink.
- Hatching eggs are kept warm. They are hatched into birds raised for meat.
- Laying hens are kept in houses. The temperature, humidity and light are controlled for comfort. No roosters are allowed in this house. None of these eggs hatch into chicks because the eggs are not fertilized.
- Eggs are washed, sanitized, and dried to prevent spoilage.
- Keep eggs in a refrigerator at home so they stay fresh longer.
- Eggs are inspected for defects, sorted according to size, and placed in cartons.
- Eggs are shipped in refrigerated trucks. Most eggs arrive at your local store within a week of being laid.
- Poultry is processed humanely before being washed, cleaned, chilled, packaged, and inspected.
# MEAT (BROILER) PRODUCTION PROCESS

<table>
<thead>
<tr>
<th>STEPS</th>
<th>EXAMPLES OF RELATED CAREERS</th>
</tr>
</thead>
</table>
| **1. Broiler Breeder Farm:** Breeder hens, when exposed to roosters, produce fertilized eggs. | • Geneticists to maintain the breeding stock  
• Buyers for feed ingredients |
| **2. Hatchery:** Hatching eggs are kept warm. They are hatched into birds raised for meat. | • Mechanics to maintain and repair equipment  
• Managers for the hatchery |
| **3. Grow Out House:** Chicks and poults are moved to barns where they freely roam, eat, and drink. | • Veterinarians to make sure that the birds stay healthy  
• IT support team to keep the technology in the houses working correctly |
| **4. Processing Plant:** Poultry is processed humanely before being washed, cleaned, chilled, packaged, and inspected. | • Food scientists to produce new products  
• Food inspectors to assure products are safe |
| **5. Grocery Store:** Poultry is often taken to stores in trucks with refrigerators. Poultry needs to be kept cold so it won’t spoil. | • Business managers who send invoices to the grocery stores  
• Marketing managers for selling the poultry produced  
• Truck drivers who transport the poultry to the store |
| **6. Home:** Families enjoy poultry products prepared in many ways, but always cooked thoroughly (at least 165°F). | • Advertising managers to increase sales among consumers  
• Chefs who plan and prepare restaurant menus |
**EGG PRODUCTION PROCESS**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>EXAMPLES OF RELATED CAREERS</th>
</tr>
</thead>
</table>
| 1. **Egg Laying House**: Temperature, humidity, and light are controlled. Birds are either given the run of the floor or housed in cages. | • Animal nutritionists to advise on feed ratios and quantities  
• Agricultural engineer to design facilities  
• IT support team to keep the technology in the houses working correctly |
| 2. **Egg Collection**: On some farms, eggs are still collected by hand, but on many farms the process is automated by conveyor belts. | • Computer programmers to keep automated systems running  
• Technician to troubleshoot collection problems |
| 3. **Egg Cleaning**: Eggs are washed, sanitized, and dried to prevent spoilage. | • Food inspectors to assure products are safe |
| 4. **Inspecting and Packing**: Eggs are inspected for defects, sorted according to size, and placed in cartons. | • Quality control managers to assure excellent products  
• Packaging buyers who source and purchase materials for packing |
| 5. **Grocery Store**: Eggs are shipped in refrigerated trucks. Most eggs arrive at your local store within a week of being laid. | • Marketing managers for the sale of the eggs  
• Truck drivers who transport the eggs to the store |
| 6. **Home**: Eggs must be refrigerated at home. They will age more in one day at room temperature than in one week in the refrigerator. | • Food scientists and nutritionists who research the health benefits of eating eggs |