



Agriculture Then and Now

Middle School Food and Agricultural Literacy Curriculum

Precepts

- H. Social Growth
 - H3. Develop, maintain and grow healthy relationships.

National Standards

- CS.01.05.01.b. Analyze the impact of **trends** and issues on the community.
- CS.05.03.01.b. Interpret resource data in graphic format.
- FPP.01.01.01.a. Discuss the history and describe and explain the components (e.g., processing, distribution, byproducts) of the food products and processing industry.
- NL-ENG.K-12.12– Applying Language Skills
- NM-NUM.6-8.3 –Compute Fluently and Make Reasonable Estimates
- NM-NUM.6-8.1 – Understand Numbers, Ways of Representing Numbers, Relationships among Numbers, and Number Systems
- NM-MEA.6-8.1 – Understand Measurable Attributes of Objects and the Units, Systems, and Processes of Measurement
- NM-DATA.6-8.1 – Formulate Questions That Can Be Addressed With Data and Collect, Organize, and Display Relevant Data to Answer
- NM-DATA.6-8.3 – Develop and Evaluate Inferences and Predictions That Are Based on Data
- NS.5-8.6 – Science in Personal and Social Perspectives
- NSS-EC.5-8.1 – Productive Resources
- NSS-EC.5-8.8 – Supply and Demand
- NSS-EC.5-8.18 – National Productivity

Student Learning Objectives

- As a result of this **unit** the student will...
- Evaluate how agriculture supports all life
- As a result of this **lesson**, the student will ...
- Compare and contrast agriculture from yesterday to today

Time

Instruction time for this lesson: 45 minutes.

Resources

Food and Farm Facts. American Farm Bureau. US Per Capita Meat Consumption 1950-2007. United States Department of Agriculture. <http://www.hsus.org/web-files/PDF/farm/Per-Cap-Cons-Meat-1.pdf>

Tools, Equipment, and Supplies

- Overhead projector/transparencies
- Writing surface
- Scratch paper
- Colored pencils, markers and crayons
- Fashion and Ag trend resources (examples include: Internet, fashion history texts, books from public library)
- MS.IAS.2.4.TM.A – one per teacher
- MS.IAS.2.4.TM.B – one per teacher
- MS.IAS.2.4.TM.C – one per teacher
- MS.IAS.2.4.TM.D – one per teacher
- MS.IAS.2.4.ASSESS.A – one per student

Key Terms

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

Trends

Content Outline

I. **Trends**

- A. Definition
 - 1. The general direction in which something tends to move
 - 2. Current style
- B. **Trends** in meat consumption
 - 1. beef
 - 2. pork
 - 3. poultry
- C. Other **trends** in agriculture

Interest Approach

Hello class! The last few days we have defined agriculture and today we are going to discover what it has in common with the fashion world! I am not talking about leather and fur; today we'll focus on its **trends**! What is a **trend**?



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Think to yourself about your favorite accessory item. This could be a belt, a purse, a wallet, or a necklace.

Wait for student reflection.

Do you think that the item you identified was popular style ten years ago? Probably not. A **trend** is defined as “the general direction in which something tends to move” or “current style.”

When I say GO, line up in the front of the room in the order of the size of your favorite accessory, with the biggest being here (*pointing to spot in room*) and the smallest being here (*pointing to spot in room*). GO.

Great line! I am going to number off in numbers one through five. When I am finished numbering, quietly find a spot in the room with your partners and wait for further instruction.

Number off students one through five. Wait for students to find spot with their partner(s) before starting again.

Use the Go Get It e-Moment® to introduce fashion **trends** in different eras of recent history. This e-Moment allows students to be responsible for their own learning, utilizing resources within the room to complete the task at hand.

When I say **TREND**, you and your partners will create a fashion drawing for a model, based on the popular fashion in an assigned decade. You can utilize several resources around the room—markers, colored pencils and/or crayons, and scratch paper—but be mindful that all reference materials must be stored away when I give the 10-second warning. Group 1 you have the 60s, 2 you have the 70s, 3 the 80s, 4 the 90s and 5 you have the early 2000s. What questions are there? **TREND**.

Monitor student work and count down time to keep students accountable to their task at hand.

Be in your seats in 10, 9, 8, (*go until 0*)! Every great fashion show has a runway. The runway is the front of the room. When I call upon your decade, do your best catwalk down our runway and show your audience the fashion **trend** of your decade. What questions do you have?

The 60s!

Pause for students' presentation.

The 70s!

Pause for students' presentation.

The 80s!

Pause for students' presentation.

The 90s!

Pause for students' presentation.

The early 2000s!

Pause for students' presentation.

Fantastic catwalk, models! You depicted the last 50 years of fashion **trends** very well!

What changes did you notice over the last 50 years in fashion **trends**?

Pause for student share.

In teaching middle school, I have observed that fashion **trends** change on a week-by-week basis and that each of you in your own way is a **trend** setter. How do you develop a fashion **trend**?

Pause for student share.

In search for these **trends**, do we sometimes alienate individuals who don't pick up the **trend**?

Pause for student share.

What is more important to you, a good friend or a fashionable friend?

Pause for student share.

While we get out scrap paper, let's remember to be mindful that while **trends** are good and fun to keep up with, it is important to develop friendships based on morals, character, and personality, not name brand jeans.



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Agriculture Then and Now

Summary of Content and Teaching Strategies

Objective 1. Compare and contrast agriculture from yesterday to today.

There are many **trends** that are occurring in the agricultural industry. **Trends** are basically changes over time due to the choices consumers make. With your marker, draw an x and y axis on your board.

Lead by example on the board. Refer to the example on **MS.IAS.2.4.TM.A**, but do not display to students.

Label the bottom of the y-axis as "0 pounds" and the top as "250 pounds."

Lead by example on the board.

At the beginning of the x-axis, write "1950" and the end as "present."

Lead by example on the board.

Your y-axis is the number of pounds of meat the average American consumes, and the x-axis is the year.

When I say CREATE, draw a line graph for how many pounds of meat Americans ate over the years. You do not need to label each year, just give an approximate for your guess. You will have 30 seconds to finish your graph. The main idea here is the **trend**. Do you think consumption is up or down? Draw a line that represents this change over time. What questions are there? CREATE.

Monitor student work and count down time to keep students accountable to their work.

3-2-1! Who will be the first to share their guess?

Pause for student share.

Great! Do you want to see what really happened?

Pause for student remarks.

Here is what really happened!

Display **MS.IAS.2.4.TM.A** or draw line on writing surface.

Why did meat consumption go up?

Pause for student reflection.

Now that we know what happened with the meat industry, what type of meat consumption do you think grew the fastest: beef, pork, or poultry? Why?

Pause for student reflection.

Well, let's see!

Display **MS.IAS.2.4.TM.B** or draw the beef chart on the writing surface.

Which year did beef reach its peak?

Pause for student reflection.

1975 is the period that beef about reached its peak. Being that the meat industry still grew, something must have kept climbing! What industry was it? Was it pork or chicken?

Pause for student reflection.

Let's dig in and see!

All right, here is the graph for pork.

Display **MS.IAS.2.4.TM.C** or draw the pork chart on the writing surface.

So it wasn't pork. But what do we notice about pork?

Pause for student answers.

The pork industry used to be the top meat industry, declined a little, but has stayed steady over the last 10 years. So what do you think that leaves with chicken?

Pause for student answers.

Let's take a look!

Display **MS.IAS.2.4.TM.D** or draw the chicken chart on the writing surface.



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Whoa! The chicken consumption has more than tripled itself since the 1950s! What changed in the American diet over these years?

Pause for student answers.

The American diet has changed from preference of meat and dietary restrictions and concerns. But the biggest change has come from the ability to have a quick meal. The poultry industry, producing smaller animals, was able to change the industry faster than beef or pork to adapt to consumer needs.

Use the Go-Get-It e-Moment to have students go and gather information, using a variety of information in the classroom to fill in their own choice of **trends** in the agricultural industry since the 1950s. Students will record the information on a sheet of paper. Instructor will need to prepare several trend facts throughout the room or make computers (Internet) available to students for research.

We have covered the meat industry fairly well, but there are **trends** in agriculture other than just the meat industry. At this point in time, select another **trend** that you believe exists in agriculture. For example, a current trend in agriculture is the demand for more organic products. What else do you think might be a **trend**? Put your pencil in the air when you have selected your choice.

Pause for student reflection and signal.

When I say SCAVENGE, do your best job to efficiently find information in this classroom over the next 5-7 minutes. You will be looking for the **trends** in agriculture from 1950 to present the specific **trend** that you have just selected. Chart your graph on your activity sheet, put away your materials, and find your way back to your seat. Who will be the first to reinterpret the directions back to the class?

Wait for students to volunteer and repeat directions.

SCAVENGE!

Monitor student progress and count down time to keep students accountable to their work.

Be back in your seats in 3-2-1! Great work, gang! I am excited to see your products! There are two more spots on your activity sheet. One is for your neighbor's **trend** and another is for a **trend** of another individual in the classroom. When I say TEACH, educate your neighbors and classmates about your **trend**, while finding two **trends** different from your own to fill in your notes with. You will have two minutes to complete this task. What questions are there? TEACH.

Monitor student progress and count down time to keep students accountable to their work.

Be in your seats in 3-2-1! Who will be the first to share their or another student's **trend**?

Pause for student share.

We have time for two more shares. Who will volunteer?

Pause for student sharing.

Great work, class! I am totally impressed by your wealth of new knowledge!

Review/Summary

Today, we learned tons about **trends** in the agricultural industry. Turn to your neighbor and share with them your thought to this question: How do the past markets influence your life today?

Pause for student shares.

What thoughts did you share?

Pause for student discussion.

Right! The **trends** of past years have set the context for the market that we currently partake in today. The highs and lows of yesterday will also serve as a betting line for producers and economists for years to come! Have a great rest of the day and prepare to think hard about agriculture again tomorrow!



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Agriculture Then and Now

Application

Extended classroom activity:

Instruct students on discovering **trends** that might affect different areas of the agricultural industry that interests them, and prepare a one-minute summary of it for class.

FFA activity:

Compare the **trends** in agriculture to the **trends** in the FFA, including membership numbers and demographics, as well as programs initiated by the organization.

SAE activity:

Have students create a blog that highlights the past **trends**, accompanied by their predictions for the future.

Evaluation

MS.IAS.2.4.ASSESS.A

Answers to Evaluation

1. b
2. a, b, e
3. b
4. c
5. a



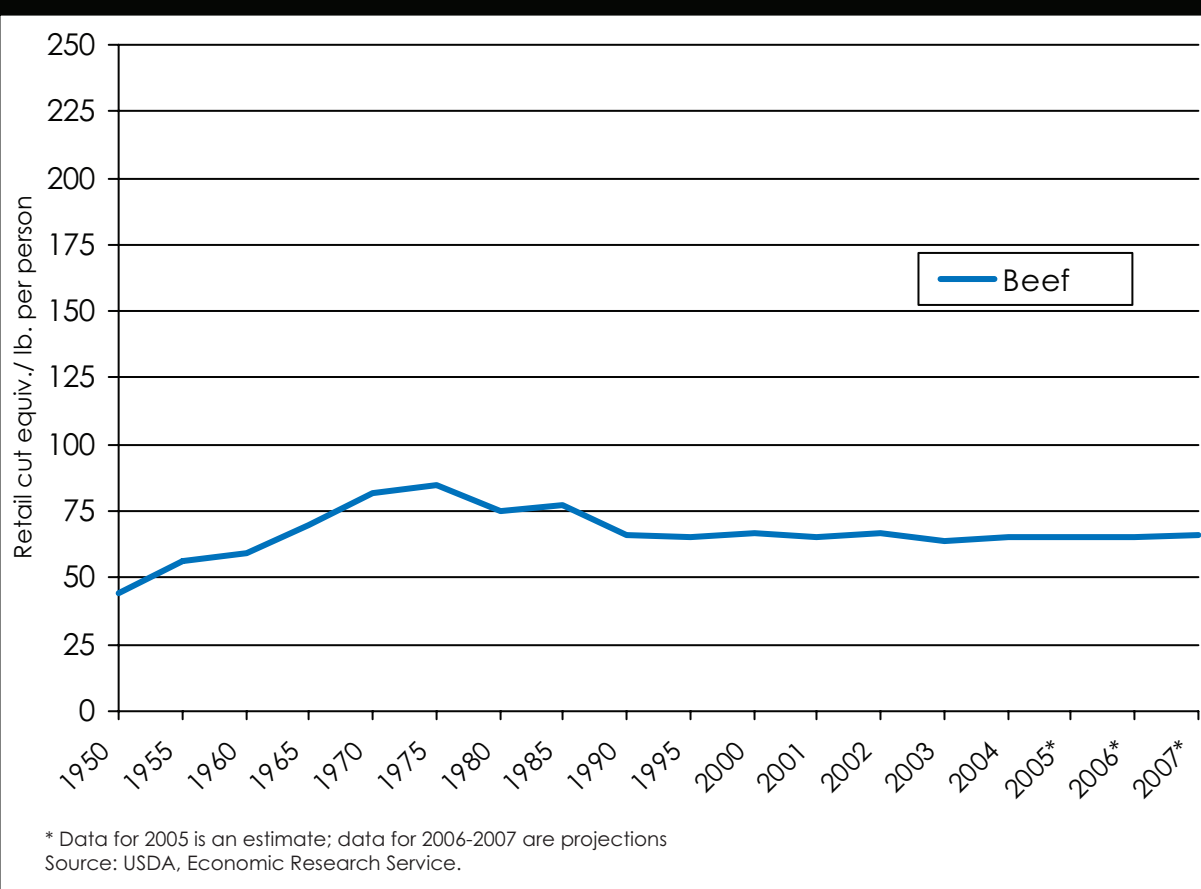
US per Capita Meat Consumption 1950 - 2007*



* Data for 2005 is an estimate; data for 2006-2007 are projections
Source: USDA, Economic Research Service.

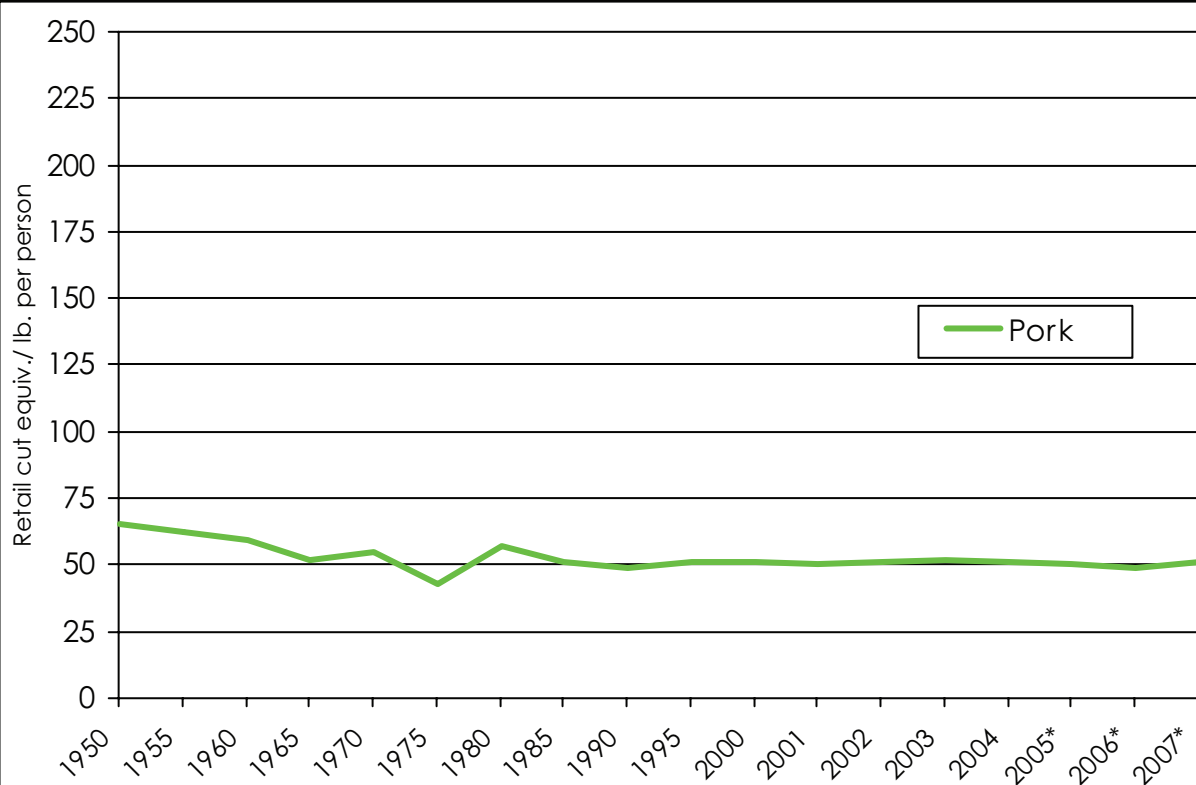


US per Capita Beef Consumption 1950 - 2007*



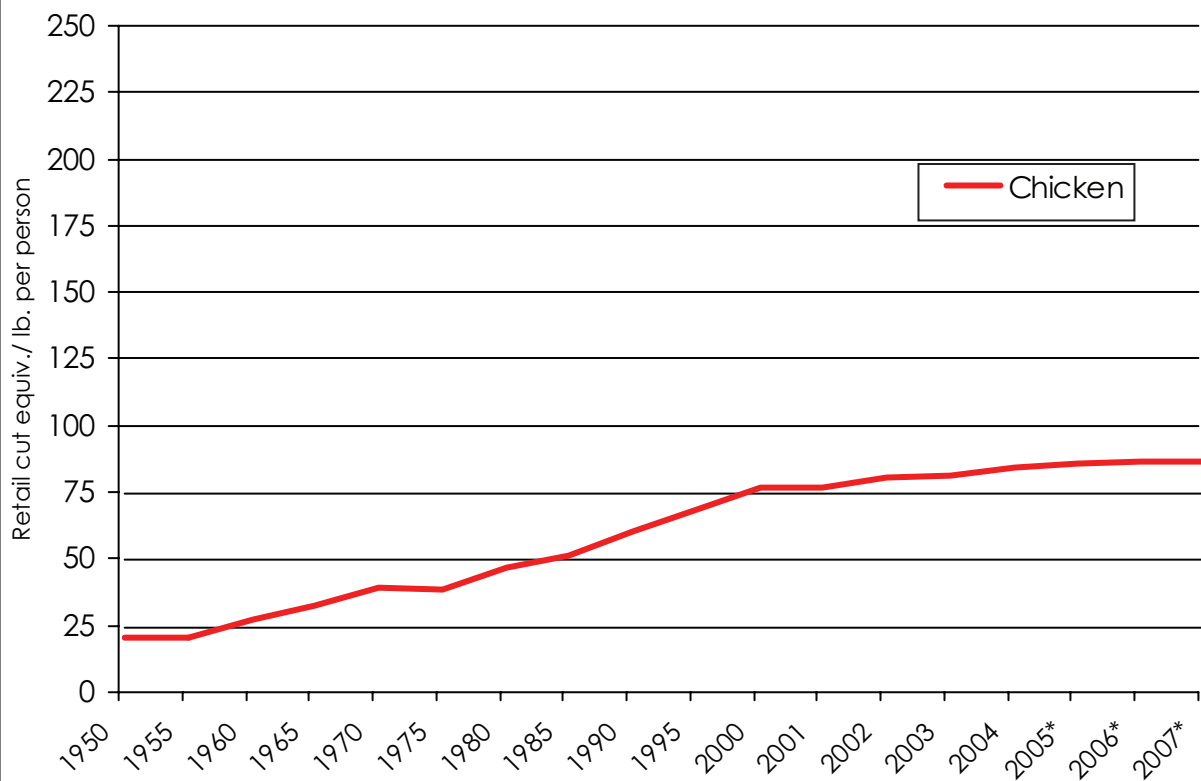


US per Capita Pork Consumption 1950 - 2007*



* Data for 2005 is an estimate; data for 2006-2007 are projections
Source: USDA, Economic Research Service.

US per Capita Chicken Consumption 1950 - 2007*



* Data for 2005 is an estimate; data for 2006-2007 are projections
Source: USDA, Economic Research Service.



Name _____

1. **Since the poultry industry is made up of smaller animals that reproduce reach optimum size faster than beef or pork, this gives them a disadvantage in adjusting to the consumers' demands.**
 - a. True
 - b. False
2. **Circle all of the answers that apply. Which meat market(s) averaged the highest consumption by the average American since 1950?**
 - a. Beef
 - b. Chicken
 - c. Lamb
 - d. Turkey
 - e. Pork
3. **What industry has continued to climb since 1950?**
 - a. Beef
 - b. Chicken
 - c. Pork
4. **What industry has remained steady over the last 10 years?**
 - a. Beef
 - b. Chicken
 - c. Pork
5. **Which industry has reached its peak in the 1970s?**
 - a. Beef
 - b. Chicken
 - c. Pork