

**CHAPTER
1**

Agriculture and Society

Lesson 1.1

Agriculture's Impact on Society

Lesson Review

Carefully study the lesson and then answer the following questions.

1. What is agriculture?

2. ____ The factor of agricultural sectors that allow each sector to perform tasks with maximum efficiency is ____.

- A. specialization
- B. diversity
- C. generality
- D. production

3. List the three categories that help determine the scope of agriculture.

Match the agricultural job to the sector of agriculture in which it belongs.

- | | |
|--|----------------------------------|
| 4. ____ Food chemist | A. Agribusiness |
| 5. ____ Irrigation system specialist | B. Agriscience |
| 6. ____ Veterinarian | C. Agricultural communications |
| 7. ____ Cattle rancher | D. Agricultural processing |
| 8. ____ Public relations manager | E. Agricultural support services |
| 9. ____ Agricultural loan officer | F. Agricultural systems |
| 10. ____ Fish hatchery technician | G. Natural resources management |
| 11. Land that is suitable for growing crops is called ____ land. | H. Production agriculture |

12. ____ What fraction of the world's surface is estimated to be arable land?
A. 1/4
B. 1/16
C. 1/32
D. 1/64
13. ____ How much arable land is estimated to be lost each day to development?
A. 250 acres
B. 750 acres
C. 1500 acres
D. 3000 acres
14. Explain what happens to the influence of agricultural products on a country's overall sales as their level of industry increases.

15. ____ On a global level, the ____ industry is the largest supplier of jobs.
A. agricultural
B. manufacturing
C. marketing
D. technology
16. ____ *True or False?* In 1960, one production agriculturalist produced enough food to feed up to 26 people.
17. ____ *True or False?* In 2000, one production agriculturalist produced enough food to feed up to 78 people.
18. ____ *True or False?* In 2020, one production agriculturalist produced enough food to feed up to 166 people.
19. What is a *commodity*?

20. Give an example of agriculture in each of the main commodity areas.

Food:

Fiber:

Natural resources:

Name _____

21. Describe the producer and consumer roles in agriculture.

Thinking Critically

1. Now that you understand the scope of agriculture, explain how agriculture has made an impact on your life in the last 24 hours. Explain the changes that would happen in society if all agricultural production stopped.

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Lesson 1.2

History of Agriculture, Food Systems, and Natural Resources

Lesson Review

Carefully study the lesson and then answer the following questions.

1. List three changes in technology that have happened since you were born.

2. _____ The area considered the *birthplace of agriculture* is called _____.
- A. The Nile River Valley
 - B. The Mediterranean
 - C. The Fertile Crescent
 - D. The Zagros Mountains

3. List three of the changes that occur in a society when shifting from nomadic to agrarian.

4. In order to be considered domesticated, a wild species must have five adaptations. List those adaptations.

Match the species with the approximate year of domestication (answers may be used more than once).

- | | |
|---|-------------|
| 5. _____ Beans | A. 9000 BCE |
| 6. _____ Fig trees | B. 8500 BCE |
| 7. _____ Sheep | C. 8000 BCE |
| 8. _____ Llamas | D. 7000 BCE |
| 9. _____ Potatoes | E. 4500 BCE |
| 10. _____ Cattle | |
| 11. _____ Maize (corn) | |
| 12. The system of land ownership used for early agriculture in many European nations was called the _____ system. | |

13. ____ Which of the following crops was brought to North America by European settlers?
 A. Corn
 B. Cotton
 C. Tobacco
 D. Wheat

14. The method of agriculture in which the landowner provided use of land in exchange for a portion of the crop produced was called ____.

15. List three impacts of the dust bowl.

16. Give a description of the Green Revolution.

17. ____ Who is considered the father of the Green Revolution?
 A. Abraham Lincoln
 B. Christopher Columbus
 C. Norman Borlaug
 D. Theodore Roosevelt

Match the agricultural legislation with the year it was passed (answers may be used more than once).

- | | |
|---------------------------|---------|
| 18. ____ Hatch Act | A. 1862 |
| 19. ____ Homestead Act | B. 1887 |
| 20. ____ Morrill Act | C. 1914 |
| 21. ____ Smith-Lever Act | D. 1917 |
| 22. ____ Smith-Hughes Act | |

Thinking Critically

1. Read the material on agricultural inventions on pages 26–29 of your textbook. Select the invention you feel had the greatest impact on agriculture. Explain what the invention was, how it was an improvement, and why you feel it was important for modern agriculture.

Activity 1.2A

Timeline of Agriculture

Materials Needed

- Pen, paper or posterboard
- Internet-search capability

Instructions

Many important events have happened in modern agriculture in the United States. Complete the activity below to show the dates and impact the following historical events and inventions had on agriculture.

Dust Bowl

Date: _____

Impact on Agriculture: _____

Barbed Wire

Date: _____

Impact on Agriculture: _____

Steam Tractor

Date: _____

Impact on Agriculture: _____

General Purpose Tractor

Date: _____

Impact on Agriculture: _____

Green Revolution

Date: _____

Impact on Agriculture: _____

Cotton Gin

Date: _____

Impact on Agriculture: _____

Mechanical Reaper

Date: _____

Impact on Agriculture: _____

Steel Plow

Date: _____

Impact on Agriculture: _____

Satellite Technology

Date: _____

Impact on Agriculture: _____

First Biotechnology Crop for Consumers

Date: _____

Impact on Agriculture: _____

On a separate piece of paper or posterboard, compile a timeline for agriculture from 1793 to the present. Your timeline should include the dates for all of the historical events listed above. Place the items in chronological order and include a drawing for each of the items on the timeline.

Activity 1.2B

Historical Leader Report

Materials Needed

- Internet-search capability
- Note cards, paper, pen

Instructions

You will have the opportunity to select someone from history whom you consider a leader. What makes that person a leader? You will conduct a search of that person to identify their personal leadership traits, and look for insight into their life experiences that led them to become a leader. After conducting the research, you will be responsible for developing a short presentation which will share the information you gather with the rest of the class.

Leader you have selected: _____

1. List the top five leadership characteristics you feel this leader displayed. For a list of leadership traits, refer to the table on page 53 of the textbook. Share evidence of how your leader demonstrated each of the five characteristics.

Leadership Characteristic: _____

Evidence: _____

Leadership Characteristic: _____

Evidence: _____

Leadership Characteristic: _____

Evidence: _____

Leadership Characteristic: _____

Evidence: _____

Leadership Characteristic: _____

Evidence: _____

2. Find information about your leader's life (background, childhood, experiences). What are the factors that you think might have led to their development of the characteristics you listed?

3. List at least three things this leader was able to accomplish because of his or her leadership characteristics.

Lesson 1.3

Future of Agriculture, Food Systems, and Natural Resources Management

Lesson Review

Carefully study the lesson and then answer the following questions.

1. List the three main factors which have driven change in the agricultural industry.

2. _____ What portion of the world's population lives in urban areas?
A. About 10%
B. About 25%
C. About 50%
D. About 75%

3. What does the decrease in arable land mean for agriculture as population continues to grow?

4. _____ What drives trends in agricultural production?
A. Producer ease
B. Stock market influences
C. Consumer desires
D. Transportation costs

5. Give an example of a trend that impacted the agricultural industry.

6. _____ The concept of sustainability is based on the idea _____.
A. of renewable energy being the only governmentally allowed energy source
B. that the depletion of natural resources is inevitable in civilized society
C. that consumers will always drive market trends
D. that everything we need to survive depends on our natural environment

7. List three sustainable agriculture practices.

8. _____ Which of the following engineering innovations is already in use?

- A. Drones for monitoring livestock.
- B. Remote-controlled tractors.
- C. Soil testing-enabled planting equipment.
- D. All of the above.

9. _____ Information systems include the equipment and software that are used to collect, filter, process, and _____ information.

- A. create
- B. change
- C. distribute
- D. remove

10. _____ What percentage of families who own a farm have a family member with an off-farm job?

- A. 53%
- B. 69%
- C. 78%
- D. 91%

11. What are the two steps to becoming an informed consumer?

Thinking Critically

1. Where do *you* see the future of agriculture going? Explain 2–3 changes you think will happen to the agricultural industry in the next twenty years. List the changes *and* the factors you think will drive the changes.

Activity 1.3A

What Will the Future of Agriculture Hold?

Materials Needed

- Internet-search capability

Instructions

What will it look like to produce and process the agricultural products of the future? This activity will allow you to choose an agricultural product and make projections about what will happen in the future with that product.

1. Select an agricultural product such as milk, leather, paper, or lettuce. Write the name of the product in the space below.

2. Research how this product is currently produced and marketed to consumers. Briefly describe the steps that are involved in producing, processing, and delivering this product to consumers.

3. Think about what could happen in the future with this product. What changes do you think there will be for the production, processing, or delivery of this product to consumers? Describe the changes you think are possible for this product.

4. What technology would be used, or would need to be invented, for the changes you wrote about to happen?

5. Sketch a picture of this product as it may appear in the future.

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