

Name:

Class:

Date:

## Lesson 6.2: Emerging Agricultural Technology

### Lesson Review

Carefully study the lesson and then answer the following questions.

1. What is technology? (6.2.1)

Answer:

2. It took \_\_\_\_\_ for the moldboard plow to evolve to its modern version. (6.2.2)

A. two decades

B. three decades

C. four decades

D. more than five decades

Answer:

3. What is the basis for precision agriculture? (6.2.3)

Answer:

4. How do global navigation satellite systems (GNSS) pinpoint a position on Earth's surface? (6.2.3)

Answer:

5. Farmers using precision agriculture techniques will reduce labor costs, improve fuel efficiency, conserve irrigation water, and improve \_\_\_\_\_. (6.2.3)

A. drainage

B. soil health

C. GPS

D. telematics

Answer:

Match the emerging agricultural technology to the definition.

- A. Telematics
  - B. Telemetry
  - C. Radio frequency identification (RFID) tags
  - D. Continuously operating reference stations (CORS)
6. An automated communications system that collects data from a remote unit and transmits it to another location (6.2.4)

Answer:

7. Used to locate pest infestations, measure soil moisture, and monitor weather conditions (6.2.4)

Answer:

8. Automatically identifies and tracks movement of animals (6.2.4)

Answer:

9. Sending and receiving data using wireless technology (6.2.4)

Answer:

10. Give three examples of work that can be performed by AGBOTS. (6.2.4)

Answer:

11. *True or False?* Biofuels are organic materials intended to replace fossil fuels. (6.2.5)

Answer:

12. *True or False?* Methanol is the most common biofuel in the United States. (6.2.5)

Answer:

13. *True or False?* The production of corn for biofuels drives the price of corn up. (6.2.5)

Answer:

14. What are the requirements for organic certification through the USDA? (6.2.6)

Answer:

15. Which type of meat product would be relatively easy to produce using in vitro meat production technology? (6.2.7)

A. Steak

B. Hamburger

C. Pork chops

D. All meat is easy to produce through in vitro processes.

Answer:

16. *True or False?* Vertical farming has the same problems as traditional agricultural practices. (6.2.8)

Answer:

17. *True or False?* Rooftop gardens are emerging as a solution to the problem of providing locally grown produce in urban areas. (6.2.8)

Answer:

18. *True or False?* Closed ecological systems allow for the interaction between ecosystems. (6.2.9)

Answer:

### **Critical Thinking**

1. From the emerging technologies presented in the chapter, which one do you think will have the greatest impact on the agriculture of the future? Explain your answer. (6.2.9)

Answer: