

UNIT 1—THE SCIENCE OF LIVING THINGS

TRUE/FALSE

1. Agriscience refers to the application of high technology to agriculture.

ANS: T PTS: 1

2. Farming and ranching account for more than half of the jobs in agriculture.

ANS: F PTS: 1

3. Aquaculture means the study of freshwater, such as lakes and ponds.

ANS: F PTS: 1

4. In the United States, the percentage of annual income spent for food has tended to increase.

ANS: F PTS: 1

5. Wildlife, trees, and fish are examples of renewable natural resources.

ANS: T PTS: 1

6. Biology may be defined as the use of cells or components of cells to produce products and processes.

ANS: F PTS: 1

7. During the past 50 years, food production has increased faster than the world's population.

ANS: T PTS: 1

8. Only people who live in the country are surrounded by the world of agriscience.

ANS: F PTS: 1

9. Entomology is one of the three basic sciences.

ANS: F PTS: 1

10. Production agriculture refers to non-farm and non-ranch jobs.

ANS: F PTS: 1

MULTIPLE CHOICE

1. What percentage of people in the United States are farmers?
- | | |
|----------------|--------------------------|
| a. Nearly 5 | c. Slightly more than 10 |
| b. Less than 2 | d. Roughly 12 |

ANS: B PTS: 1

2. Which term refers to the study of the properties and management of soil to grow plants?
- a. Crop science
 - b. Plant science technology
 - c. Agricultural engineering
 - d. Soil science

ANS: D PTS: 1

3. By the year 2025, the world population is projected to be:
- a. 8 billion
 - b. 9 billion
 - c. 10 billion
 - d. 11 billion

ANS: A PTS: 1

4. The acronym USDA stands for the government agency known as:
- a. United States Department of Agriculture
 - b. United States Division of Agriculture
 - c. Universal Standards of Demarcation in America
 - d. United States Development of Agriculture

ANS: A PTS: 1

5. What is the meaning of the Greek word *bios*?
- a. life
 - b. study
 - c. environment
 - d. nature

ANS: A PTS: 1

6. The Greek word *logy* means to:
- a. study
 - b. work
 - c. write
 - d. speak

ANS: A PTS: 1

7. *Organic food* is a term used for foods that have been grown:
- a. with limited use of chemical pesticides
 - b. without use of chemical pesticides
 - c. in freshly turned soil
 - d. in controlled environments

ANS: B PTS: 1

8. Which terms refers to all the conditions, circumstances, and influences surrounding and affecting an organism or group of organisms?
- a. resources
 - b. nature
 - c. agronomy
 - d. environment

ANS: D PTS: 1

9. The science involved in the cultivation, propagation, processing, and marketing of items such as flowers and vegetables is known as:
- a. entomology
 - b. agronomy
 - c. horticulture
 - d. ornamentation

ANS: C PTS: 1

10. On average, each farmer in the United States produces enough food for about how many people?
- a. 144
 - c. 184

b. 167

d. 197

ANS: B

PTS: 1

COMPLETION

1. The U.S. Department of Education has used the phrase “agriculture/agribusiness and renewable natural resources” to refer to the broad range of activities in _____.

ANS: agriculture

PTS: 1

2. Biology, chemistry, and _____ are the three basic sciences used in agriscience.

ANS: biochemistry

PTS: 1

3. The key to an adequate food supply for the growing human population in the new millennium is agricultural _____.

ANS: research

PTS: 1

4. The _____ River water-control projects have permitted the transformation of the American Southwest from a desert to irrigated lands.

ANS: Colorado

PTS: 1

5. _____ pest management refers to combining two or more different control methods to control insects, diseases, rodents, and other pests.

ANS: Integrated

PTS: 1

MATCHING

Match each of the following definitions with their related terms.

- a. science of soil management and crops
- b. plant grown for appearance and beauty
- c. management of agricultural resources
- d. science of fruits, vegetables, and ornamentals
- e. sciences of animal growth, care and management
- f. growing and managing living things in water
- g. application of mechanical and other engineering principles in agriculture
- h. grass used for decorative and soil-holding purposes
- i. science of insect life
- j. commercial firms developed in support of agriculture

1. entomology
2. horticulture
3. agronomy
4. animal sciences
5. agricultural economics
6. agricultural engineering
7. aquaculture
8. agribusiness
9. ornamental
10. turf

- | | |
|------------|--------|
| 1. ANS: I | PTS: 1 |
| 2. ANS: D | PTS: 1 |
| 3. ANS: A | PTS: 1 |
| 4. ANS: E | PTS: 1 |
| 5. ANS: C | PTS: 1 |
| 6. ANS: G | PTS: 1 |
| 7. ANS: F | PTS: 1 |
| 8. ANS: J | PTS: 1 |
| 9. ANS: B | PTS: 1 |
| 10. ANS: H | PTS: 1 |

SHORT ANSWER

1. List five areas of agriscience.

ANS:

Agriscience includes many endeavors. Some of these are aquaculture, agricultural engineering, animal science technology, crop science, soil science, biotechnology, integrated pest management, organic foods, water resources, and environment.

PTS: 1

2. Define biotechnology.

ANS:

Biotechnology refers to the management of the genetic characteristics transmitted from one generation to another and its application to our needs. It may be defined as the use of cells or components of cells to produce products and processes.

PTS: 1

3. What is meant by an agricultural education?

ANS:

Agricultural education is a unique program available to students. It offers organized instruction, supervised agricultural experience (SAE), FFA, and extension education activities. Agricultural communications, journalism, and community development are also components of agricultural education.

PTS: 1

4. Define the purpose of an applied science, and give some examples.

ANS:

Applied science uses the basic sciences in practical ways. Examples include entomology, agronomy, horticulture, and the animal sciences.

PTS: 1

5. What are the animal sciences and what is the primary goal of animal scientists?

ANS:

The animal sciences are applied sciences that involve growth, care, and management of domestic livestock. They include veterinary medicine, animal nutrition, animal reproduction, and animal production and care. Animal scientists work to discover scientific principles related to animals. Scientific principles are then applied to animal management plans to improve animal health and production.

PTS: 1