

Essential Biology Fundamentals

Biology · Answer Key · 15 Questions

1. What is the basic structural and functional unit of all living organisms?

- A) Atom
- B) Cell**
- C) Molecule
- D) Organ

2. Which organelle is known as the powerhouse of the cell because it generates energy?

- A) Nucleus
- B) Ribosome
- C) Mitochondrion**
- D) Lysosome

3. What molecule carries the genetic instructions for the development and functioning of living things?

- A) DNA**
- B) Protein
- C) Lipid
- D) Sugar

4. Which process do plants use to convert sunlight into chemical energy?

- A) Respiration
- B) Digestion
- C) Photosynthesis**
- D) Fermentation

5. What are the primary products of photosynthesis?

- A) Oxygen and glucose**
- B) Carbon dioxide and water
- C) Nitrogen and protein
- D) Fat and minerals

6. Which kingdom do mushrooms and molds belong to?

- A) Plantae
- B) Animalia
- C) Fungi**
- D) Protista

7. What is the name of the pigment that makes plants appear green?

- A) Carotene
- B) Chlorophyll**
- C) Anthocyanin
- D) Hemoglobin

8. How many chambers are in a standard human heart?

- A) Two
- B) Three
- C) Four**
- D) Five

9. What is the primary function of red blood cells?

- A) Fighting infection
- B) Transporting oxygen**
- C) Clotting blood
- D) Producing antibodies

10. Which group of vertebrates maintains a constant internal body temperature?

- A) Reptiles
- B) Amphibians
- C) Fish
- D) Mammals**

11. What is the scientific term for an organism that only eats plants?

- A) Carnivore
- B) Omnivore
- C) Herbivore**
- D) Decomposer

12. Which gas do humans exhale as a waste product of respiration?

- A) Oxygen
- B) Nitrogen
- C) Carbon dioxide**
- D) Hydrogen

13. Which part of the plant is responsible for absorbing water and nutrients from the soil?

- A) Flower
- B) Leaf
- C) Stem
- D) Root**

14. What is the protective outer layer of an animal cell called?

- A) Cell wall
- B) Cell membrane**
- C) Cytoplasm
- D) Nucleus

15. In which organ does the majority of nutrient absorption take place in the human body?

- A) Stomach
- B) Large intestine
- C) Small intestine**
- D) Esophagus