

Advanced Biology Essentials

Biology · Practice Test · 12 Questions

1. Which organelle is known as the powerhouse of the cell?

- A) Nucleus
- B) Mitochondria
- C) Ribosome
- D) Golgi apparatus

2. What is the primary sugar that provides energy for cellular processes?

- A) Glucose
- B) Fructose
- C) Lactose
- D) Sucrose

3. Which molecule carries the genetic instructions for the development and function of living things?

- A) RNA
- B) Protein
- C) DNA
- D) Lipid

4. What is the process by which plants convert sunlight into chemical energy?

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

5. Which blood cells are primarily responsible for fighting infections?

- A) Red blood cells
- B) White blood cells
- C) Platelets
- D) Plasma

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

- A) Atom
- B) Molecule
- C) Cell
- D) Tissue

7. In human genetics, what are the structures composed of DNA that contain genes?

- A) Chromosomes
- B) Ribosomes
- C) Vacuoles
- D) Lysosomes

8. Which gas do humans exhale as a byproduct of cellular respiration?

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

9. What is the enzyme in the stomach that helps digest proteins?

- A) Amylase
- B) Pepsin
- C) Lipase
- D) Lactase

10. Which part of the brain controls balance and coordination?

- A) Cerebrum
- B) Brainstem
- C) Cerebellum
- D) Thalamus

11. What is the process of cell division that results in two identical daughter cells?

- A) Mitosis
- B) Meiosis
- C) Fertilization
- D) Transcription

12. Which chemical base pairs with Adenine in a DNA molecule?

- A) Guanine
- B) Cytosine
- C) Thymine
- D) Uracil