

Explore the Living World: Life Science Fundamentals

Life Science · Answer Key · 20 Questions

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

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

2. Which process do plants use to convert light energy into chemical energy?

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

3. What is the name of the complex molecule that carries genetic information in all living organisms?

- A) RNA
- B) Protein
- C) DNA**
- D) Carbohydrate

4. Which human organ is responsible for pumping blood throughout the body?

- A) Lungs
- B) Liver
- C) Kidney
- D) Heart**

5. What type of organism produces its own food, typically using sunlight?

- A) Consumer
- B) Decomposer
- C) Producer**
- D) Scavenger

6. Which kingdom includes mushrooms, yeasts, and moulds?

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

7. What gas do humans and other animals inhale for respiration?

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

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

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

9. What is the term for a group of organisms that can reproduce with one another and produce fertile offspring?

- A) Family
- B) Genus
- C) Species**
- D) Order

10. What type of animal has a backbone or spinal column?

- A) Invertebrate
- B) Arthropod
- C) Vertebrate**
- D) Mollusc

11. Which of the following is a macronutrient essential for building and repairing tissues in the body?

- A) Vitamin C
- B) Iron
- C) Protein**
- D) Calcium

12. What is the name for the process where water vapor rises into the atmosphere from plants?

- A) Condensation
- B) Precipitation
- C) Evaporation
- D) Transpiration**

13. Which part of the cell controls its activities and contains genetic material?

- A) Mitochondria
- B) Ribosome
- C) Cytoplasm

D) Nucleus

14. What is the term for all the living organisms in an area interacting with their non-living environment?

- A) Population
- B) Community
- C) Habitat

D) Ecosystem

15. Which sense organ is responsible for detecting light and allowing us to see?

- A) Ear
- B) Nose
- C) Tongue

D) Eye

16. What simple sugar is the primary source of energy for cells?

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

D) Glucose

17. Which major organ in the human body is responsible for filtering waste from the blood to produce urine?

- A) Liver
- B) Lungs

C) Kidneys

D) Pancreas

18. What is the process by which an organism becomes better suited to its environment?

- A) Mutation
- B) Migration

C) Adaptation

D) Reproduction

19. What is the protective outer layer of a plant cell that provides structural support?

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

20. Which blood component is primarily responsible for carrying oxygen to the body's tissues?

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