

## Biology Chapter 2 Self Quiz PDF Answers In Appendix LII

Biology Chapter 2 Self Quiz PDF Answers In Appendix LII

Disclaimer: *The biology chapter 2 self quiz pdf answers in appendix III was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at [max@studyblaze.io](mailto:max@studyblaze.io).*

**Which factors can affect enzyme activity? (Select all that apply)**

- Temperature
- pH
- Substrate concentration
- Light intensity

**What is the primary element that forms the backbone of organic molecules?**

- Hydrogen
- Carbon
- Nitrogen
- Oxygen

**Which of the following are functions of lipids in biological systems? (Select all that apply)**

- Energy storage
- Structural component of cell membranes
- Genetic information storage
- Insulation

**Which of the following are components of the cell membrane? (Select all that apply)**

- Phospholipids
- Proteins
- Nucleic acids
- Carbohydrates

**Which of the following is a characteristic of prokaryotic cells?**

- Presence of a nucleus
- Membrane-bound organelles

- Multicellular organization
- Single circular DNA molecule

**Which of the following is NOT a function of proteins?**

- Enzyme catalysis
- Genetic information storage
- Transport
- Structural support

**Which of the following are properties of water that make it essential for life? (Select all that apply)**

- High heat capacity
- Universal solvent
- Low surface tension
- Ability to form hydrogen bonds

**Discuss the importance of carbohydrates in cellular respiration.**

**Explain how the properties of water contribute to its role as a universal solvent.**

**How do prokaryotic and eukaryotic cells differ in terms of genetic material organization?**

**What is the significance of the high specific heat capacity of water for living organisms?**

**Describe the structure of a phospholipid and its role in the cell membrane.**

**Which of the following are true about eukaryotic cells? (Select all that apply)**

- They have a nucleus.
- They lack membrane-bound organelles.
- They can be unicellular or multicellular.
- Their DNA is linear.

**What is the primary function of nucleic acids?**

- Energy storage
- Information storage
- Structural support
- Catalysis

**Which macromolecules are polymers? (Select all that apply)**

- Proteins
- Lipids
- Carbohydrates
- Nucleic acids

**Which organelle is responsible for energy production in eukaryotic cells?**

- Nucleus
- Ribosome
- Golgi apparatus
- Mitochondria

**Which macromolecule serves as the main source of energy for cells?**

- Proteins
- Carbohydrates
- Nucleic acids
- Lipids

**What type of bond holds water molecules together?**

- Ionic bond
- Covalent bond
- Metallic bond
- Hydrogen bond

**Explain the role of enzymes in metabolic reactions.**

**What is the basic unit of life according to cell theory?**

- Atom
- Cell
- Organism
- molecule