

## Cell Structure Quiz PDF

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**What are the roles of the cytoskeleton? (Select all that apply)**

- Structural support
- Cell movement
- Photosynthesis
- Cell division

**Explain the role of the nucleus in eukaryotic cells.**

**Describe the differences between prokaryotic and eukaryotic cells.**

**Why is the process of cellular respiration crucial for cell survival?**

**Discuss the process of protein synthesis, including the roles of the nucleus and ribosomes.**

**How do plant cells maintain their structure and rigidity?**

**Which of the following is a function of lysosomes?**

- Photosynthesis
- Protein synthesis
- Digestion of cellular waste
- Lipid synthesis

**Which of the following are found in both plant and animal cells? (Select all that apply)**

- Nucleus
- Cell wall
- Mitochondria
- Chloroplasts

**What is the main function of the cell wall in plant cells?**

- Energy production
- Photosynthesis
- Structural support
- Protein synthesis

**Which process occurs in the chloroplasts of plant cells?**

- Cellular respiration
- Photosynthesis
- Protein synthesis
- Lipid synthesis

**Which organelles contain their own DNA? (Select all that apply)**

- Nucleus
- Mitochondria
- Chloroplasts
- Ribosomes

**What structure surrounds and protects the cell?**

- Cell wall
- Cell membrane
- Cytoplasm
- Nucleus

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

- Presence of a nucleus
- Lack of membrane-bound organelles
- Large central vacuole
- Presence of chloroplasts

**Which structures are involved in protein synthesis? (Select all that apply)**

- Ribosomes
- Golgi apparatus
- Rough endoplasmic reticulum

Lysosomes

**Which organelle is responsible for modifying and packaging proteins?**

- Endoplasmic reticulum
- Golgi apparatus
- Lysosome
- Ribosome

**Which organelle is known as the powerhouse of the cell?**

- Nucleus
- Mitochondria
- Ribosome
- Golgi apparatus

**What is the significance of the cell membrane's semi-permeable nature?**

**Which processes are considered passive transport? (Select all that apply)**

- Diffusion
- Osmosis
- Active transport
- Facilitated diffusion

**What are the main components of the cell membrane? (Select all that apply)**

- Phospholipids
- Proteins
- Nucleic acids
- Carbohydrates

**What is the basic unit of life?**

- Atom
- Molecule
- Cell
- Tissue