

KNOWLEDGE



QUESTION

1. What is the function of the nucleus?

2. How do chloroplasts produce food for the cell?

3. What is the role of mitochondria in a cell?

4. Describe the structure and function of the endoplasmic reticulum.

5. How does the Golgi apparatus transport materials within the cell?

6. What is the function of lysosomes?

7. How does a vacuole contribute to the cell's homeostasis?

8. What is the role of the cell wall in plant cells?

9. How does the cell membrane regulate the flow of substances in and out of the cell?

10. What are centrioles, and what is their function during cell division?

ANSWER

1. The nucleus contains genetic material (DNA) and controls cell activities.

2. Chloroplasts perform photosynthesis to produce food for the cell.

3. Mitochondria produce energy for the cell through cellular respiration.

4. The endoplasmic reticulum synthesizes and transports proteins and lipids.

5. The Golgi apparatus packages and distributes proteins and lipids.

6. Lysosomes break down waste materials and cellular debris.

7. A vacuole stores water, nutrients, and waste products, contributing to the cell's homeostasis.

8. The cell wall provides structural support and protection in plant cells.

9. The cell membrane regulates the flow of substances in and out of the cell.

10. Centrioles are involved in cell division.