



1. The cell wall is made of cellulose and provides structural support and protection.

2. The cell membrane is a phospholipid bilayer that regulates the movement of substances in and out of the cell.

3. The cytoplasm is a gel-like substance that fills the cell and contains various organelles.

4. The nucleus is the control center of the cell, containing DNA and surrounded by a nuclear envelope.

5. The vacuole is a large, fluid-filled sac that stores water, nutrients, and waste products.

6. Chloroplasts are organelles that capture light energy and convert it into chemical energy through photosynthesis.

7. Mitochondria are organelles that generate energy for the cell through cellular respiration.

8. The Golgi body is a series of stacked, flattened sacs that process and transport proteins and lipids.

9. Ribosomes are small organelles that synthesize proteins.

10. Lysosomes are organelles that break down waste materials and cellular debris.

FACTFILE



Cell	Water Potential	Cell Wall Tension
Left Cell	High	High
Right Cell	Low	Low

1. The cell on the left is in a hypotonic solution, where water enters the cell, causing it to become turgid.

2. The cell on the right is in a hypertonic solution, where water leaves the cell, causing it to become plasmolyzed.

3. The diagram illustrates the process of osmosis, where water moves from an area of high water potential to an area of low water potential.