

Name _____

The Marvels of Plant Cells: Tiny Powerhouses in Green

Open-Ended Response Answer Key

1. Chloroplasts capture sunlight and use it to convert carbon dioxide and water into sugars, releasing oxygen as a byproduct.
2. The cell wall provides structural support, helping plants maintain their shape and resist external pressures.
3. Vacuoles play a role in maintaining turgor pressure, storing nutrients, and regulating the cell's internal environment.
4. Studying plant cells can lead to improvements in crop yields, development of new plant varieties, and discovery of potential treatments for diseases.

