Name _____

The Power Vault: How Plants Store Energy from Photosynthesis

Short Answer Key

1. Glucose serves as the primary energy currency in plants and is primarily stored as starch. It can also be stored as sugars in fruits.
2. Cellular respiration is the process by which plants convert stored glucose into usable energy, releasing carbon dioxide and water as byproducts. It relates to the energy stored through photosynthesis as it allows plants to retrieve and utilize that energy.
3. Root vegetables like potatoes and carrots store energy in the form of starch, while fruits like apples and bananas store it as sugars.
4. Deciduous trees conserve energy in the form of stored starch and reduce energy expenditure in the dormant season (winter) when photosynthesis is less active. This adaptation is essential to survive the colder months.
5. Energy storage in plants is crucial for their growth, reproduction, and survival. It ensures a continuous supply of energy for various life processes and helps plants adapt to changing environmental conditions.