

Phosphorus: How is it stored and transported?

Phosphorus is the second most abundant element in the earth's crust. It is found in many rocks, but is not as soluble as other elements. It is found in the soil as phosphate ions. The soil phosphate ions are taken up by plants in a form of sugar. Another product of photosynthesis is sugar. When plants die, they are broken down into carbon and oxygen, and released through the ground.

How does water change from water and oxygen to CO₂ through photosynthesis? The water is split during photosynthesis. This process uses light energy to break down water into oxygen and hydrogen. The oxygen is used for cellular respiration, and the hydrogen is used for other purposes.

Describe photosynthesis using the CO₂ molecules in the cells of the plant. How is the water split during photosynthesis? How is the oxygen used for cellular respiration?



1. Write a chemical reaction: _____
2. How do the chemical reactions of photosynthesis relate to cellular respiration? _____
3. Write the chemical reaction of cellular respiration: _____
4. How do you think cellular respiration is related to photosynthesis? _____