

Name _____

The Oxygen Odyssey: What Happens to Oxygen Produced During Photosynthesis

Short Answer Key

1. Oxygen released during photosynthesis is used in cellular respiration to generate energy (ATP) by breaking down glucose in the presence of oxygen.
2. Stomata are tiny openings on plant leaves that allow gases, including oxygen, to pass in and out of plant cells. Oxygen is released through stomata during photosynthesis.
3. Photosynthesis contributes to the carbon cycle by taking in carbon dioxide and releasing oxygen. This is important for maintaining the balance of carbon dioxide levels in the atmosphere, which helps regulate the Earth's climate.
4. Human activities that can disrupt the oxygen balance in the atmosphere include deforestation, air pollution, and habitat destruction.
5. Photosynthesis has a global impact on oxygen production, occurring in both terrestrial and aquatic ecosystems. Phytoplankton in oceans are significant contributors to oxygen production.

