

Name \_\_\_\_\_

## Photosynthesis Powerhouses: Where Most of the Magic Happens

### Short Answer Key

1. Two types of terrestrial environments where photosynthesis occurs are forests (essential for oxygen production and carbon sequestration) and grasslands (important for carbon sequestration and habitat provision).
2. Phytoplankton are tiny marine algae that perform photosynthesis in oceans, producing a significant portion of the world's oxygen and serving as the foundation of marine food chains.
3. Sunlight is essential for photosynthesis because it provides the energy required for the process to convert carbon dioxide and water into glucose and oxygen.
4. Terrestrial environments have a more abundant supply of water, while aquatic environments also contain water but may vary in depth, affecting light penetration and photosynthesis.
5. Human activities like deforestation reduce the number of trees available for photosynthesis, while pollution can harm photosynthetic organisms, disrupting ecosystems.

