

Name \_\_\_\_\_

## The Magic of Photosynthesis: How Plants Make Their Own Food

### Open-Ended Response Answer Key

1. A world without photosynthesis would lead to a shortage of food as plants couldn't produce glucose. It would also result in a lack of oxygen in the atmosphere, making it difficult for animals and humans to breathe.
2. Photosynthesis is like a special process in plants that turns sunlight into food. Plants use this food for energy and growth, and they also release oxygen into the air.
3. Human activities increasing carbon dioxide levels can lead to climate change, which might affect the environment where plants grow. This could impact photosynthesis and disrupt the balance of the ecosystem.
4. The "food chain" is like a sequence where animals eat plants or other animals. Photosynthesis is the first step in the food chain because plants use it to make food, and then herbivores eat the plants, followed by carnivores eating the herbivores, and so on.

