

Name \_\_\_\_\_

## Chlorophyll: The Green Marvel of Photosynthesis

### Short Answer Key

1. Chlorophyll captures sunlight and converts it into chemical energy during photosynthesis.
2. Chlorophyll makes leaves appear green because it reflects green light and absorbs light in the blue and red parts of the spectrum.
3. The two most important types of chlorophyll are chlorophyll-a (responsible for the green color of plants) and chlorophyll-b (captures light in the blue and red regions).
4. Leaves change color in the autumn because chlorophyll breaks down, revealing other pigments like carotenoids (orange and yellow) and anthocyanins (red and purple).
5. One of the crucial roles of chlorophyll is producing oxygen during photosynthesis, which is essential for the respiration of animals and humans and helps regulate the Earth's climate.

