

Name \_\_\_\_\_

## The Remarkable Journey of Water and Nutrients: How Plants Absorb Vital Elements

### Multiple Choice Questions

1. How do root hairs help plants absorb water?
  - A) By releasing water into the soil
  - B) By decreasing the surface area of the roots
  - C) By increasing the surface area of the roots
  - D) By absorbing sunlight
  
2. What is the process by which water enters root hairs from the soil?
  - A) Transpiration
  - B) Respiration
  - C) Photosynthesis
  - D) Osmosis
  
3. What is the function of xylem vessels in plants?
  - A) Transporting water and nutrients from roots to other parts of the plant
  - B) Absorbing sunlight
  - C) Releasing oxygen into the soil
  - D) Anchoring the plant in the soil
  
4. Besides water, what other essential elements do plants absorb through their roots?
  - A) Oxygen and carbon dioxide
  - B) Nitrogen, phosphorus, and potassium
  - C) Insects and small animals
  - D) Rocks and minerals
  
5. How does the plant regulate the process of water and nutrient absorption?
  - A) By decreasing root hair density
  - B) By increasing soil moisture levels
  - C) By adjusting uptake in response to environmental conditions
  - D) By preventing water loss through transpiration

