

Name \_\_\_\_\_

## Nature's Ingenious Hydration: How Non-Vascular Plants Get Water and Nutrients

### Short Answer Key

1. Rhizoids anchor non-vascular plants to the substrate and absorb water and nutrients through osmosis.
2. Mucilage is a gel-like substance that non-vascular plants secrete to absorb and retain water, preventing desiccation.
3. Non-vascular plants form symbiotic relationships with mycorrhizal fungi, which help enhance nutrient uptake by extending the plant's root system and increasing its surface area for absorption.
4. Non-vascular plants often grow near water sources such as streams and ponds, allowing them to absorb water directly from the environment through their rhizoids, which is advantageous for hydration and nutrient uptake.
5. Non-vascular plants lack vascular tissues like xylem and phloem, so they rely on osmosis, water retention mechanisms, and symbiotic relationships for water and nutrient uptake.

