

Name _____

The Versatile Plant Stem: An Essential Organ for Growth and Support

Short Answer Key

1. Water and nutrients are transported through the plant stem via specialized tissues called xylem vessels (for water) and phloem vessels (for nutrients).
2. Buds along the stem give rise to new leaves, branches, and flowers, facilitating plant growth and reproduction.
3. An example of a plant adaptation related to stem structure and function is the presence of thorns on stems, which deter herbivores and protect the plant from predation.
4. The stem supports the plant's structural integrity in adverse weather conditions by providing rigidity and flexibility, allowing it to bend without breaking.
5. Bulbs are specialized stem structures that store food reserves, enabling the plant to survive dormancy or adverse conditions.

