

Name _____

The Backbone of Plant Growth: How Stems Support Plants

Short Answer Key

1. Stems support the process of photosynthesis by lifting leaves towards sunlight, maximizing their exposure to light.
2. Xylem transports water and minerals upward from the roots, while phloem transports sugars and other nutrients downward from the leaves.
3. Sturdy stems support flowers and fruits, ensuring they are held upright and accessible for pollination and seed dispersal.
4. Apical meristems are located at the tips of stems and are responsible for producing new cells for stem elongation.
5. Lateral meristems contribute to stem growth and development by promoting the growth of secondary tissues, increasing stem girth and providing additional support.

