Plant Systems



ACROSS

- 1 One of a pair of special cells in the epidermis that surround and control the opening and closing of each stomate
- 5 Supports branches, leaves, and flowers and provides a way to transport materials
- 6 The system in a flowering plant, fern, or conifer that anchors the plant, absorbs water and minerals, and stores food
- 8 Main products are glucose and energy
- 9 Undifferentiated cells under the bark in the stems and roots of woody plants
- 11 _____ mesophyll: a region of loosely packed cells containing chloroplasts
- 14 A thin layer of cells covering all nonwoody surfaces of the plant
- 15 Vascular tissue in plants that transports dissolved food materials and hormones throughout the plant
- 16 An organelle which performs photosynthesis
- 18 A layer of tall, closely packed cells containing chloroplasts, just below the upper surface of a leaf
- 19 An opening in the surface of a leaf that allows the exchange of gases
- 20 Specialized structures developed for sexual reproduction

DOWN

- 1 All plant tissues other than those that make up the dermal and vascular tissue systems
- 2 The tissues covering the outer surface of the plant
- 3 The pigment that absorbs light to begin photosynthesis
- 4 A layer of wax on the upper and lower surfaces of a leaf that blocks the diffusion of water and gases
- 5 The system in a flowering plant that is specialized to conduct photosynthesis and reproduce secually; it consists of the leaf, the flower, and the stem
- 7 An undifferentiated plant cell that can divide and differentiate to form specialized cells
- 8 Tissue on the surface of a plant that produces bark on stems and roots
- 10 Undifferentiated cells at the tips of plant roots and shoots
- 12 Vascular tissue in plants that transports water and dissolved minerals from the roots to the leaves and stems of the plant
- 13 The tissues responsible for conducting materials within a plant
- 17 The main photosynthetic structure of the plant