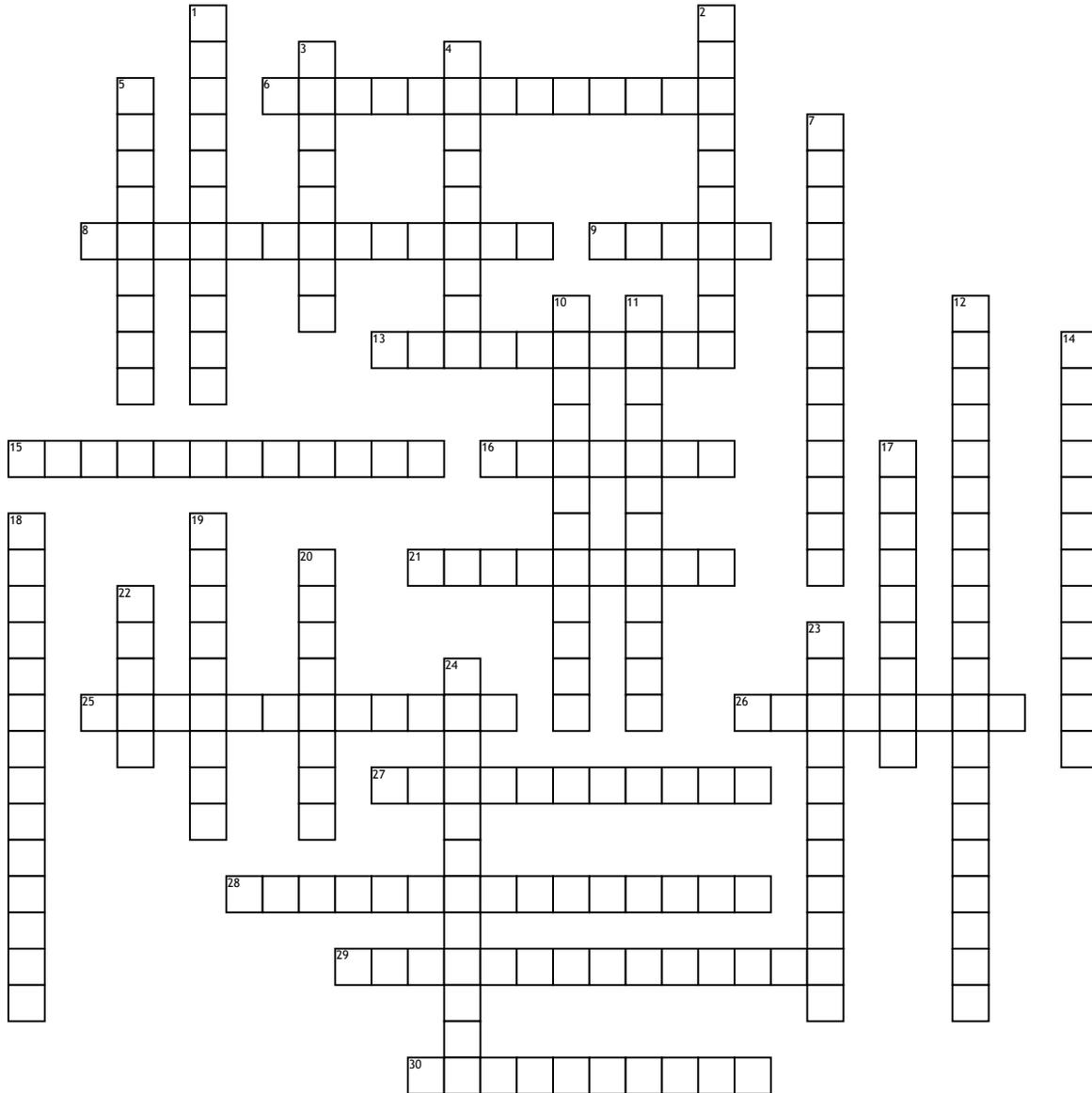


# J.P's Plant Biology Crossword



## Across

6. They are microscopic channels which traverse the cell walls of plant cells and enables transport and communication between them.
8. any of the hollow hairlike outgrowths of the outer cells of a root, just behind the tip, that absorb water and salts from the soil.
9. the vascular tissue in plants which conducts water and dissolved nutrients upwards from the root and also helps to form the woody element in the stem
13. are made in the roots and travel upwards to promote lateral plant growth. In this way, they're working opposite to auxin. Overall they strike a balance to drive good growth both upwards and laterally.
15. aid in carrying out the process of photosynthesis to produce food for the plants.
16. The organelle that controls all the activities within a cell
21. A cell structure in which the functions are carried out to ensure the cell's survival.
25. They are hollow cylinder like structures found in the cytoplasm of the cells. Its function is transport and structural support.
26. the corky outer layer of a plant stem formed in secondary thickening or as a response to injury or infection.
27. tubes that are made of columns of elongated living cells with small pores in the end walls to allow stuff to flow through

28. A leaf tissue consisting of loosely arranged, chloroplast-bearing cells, often located on the lower side of the leaf.

29. are solid rod like structures whose primary function is structural support.

30. They are a type of plastid which are non-pigmented.

## Down

1. The layer of cutin covering the epidermis of the aerial parts of plants.
2. specialized cells in the epidermis of leaves, stems and other organs that are used to control gas exchange.
3. help in storage of plant products.
4. A vacuole that is surrounded by a membrane
5. It is a single membrane bound organelle that comprises of degradative enzyme
7. alongside water is needed for photosynthesis
10. The energy producers of the cell. Also carries out cellular respiration to produce energy for the cell.
11. plant hormones that regulate various developmental processes, including stem elongation, germination, dormancy, flowering, flower development and leaf and fruit senescence
12. are membrane covered organelles that transport materials.
14. It is a network of fibers made up of micro-tubule and micro-filament. They maintain the shape and gives support to the cell.

17. a complex of vesicles and folded membranes within the cytoplasm of most eukaryotic cells, involved in secretion and intracellular transport.

18. a process used by plants and other organisms to convert light energy into chemical energy that can later be released to fuel the organisms' activities

19. the outer layer of tissue in a plant, except where it is replaced by periderm

20. Temporary storage compartments in cells, sometimes used to store waste.

22. are a class of plant hormones with some morphogen-like characteristics. They have a cardinal role in coordination of many growth and behavioral processes in the plant's life cycle and are essential for plant body development

23. They are plastids responsible for pigment synthesis and storage. They are found in photosynthetic eukaryotic species. They are found in colored organs of plants like fruits and flowers.

24. A membrane that separates the interior of the cell from its surroundings