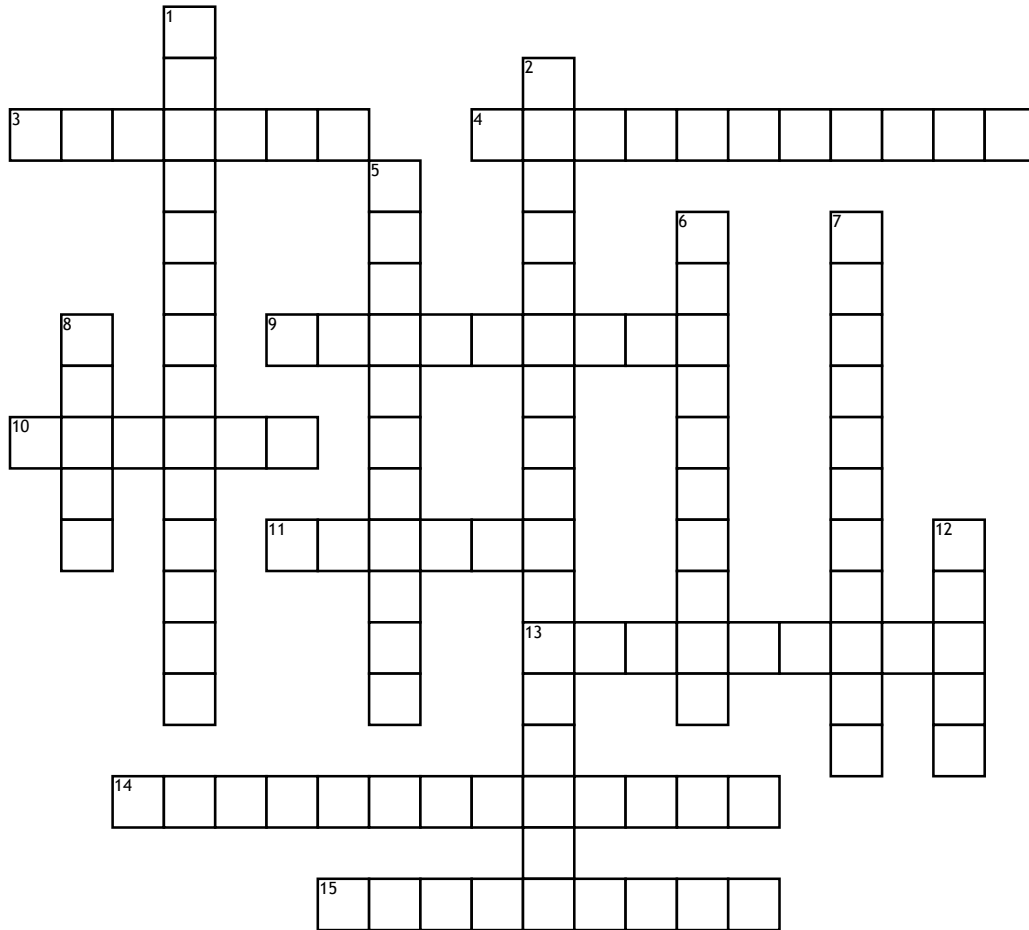


Plant Process



Across

3. movement of a solvent through a semipermeable membrane into a solution of higher solute concentration that tends to equalize the concentrations of solute on the two sides of the membrane
4. a process in living organisms involving the production of energy
9. : each of a large number of elongated microscopic outgrowths from the outer layer of cells in a root, absorbing moisture and nutrients from the soil.
10. an outer layer of tissue immediately below the epidermis of a stem or root
11. the vascular tissue in plants that conducts sugars and other metabolic products downward from the leaves

Word Bank

mesophyll
root hairs
absorption
photosynthesis

osmosis
xylem
chloroplast
epidermis

transpiration
phloem
chlorophyll
cortex

permeable membrane
stoma
respiration

13. the inner tissue (parenchyma) of a leaf, containing many chloroplasts

14. the exhalation of water vapor through the stomata

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

Down

1. the process by which green plants and some other organisms use sunlight to synthesize foods from carbon dioxide and water

2. A membrane that permits passage of water and certain substances in solution

5. a plastid that contains chlorophyll and in which photosynthesis takes place.

6. The process of absorbing or assimilating substances into cells or across the tissues and organs through diffusion or osmosis

7. a green pigment, present in all green plants and in cyanobacteria, responsible for the absorption of light to provide energy for photosynthesis

8. A tiny pore in a plant leaf surrounded by a pair of guard cells that regulate its opening and closure, and serves as the site for gas exchange.

12. the vascular tissue in plants that conducts water and dissolved nutrients upward from the root and also helps to form the woody element in the stem.