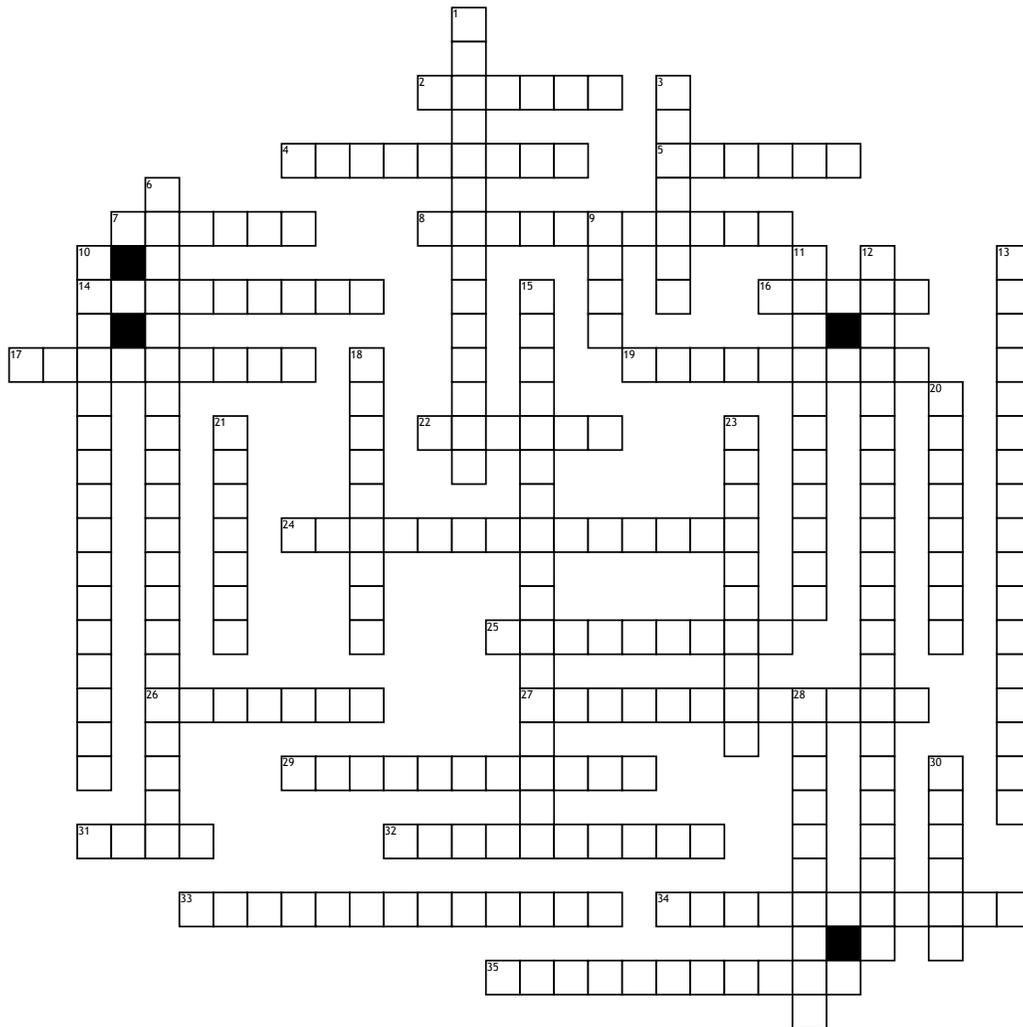


Plant Physiology



Across

- 2. a minor component in a solution, dissolved in solvent
- 4. serve as channels in the transfer of water
- 5. transports sugars from leaves to roots
- 7. a cell that makes nutrients to be sent somewhere else in the plant (leaves)
- 8. water loathing
- 14. if a cell bursts in a solution
- 16. transports water from roots to stems and leaves
- 17. fat that is usually solid at room temp and has no c=c
- 19. Sends molecules across a membrane in the same direction at the same time
- 22. a polymer that makes plants rigid and woody
- 24. a plant cell prefers a slightly hypotonic environment to maintain _____
- 25. harder darker wood found in center of trunks made of mostly dead cells
- 26. beta chlorophyll that captures light and transfers it to alpha chlorophyll
- 27. part of the cell membrane that acts as a barrier to molecules and ions

- 29. fat that is usually liquid at room temp and has at least one c=c bond
- 31. cells in a plants that need or store nutrients
- 32. plasmodesma pathway through cytoplasm
- 33. the cell that assists loading/unloading sugar into the sieve element
- 34. .an organism that cannot synthesize its own energy
- 35. alpha chlorophyll that absorbs light energy

Down

- 1. The process of using the sun to make energy
- 3. softer wood that makes out outer ring of tree trunk
- 6. a trait cells have that allows cellular organelles to work under independent conditions from one another
- 9. expends energy to move ions from low to high concentration
- 10. when a plant takes up O₂ in light and produces some CO₂
- 11. Water loving
- 12. The function of deciding what goes through a cell
- 13. Key constant in determining enzyme-substrate reaction

- 15. a cell wall that forms when a plant cell is done growing
- 18. an organism that can synthesize its own energy
- 20. If a cell is in a solution and seems to be in equilibrium
- 21. The passive movement of water
- 23. If a cell shrivels in a solution
- 28. sends molecules the opposite direction at the same time across a membrane
- 30. a packet of light

Word Bank

- | | | | | |
|---------------------|----------------|--------------------|------------------------|----------------------|
| isotonic | Antenna | lignin | sink | Osmosis |
| pump | Symporter | Michaelis constant | solute | aquaporin |
| lipid bilayer | photosynthesis | source | symplastic | photon |
| Photorespiration | hydrophobic | xylem | heartwood | compartmentalization |
| autotroph | heterotroph | antiporter | Selective permeability | Phloem |
| secondary cell wall | companion cell | Turgor Pressure | hydrophilic | hypotonic |
| saturated | unsaturated | sapwood | Hypertonic | Core complex |