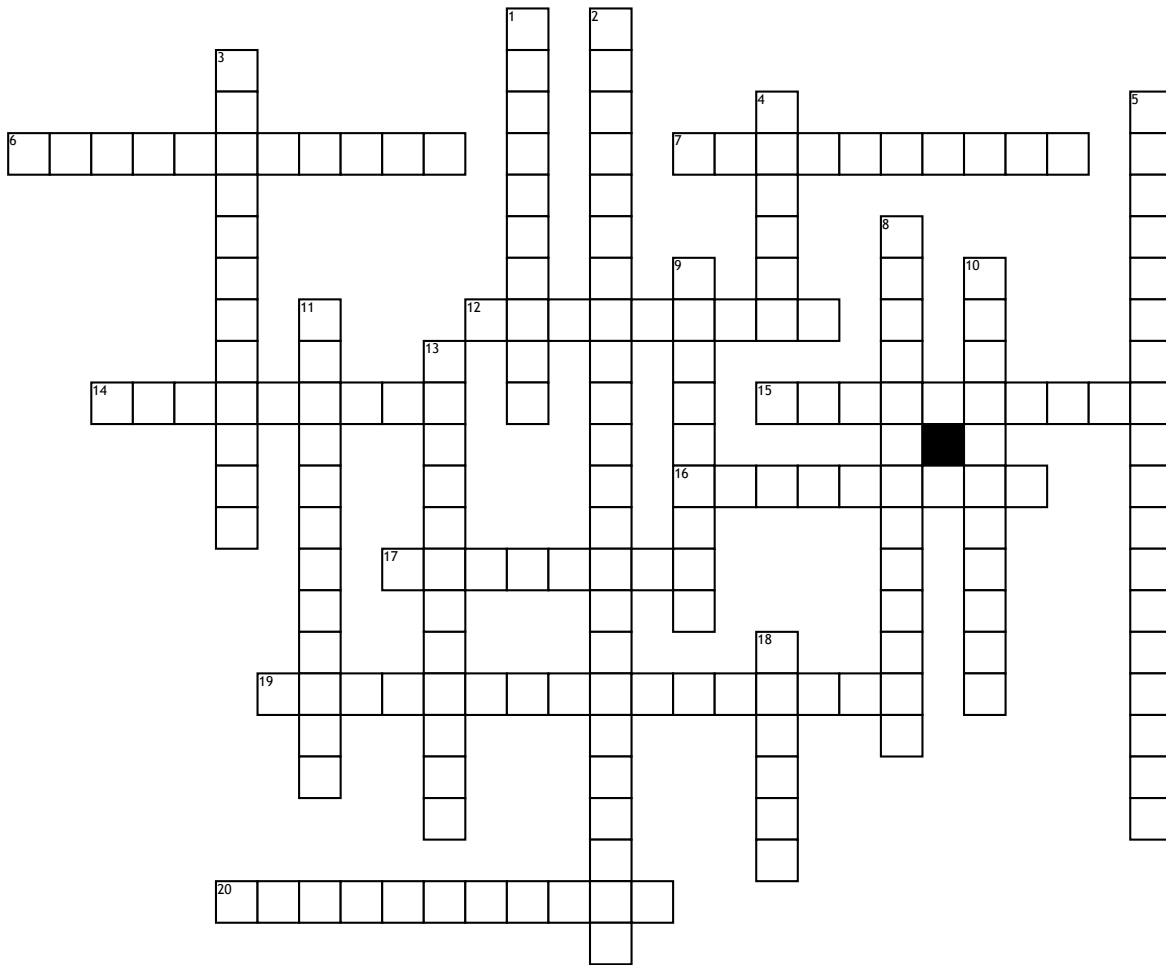


# Cell wall and cell membrane



**Across**

- 6. Polar amino acids are located internally and face aqueous solutions
- 7. a unicellular organism that lacks a membrane-bound nucleus, mitochondria, or any other membrane-bound organelle
- 12. what is the cell wall in a plant cell made of
- 14. any organism whose cells have a cell nucleus and other organelles enclosed within membranes
- 15. Their role is to maintain stability of the membrane and to facilitate cellular recognition
- 16. jelly-like fluid that fills a cell
- 17. provides the cell structural support and protection

- 19. They include integral membrane proteins that are permanently anchored or part of the membrane and peripheral membrane proteins that are only temporarily attached to the lipid bilayer or to other integral proteins
- 20. non polar amino acids associate directly with the lipid bilayer

**Down**

- 1. does not have a cell wall and chloroplasts
- 2. protein is a type of membrane protein that is permanently attached to the biological membrane
- 3. a thin polar membrane made of two layers of lipid molecules.
- 4. another component that makes up the cell wall in a plant cell
- 5. glycolipids and glycoproteins serve as the "fingerprints" of the cell

- 8. several heteropolymers (matrix polysaccharides), such as arabinoxylans, present along with cellulose in almost all plant cell walls
- 9. a large central vacuole that stores useful material and digest waste proteins and organelles
- 10. This helps slightly immobilize the outer surface of the membrane and make it less soluble to very small water-soluble molecules that could otherwise pass through more easily
- 11. are proteins that contain oligosaccharide chains covalently attached to polypeptide side-chains.
- 13. controls the movement of substances in and out of cells and organelles
- 18. is a structural heteropolysaccharide contained in the primary cell walls of terrestrial plants