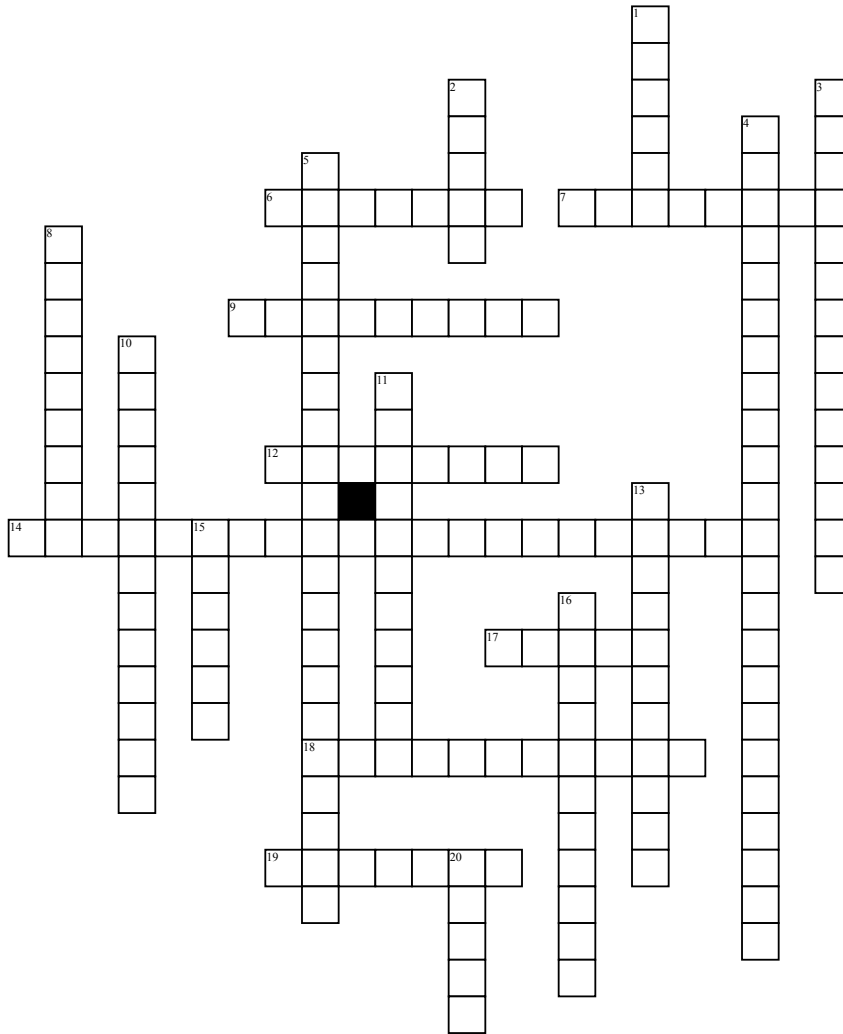


Photosynthesis



Across

6. light-absorbing molecules used by plants to gather the sun's energy
 7. light from the sun.
 9. organism that is able to capture energy from sunlight or chemicals and use it to produce its own food from inorganic compounds; also called a producer
 12. strong, supporting layer around the cell membrane in some cells
 14. compound used by cells to store and release energy
 17. a colorless, transparent, odorless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.
 18. the light-independent reactions of photosynthesis in which energy from ATP and NADPH is used to build high-energy compounds such as sugar
 19. a simple sugar which is an important energy source in living organisms and is a component of many carbohydrates.

Down

1. a colorless, odorless reactive gas, the chemical element of atomic number 8 and the life-supporting component of the air.
 2. place (a seed, bulb, or plant) in the ground so that it can grow.
 3. process used by plants and other autotrophs to capture light energy and use it to power chemical reactions that convert carbon dioxide and water into oxygen and energy-rich carbohydrates such as sugars and starches
 4. set of reactions in photosynthesis that use energy from light to produce ATP and NADPH
 5. set of reactions in photosynthesis that do not require light; energy from ATP and NADPH is used to build high-energy compounds such as sugar; also called the Calvin cycle
 8. saclike photosynthetic membranes found in chloroplasts

10. a colorless, odorless gas produced by burning carbon and organic compounds and by respiration. It is naturally present in air (about 0.03 percent) and is absorbed by plants in photosynthesis.
 11. principal pigment of plants and other photosynthetic organisms
 13. organelle found in cells of plants and some other organisms that captures the energy from sunlight and converts it into chemical energy
 15. fluid portion of the chloroplast; outside of the thylakoids
 16. cluster of proteins that span the thylakoid membrane and allow hydrogen ions (H⁺) to pass through it
 20. sweeten, sprinkle, or coat with sugar.

Word Bank

Pigment	Thylakoid	Carbon dioxide	Photosynthesis
Cell wall	Light dependent reactions	Glucose	Autotroph
Sugar	ATP synthase	Oxygen	Sunlight
Water	Stroma	Chlorophyll	Plant
Adenosine triphosphate	Calvin cycle	Light independent cycle	Chloroplast