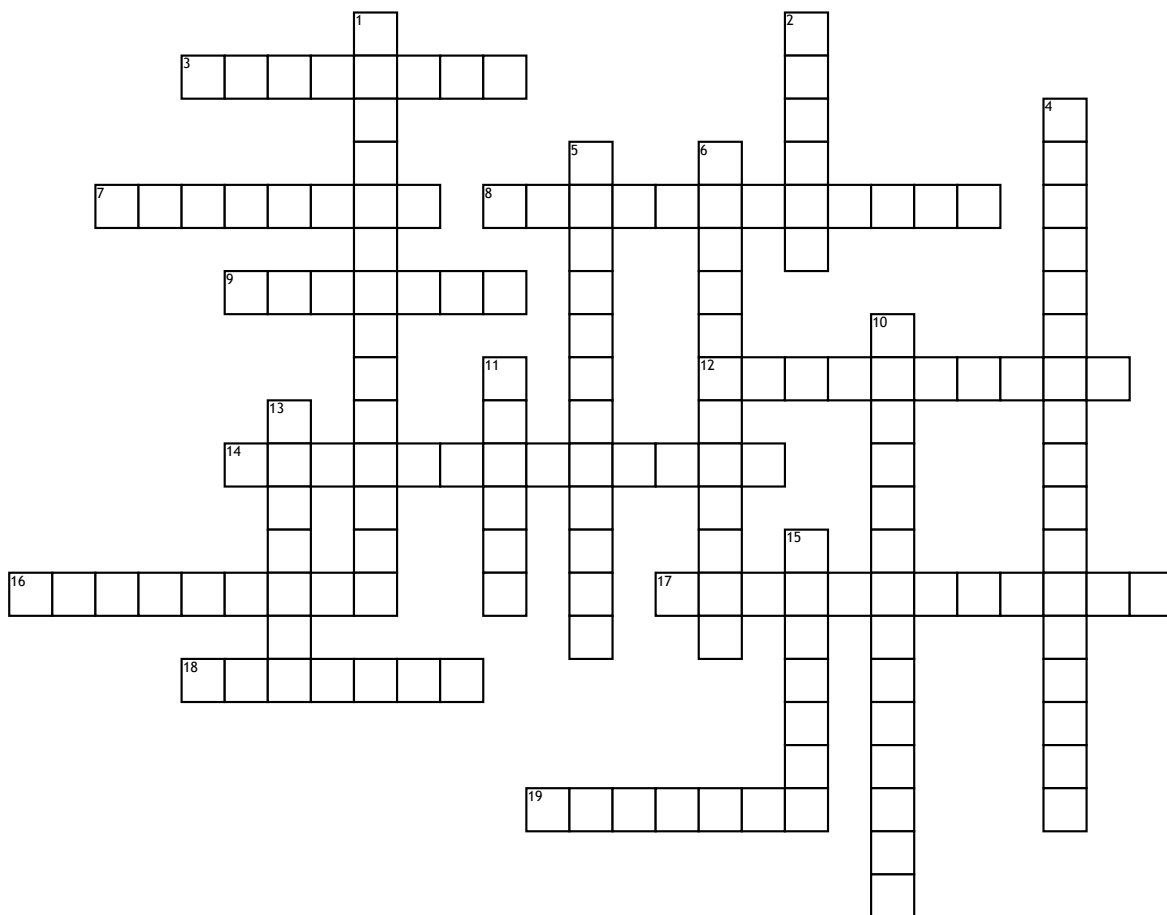


Chemistry of life



Across

3. It is a polysaccharide that forms glucose on hydrolysis.

7. a hexose sugar found especially in honey and fruit.

8. any of a large group of organic compounds occurring in foods and living tissues and including sugars, starch, and cellulose. They contain hydrogen and oxygen in the same ratio as water (2:1) and typically can be broken down to release energy in the animal body.

9. a simple sugar that is an important energy source in living organisms and is a component of many carbohydrates.

12. the chemical breakdown of a compound due to reaction with water.

14. a molecule containing a very large number of atoms, such as a protein, nucleic acid, or synthetic polymer.

16. a sugar of the hexose class that is a constituent of lactose and many polysaccharides.

17. any of a class of sugars whose molecules contain two monosaccharide residues.

18. any of a large class of organic compounds with a characteristic molecular structure containing four rings of carbon atoms

19. the crystallizable form of starch, consisting of long unbranched polysaccharide chains.

Down

1. any of the class of sugars (e.g., glucose) that cannot be hydrolyzed to give a simpler sugar.

2. any of a class of organic compounds that are fatty acids or their derivatives and are insoluble in water but soluble in organic solvents.

4. a type of carbohydrate-protein covalent linkage between an asparagine side chain amide and a sugar; type linkage.

5. an ester formed from glycerol and three fatty acid groups.

6. a lipid containing a phosphate group in its molecule

10. a carbohydrate (e.g., starch, cellulose, or glycogen) whose molecules consist of a number of sugar molecules bonded together.

11. each of two or more compounds with the same formula but a different arrangement of atoms in the molecule and different properties.

13. It is a disaccharide consisting of two linked glucose units

15. It is a disaccharide containing glucose and galactose units.