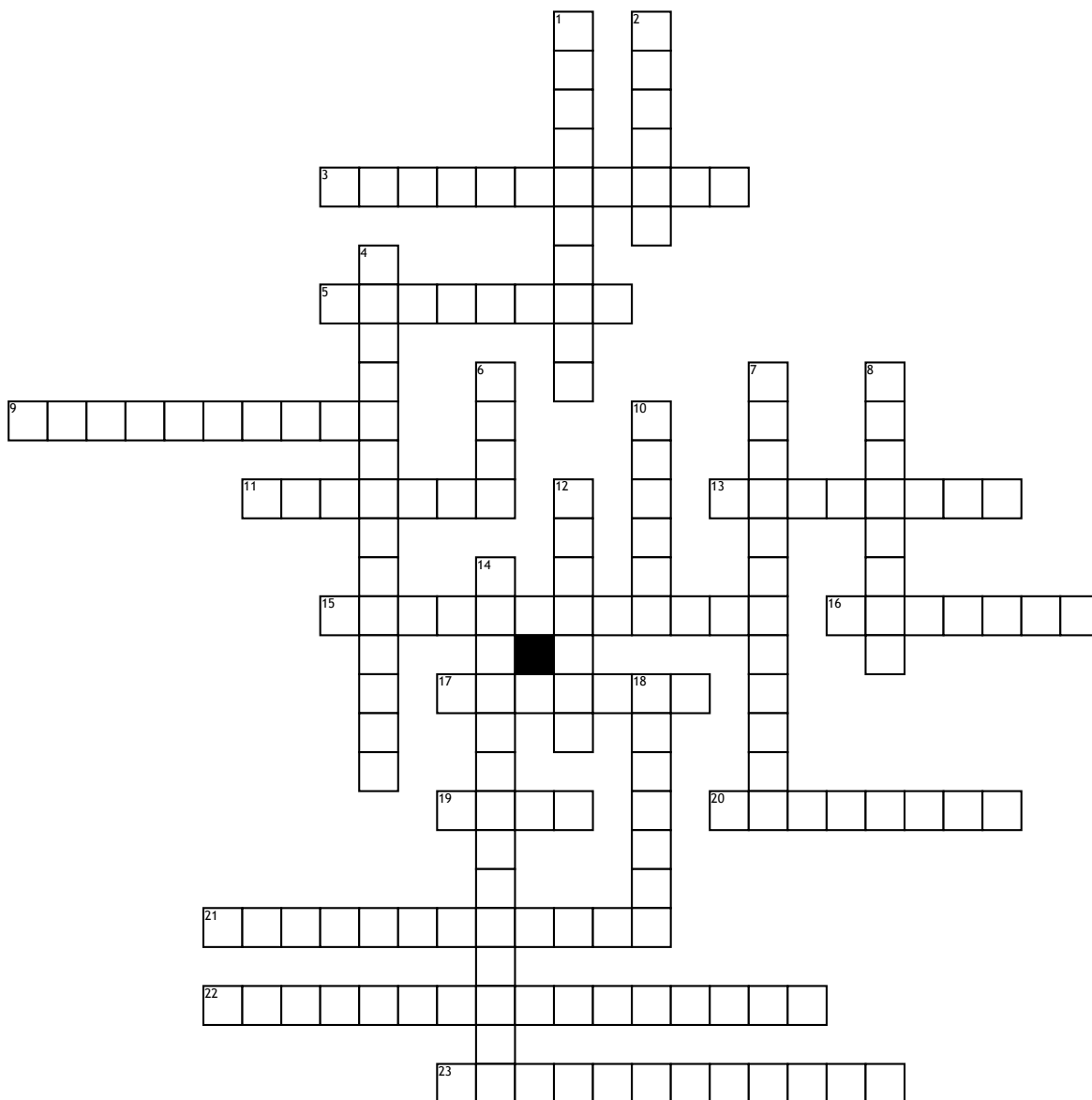


Name: _____

Date: _____

Chemistry of Life



Across

3. The monomers of nucleic acids of a 5 carbon sugar, nitrogen base

5. Unequal charge distribution within a molecule resulting in opposite poles or polar

9. The monomers of proteins containing an amino group and a carboxyl group

11. A measurement system that indicates the concentration of H⁺ ions

13. Macromolecules that contain hydrogen, carbon, oxygen and nitrogen. Catalyze chemical reactions, provide structures, fight disease, and allow for cellular transport

15. Compounds made up of carbon, hydrogen, and oxygen in 1:2:1 ratio. Used by living things for energy and to build structures.

16. A substance in which solutes are dissolved

17. Small subunit molecules that are the building blocks or polymers

19. A compound that forms H⁺ ions in solution. These solutions have higher H⁺ ion concentrations than neutral water and pH values below 7

20. An attraction between molecules of different substances

21. Macromolecules containing hydrogen, oxygen, carbon, nitrogen, phosphorus. Stores and transmits genetic information

22. The energy that is needed to get a chemical reaction started

23. The amount of heat energy required to raise the temperature of a substance

Down

1. The reactants of enzyme-catalyzed reactions

2. Diverse groups of molecules made up of carbon and hydrogen; generally not soluble in water. Used by living things for energy storage, biological membranes and waterproof

4. Large carbohydrate molecule made up of many sugars

6. A compound that forms OH⁻ ions in solution. These solutions have lower H⁺ ions than neutral water and have pH values above 7

7. The attraction between a hydrogen atom with a partial positive charge and another atom with a partial negative charge

8. An attraction between molecules of the same substance

10. Weak acids or bases that can react with a strong acids or bases to prevent sharp sudden changes in pH. Important for maintaining homeostasis.

12. Large molecules made up of repeating subunits or monomers

14. One sugar molecule

18. Proteins that speed up chemical reactions that take place in cells