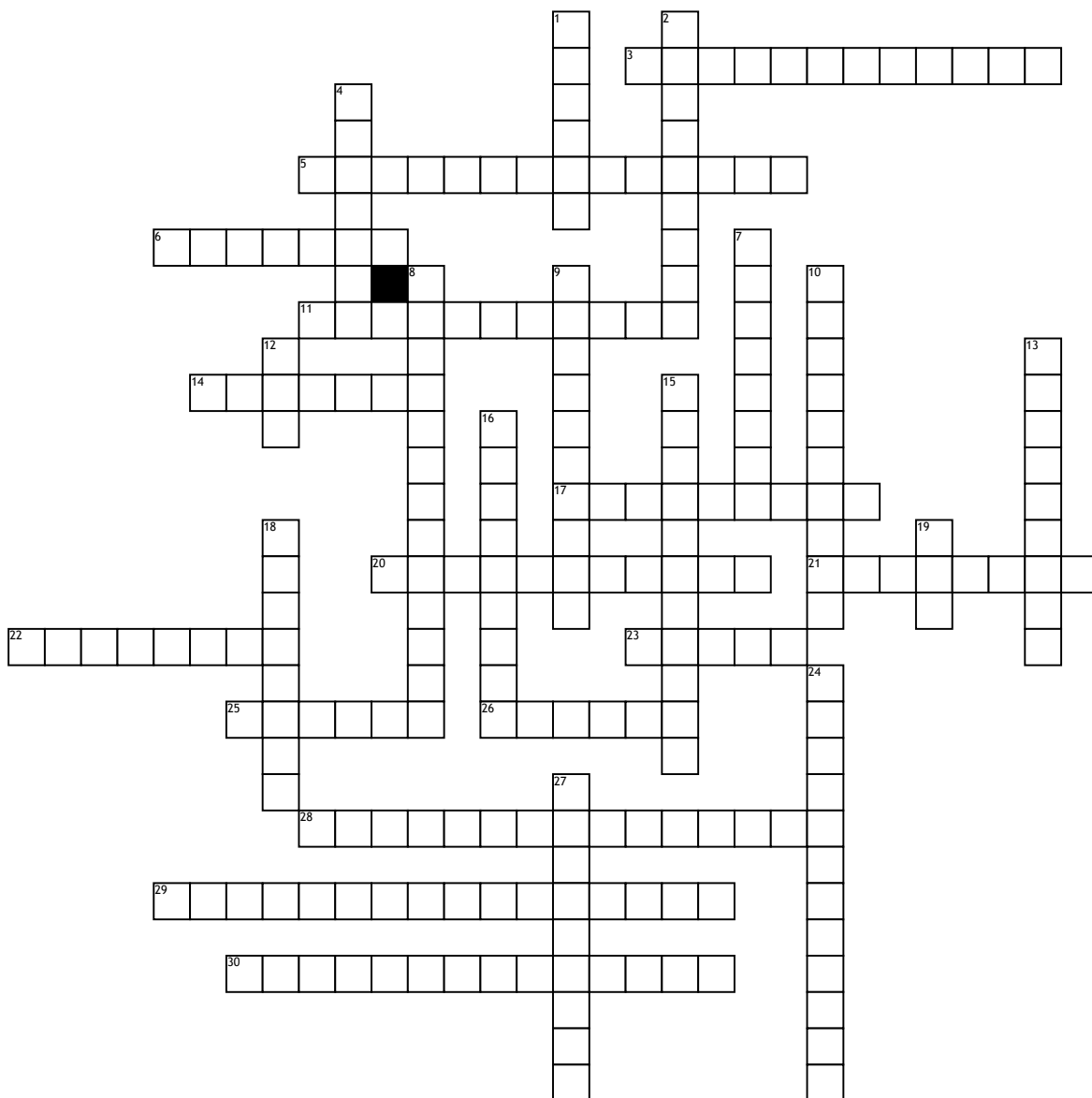


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# MACROMOLECULES



## Across

3. biological molecule consisting of carbon, hydrogen and oxygen atoms, usually with a hydrogen-oxygen atom ratio of 2:1

5. polymeric carbohydrate molecules composed of long chains of monosaccharide units bound together by glycosidic linkages and on hydrolysis give the constituent monosaccharides or oligosaccharides.

6. a substance that has a molecular structure consisting chiefly or entirely of a large number of similar units bonded together many synthetic organic materials

11. having carbon-carbon double or triple bonds and therefore not containing the greatest possible number of hydrogen atoms for the number of carbons.

14. a molecule that may bind chemically or supramolecularly to other molecules to form a polymer

17. an insoluble substance that is the main constituent of plant cell walls and of vegetable fibers such as cotton.

20. covalent chemical bond formed between two amino acid molecules.

21. uncommon in nature but became commonly produced industrially from vegetable fats for use in margarine, snack food, packaged baked goods and frying fast food

22. a multibranched polysaccharide of glucose that serves as a form of energy storage in animals and fungi.

23. a group of naturally occurring molecules that include fats, waxes, sterols, fat-soluble vitamins, monoglycerides, diglycerides, triglycerides, phospholipids, and others

25. carbohydrate with the formula  $C_5H_{10}O_5$ ;

26. macromolecular biological catalysts

28. An organic compound is any member of a large class of gaseous, liquid, or solid chemical compounds whose molecules contain carbon.

29. minimum energy which must be available to a chemical system with potential reactants to result in a chemical reaction.

30. called simple sugars

## Down

1. amylum is a polymeric carbohydrate consisting of a large number of glucose units joined by glycosidic bonds

2. holding as much water or moisture as can be absorbed; thoroughly soaked.

4. large biomolecules, or macromolecules, consisting of one or more long chains of amino acid residues.

7. simple polyol compound. It is a colorless, odorless, viscous liquid that is sweet-tasting and non-toxic.

8. large molecule, such as protein, commonly created by polymerization of smaller subunits

9. is a carboxylic acid with a long aliphatic chain, which is either saturated or unsaturated

10. the region of an enzyme where substrate molecules bind and undergo a chemical reaction.

12. Ribonucleic acid is a polymeric molecule implicated in various biological roles in coding, decoding, regulation, and expression of genes

13. inorganic chemical and a salt of phosphoric acid.

15. organic molecules that serve as the monomers

16. surface on which a plant or animal lives

18. A hydrogen bond is the electrostatic attraction between polar groups that occurs when a hydrogen (H) atom bound to a highly electronegative atom such as nitrogen (N), oxygen (O) or fluorine (F) experiences attraction to some other nearby highly electronegative atom.

19. Deoxyribonucleic acid is a molecule that carries the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms and many viruses

24. biopolymers, or large biomolecules, essential for all known forms of life.

27. biologically important organic compounds containing amine and carboxylic acid functional groups,