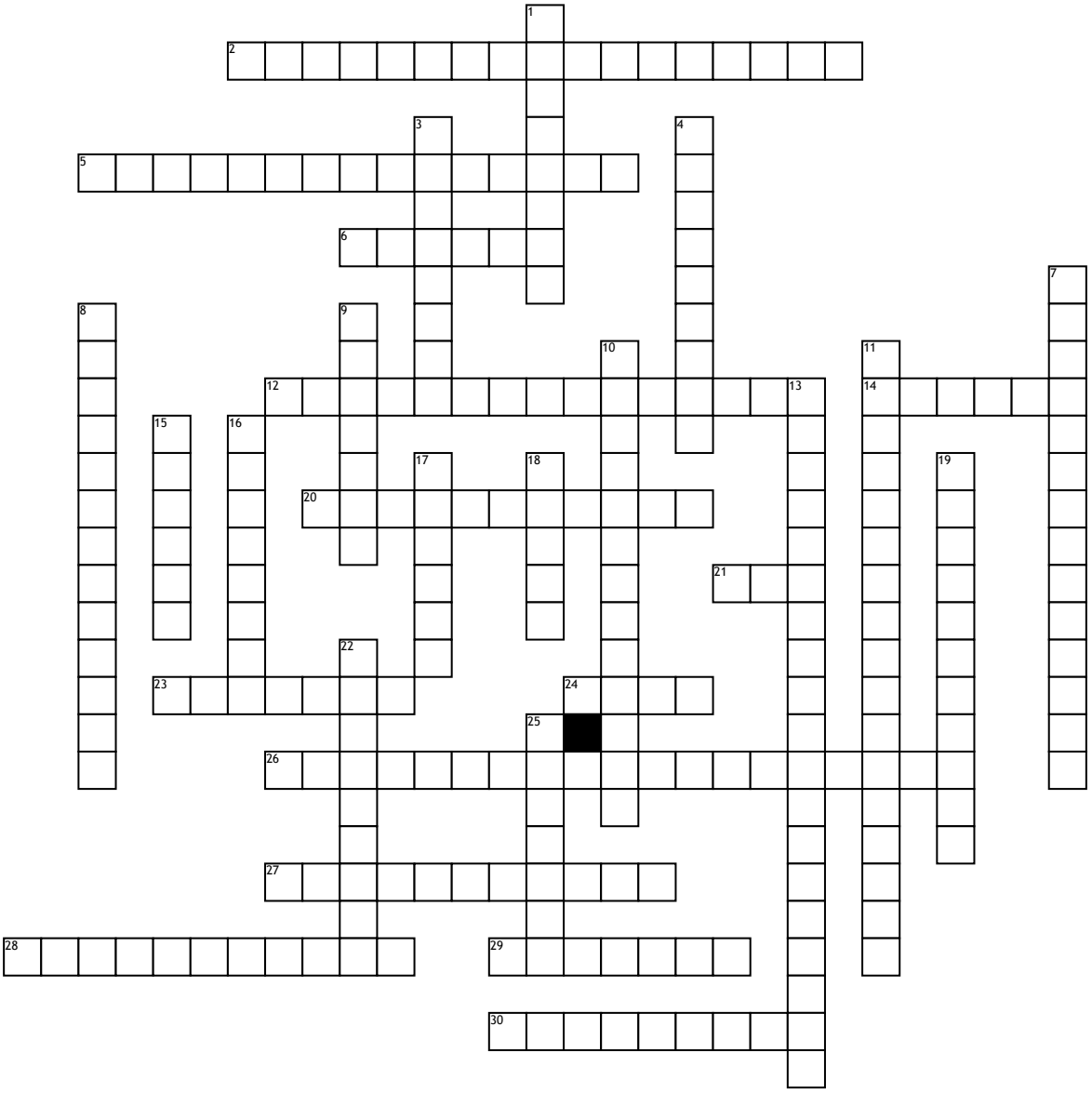
Name: _____ Date: _____

Macromolecules



Across

2. Genetic disorder in which red blood cells have abnormal hemoglobin molecules and take on an abnormal shape.

5. Unsaturated fats that have been synthetically converted to saturated fats by breaking C=C double bonds and adding hydrogen.

6. A larger, 6-membered ring fused to a 5-membered ring - adenine, guanine

12. simple sugars

14. a class of macromolecules that are nonpolar and insoluble in water; they don't form polymers

20. The chemical bond that forms between the carboxyl group of one amino acid and the amino group of another amino acid

21. single-stranded nucleic acid that functions in protein synthesis

23. large compound formed from combinations of many monomers

24. lipid consisting of glycerol and fatty acids

26. Process that releases energy by breaking down glucose and other food molecules in the presence of oxygen

27. an important steroid, is a component in animal cell membranes

28. Basic units of DNA molecule, composed of a sugar, a phosphate, and one of 4 DNA bases

29. Proteins that speed up chemical reactions

30. consists of a carboxyl group attached to a long carbon skeleton

Down

1. storage polysaccharide in animals

3. lipids characterized by a carbon skeleton consisting of four fused rings

4. An organic molecule possessing both a carboxyl and an amino group. Amino acids serve as the monomers of polypeptides.

7. A sugar containing two monosaccharides. Example: sucrose which is fructose + glucose.

8. A very large organic molecule composed of many smaller molecules

9. small chemical unit that makes up a polymer

10. sugars and polymers of sugars

11. A covalent bond formed between two monosaccharides by a dehydration reaction.

13. have the maximum number of hydrogen atoms possible and no double bonds

15. A structural polysaccharide, consisting of amino sugar monomers, found in many fungal cell walls and in the exoskeletons of all arthropods.

16. A three-carbon alcohol to which fatty acids are covalently bonded to make fats and oils.

17. A storage polysaccharide in plants consisting entirely of glucose monomers.

18. made of DNA

19. A single 6-membered ring of carbon and nitrogen - Cytosine, thymine, uracil

22. A substance (made of sugars) that is common in the cell walls of many organisms

25. A biologically functional molecule consisting of one or more polypeptides folded and coiled into a specific three-dimensional structure.