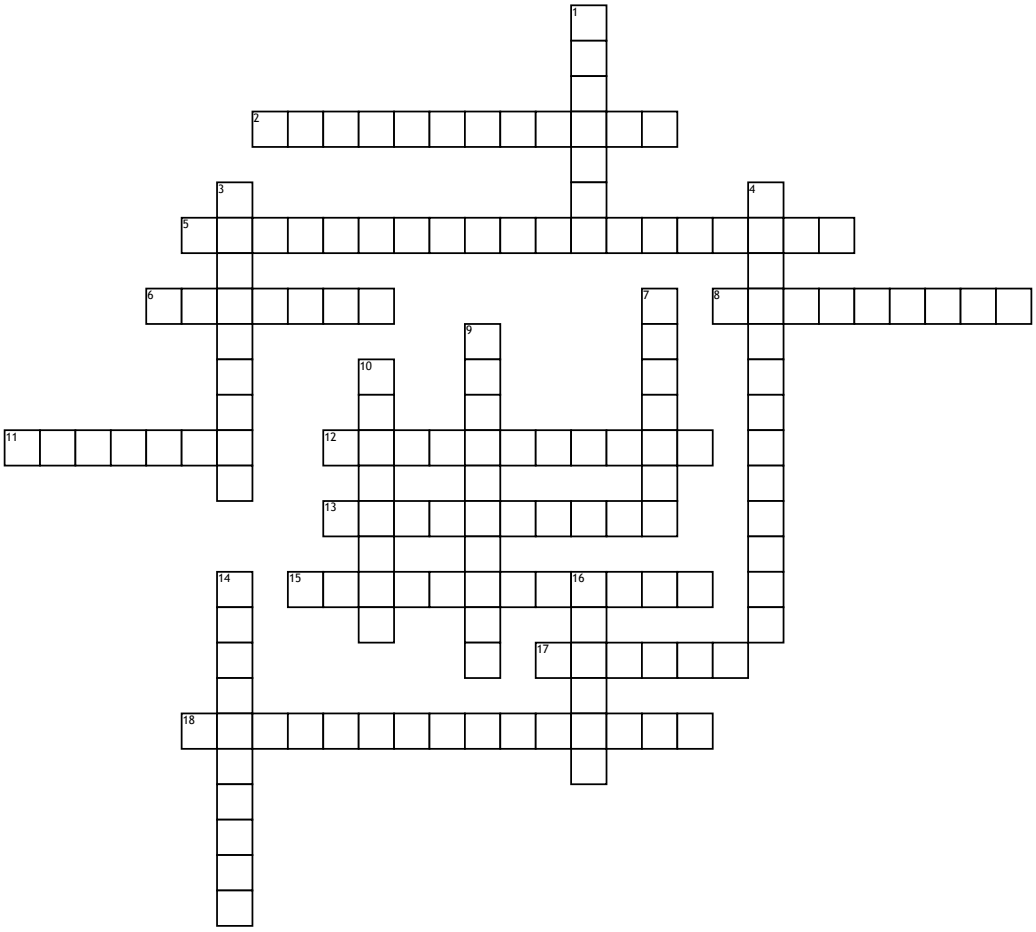
Name: _____ Date: _____ Period: _____

Carbon & the Molecular Diversity of Life



Across

2. organic molecules consisting of only hydrogen and carbon

5. a chemical reaction in which two molecules become covalently bonded to each other with the removal of a water molecule

6. long molecule consisting of many similar or identical building blocks linked by covalent bonds

8. fatty acid in which all carbons in the hydrocarbon tail are connected by single bonds

11. Catalyzed chemical reactions

12. fatty acid that has one or more double bonds between carbons in the hydrocarbon tail.

13. contain a central carbon bonded to a carboxyl group at one end, an amino group at the other end, a hydrogen atom, and an R group

15. stores, transmits, and helps express hereditary information

17. any of a group of large biological molecules including fats, phospholipids, and steroids, that mix poorly, if at all, with water.

18. include glucose and fructose: they are used as fuel: they are carbon sources that can be converted to other molecules or combined into polymer

Down

1. the subunit that serves as the building block of polymers

3. strengthens plants cell wall

4. include lactose and sucrose: they also are used as fuel: they are carbon sources that can be converted to other molecules or combined in polymers

7. molecules that have the same formula but different arrangement of atoms

9. systematic study of the full protein sets encoded by genomes

10. study of whole sets of genes and their interactions within a species, as well as genome comparisons between species.

14. chemical reaction that breaks bonds between two molecules by the addition of water

16. strengthen exoskeleton and fungal cell wall

Word Bank

Monosaccharides
Lipids
Chitin
Proteomics
Cellulose
Unsaturated
Enzymes
Polymer
Nucleic acids
Dehydration reaction
Isomers
Disaccharides
Monomer
Hydrolysis
Saturated
Genomics
Amino acids
Hydrocarbons