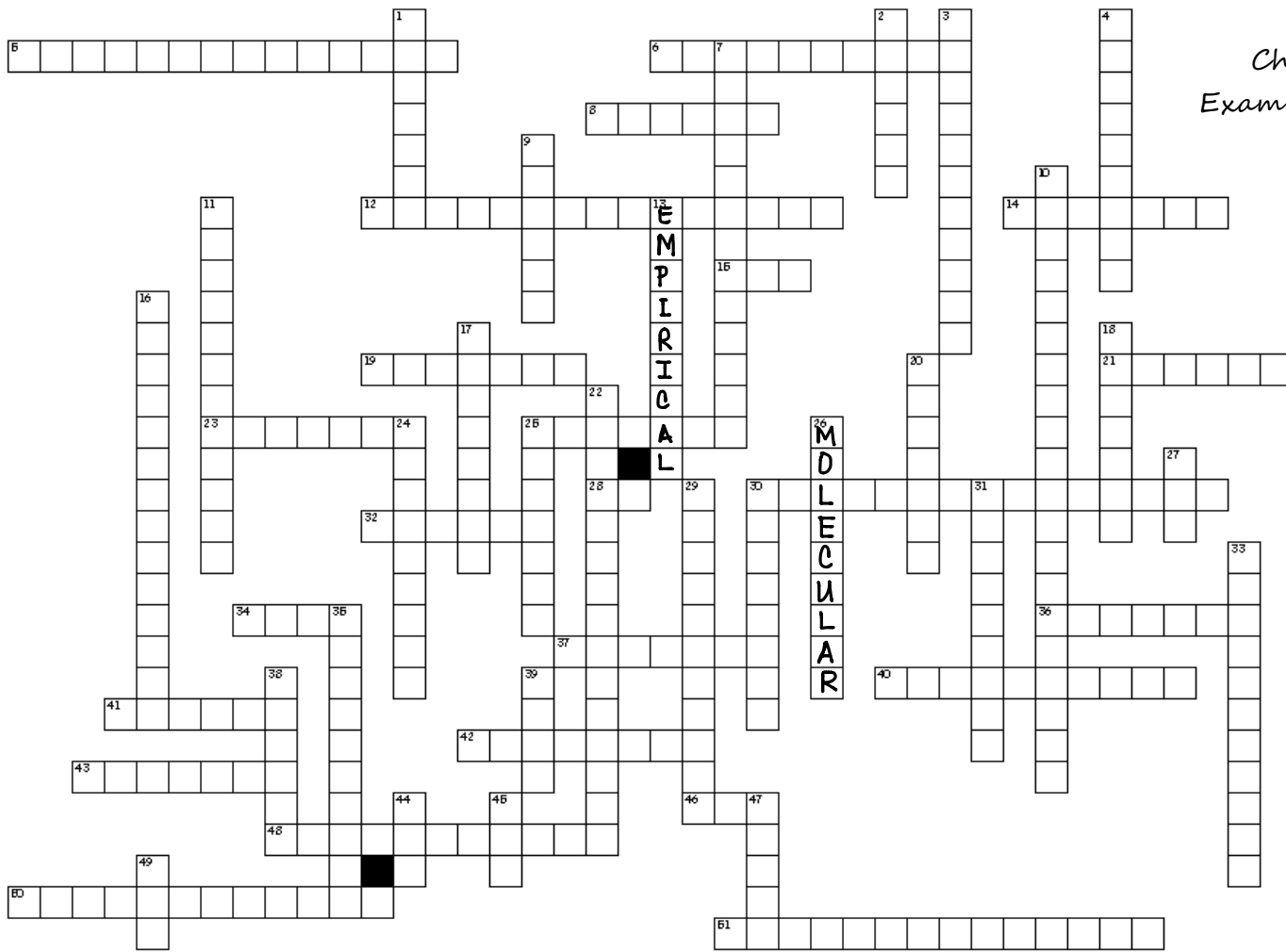


Unit 10:  
Organic  
Chemistry  
Exam Review  
Sheet



Name \_\_\_\_\_ Date \_\_\_\_\_ Mod \_\_\_\_\_

### Across

5. The process of creating an ester from a reaction involving an alcohol combining with an organic acid in the presence of sulfuric acid
6. Another term for sugar
8. These are often used as artificial flavors and scents
12.  $\text{CHBr}_3$
14.  $\text{C}_5\text{H}_{10}$
15. ten carbons
19. Saturated hydrocarbons
21.  $\text{C}_2\text{H}_6$
23. Aliphatic compounds with at least one triple bond between carbon atoms
25. Create saturated, solid lipids
28. This attachment indicates an alcohol
30. Fatty acids with many double bonds
32.  $\text{C}_4\text{H}_6$
34. one carbon
36. Compounds with the same chemical formulas, but different molecular structures
37. This bond attaches amino acids together
40. A chain of carbons containing a carboxyl group
41. This attached group is  $\text{CH}_3$
42. These compounds have benzene rings
43. Chain of amino acids
46. Found in the nucleus of cells
48. This hydrocarbon will have a hydrogen replaced with an atom of a different element
50. Compounds containing carbon and hydrogen
51. A chain of simple sugars that are bound together

**\*\*You do not need to know the two bold faced clues in the puzzle. Do not rely solely on this study guide. Not all vocabulary terms were put into the crossword puzzle. Use this as a way to supplement the review of your notes! ☺**

### Down

1. A small molecule that can be bound into chains creating a large molecule
2. Fats, oils and waxes
3. Aromatic compounds have this structure (2 words)
4. Most organic compounds are not naturally occurring, they are \_\_\_\_.
7. Sugars and starches
9. This attached group is  $\text{C}_3\text{H}_7$
10. DNA
11. These are chains of attached nucleotides
- 13. This formula is the most simplified ratio of atoms**
16. A simple sugar such as glucose
17. A  $\text{COOH}$  group
18. Twisted shape of DNA and RNA
20. This word refers to compounds containing carbon
22. RNA
24. Compounds will all single bonds between carbon atoms
25. Aliphatic compounds with at least one double bond between carbon atoms
- 26. This formula shows the number of atoms of each element actually in the compound**
27. six carbons
29. A  $\text{COOH}$  group indicates that the substance is this
30. Chains of small molecules
31. All organic compounds that do not have benzene rings
33. Compounds with one or more double or triple bond between carbons
35. This is the result of a hydrogen being replaced by an element from group 17 in a hydrocarbon
38. Create unsaturated lipids (liquids and solids)
39. three carbons
44. two carbons
45. four carbons
47. These acids have a carboxyl group and an amino group
49. nine carbons

**Draw the following organic molecules:**

- 3-chloro-1,1-dimethylcyclohexane
- 3-hexanol
- 3-ethyl-2,4-dimethyl-3-hexene
- 1,4-dimethylbenzene
- butanoic acid
- 1-bromo-6-iodo-3-methylhexane
- 3-hexyne
- ethylmethylamine

- 1,1,1-tribromo-3,3-diiodobutane
- pentanedioic acid
- ethyldimethylamine
- 1,3,5-pentanetriol
- 1-chloro-1,1,3,3,3-pentafluoropropane
- 6,6-dimethyl-1,4-octadiene
- 1,2,3-butatriene

- 3-ethyl-1,1,2,2-tetramethylcyclopentane
- 2,4,6-octatriene
- 1,2-diethylbenzene
- 3,3-diethylpentane
- 1,4-dipropylcyclohexane

**Name the following organic molecules:**

