

Organic Review and Pretesting name: \_\_\_\_\_

1. What element is present in all organic molecules?
2. An organic compound with one or more  $-OH$  functional groups as the only functional group is classified as what kind of molecule?
3. Label each as alkane, alkene, or alkyne?  $C_7H_{16}$        $C_9H_{16}$        $CH_4$        $C_5H_{10}$
4. Is this molecule saturated?  $C_7H_{14}$
5. What is the formula of a saturated hydrocarbon with seven carbon atoms present?
6. Draw diethyl ether & 2-propanol. Are they isomers?
7. Draw ethyl propyl ether and an isomer for it.
8. In ethyne, how many electrons are being shared by the 2 carbon atoms?
9. Can propane undergo an addition reaction? Why or why not?
10. What is the molar mass of methanol?
11. Enzymes from yeast and sugars from plants undergo a chemical reaction. What is it called, and what are the two products?
12. To make soap, what chemical reaction occurs?
13. Skip this one
14. The reaction  $CH_2CH_2 + H_2 \longrightarrow CH_3CH_3$  is what chemical process?
15. When  $CH_4 + Br_2 \longrightarrow CH_3Br + HBr$  what is this chemical process called?
16. What is the difference in bonding of carbon atoms in saturated vs. unsaturated hydrocarbons?
17. When a molecule of alcohol and one of an acid react together, what is the product? When methanol and hexanoic acid react, a water molecule is one product, what is the other?
18. When  $C_5H_{12} + 8O_2 \longrightarrow 5CO_2 + 6H_2O + \text{energy}$ , this process is called.
19. When ethane and bromine undergo substitution reaction, what are the products?
20. Can you draw a 1-methyl pentane? Why not?
21. What is the formula for cyclopropane? What is the formula for propane? Why are they different?

