



Chemistry

Name: _____

Section _____ FUNCTIONAL GROUPS I WS Date: _____

Directions (1-8): For each statement or question, choose the word or expression that, of those given, best completes the statement or answers the question.

1 An organic compound with a general formula R-OH would have a name ending in

- (1) -al (3) -one
(2) -ol (4) -ole

2 Which class of compounds has the general formula R-O-R'?

- (1) esters (3) ethers
(2) alcohols (4) aldehydes

3 The formula C₅H₁₁OH represents an

- (1) acid (3) ether
(2) ester (4) alcohol

4 Which is the general formula for an aldehyde?



5 Which general formula represents a ketone?



6 Which functional group is found in all organic acids?

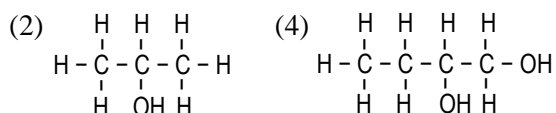
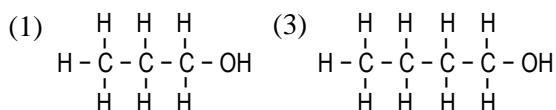


7 The molecule $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_3$

is a member of the class of organic compounds called

- (1) ethers (3) alcohols
(2) ketones (4) aldehydes

8 Which is the structural formula for 2-propanol?



Structural Isomerization:

Identify each of the following functional groups and then draw its structural formula.

1. CH_3COOH	6. $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$
2. CH_3COCH_3	7. $\text{CH}_3\text{CH}_2\text{COOH}$
3. $\text{CH}_3\text{CH}_2\text{OH}$	8. $\text{CH}_3\text{CH}_2\text{COOCH}_3$
4. $\text{CH}_3\text{CH}_2\text{OCH}_3$	9. $\text{CH}_3\text{CH}_2\text{COCH}_3$
5. $\text{CH}_3\text{CH}_2\text{CHO}$	10. CH_3OCH_3