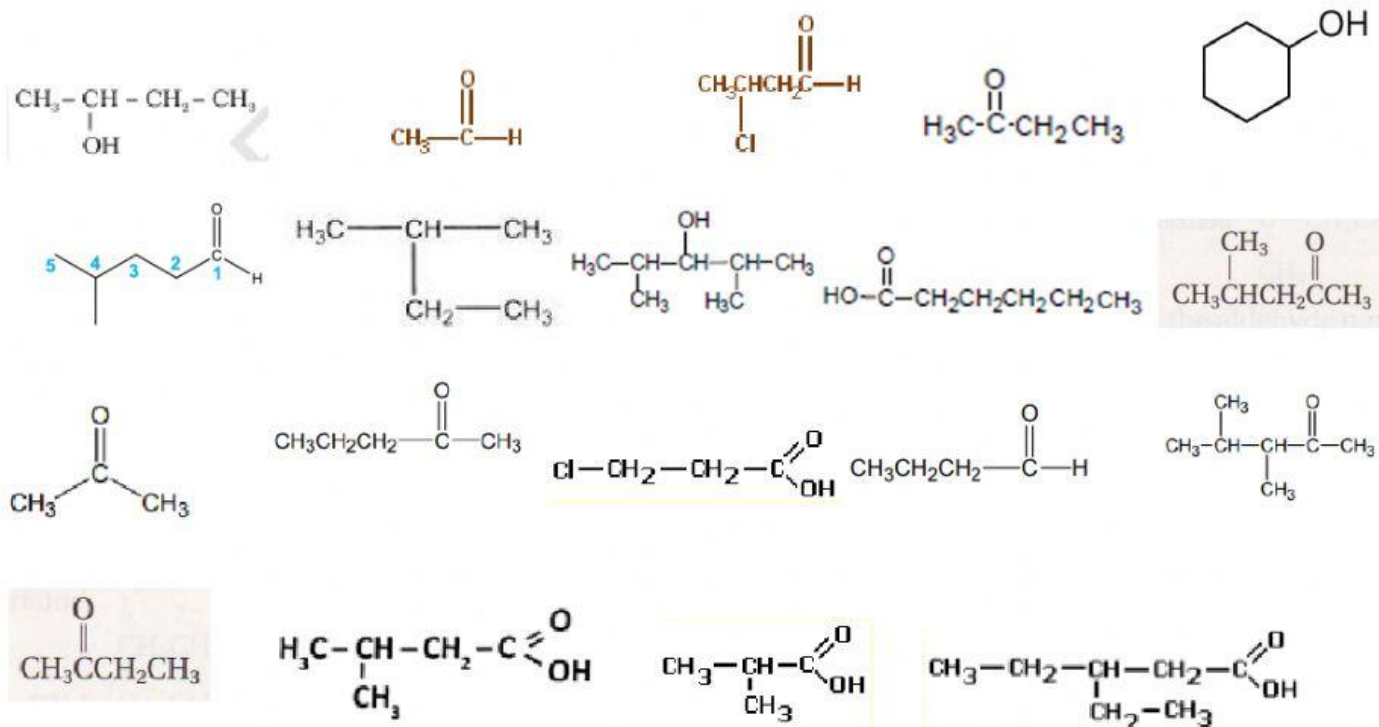


## Worksheet - ROH, Aldehydes and Ketones

1. Use systematic nomenclature to name the following structures.



2. For each pair of compounds on the left, select a correct structural characterization from the response list on the right. Responses on the right may be used more than once.

- |                       |  |
|-----------------------|--|
| ___ 1-Butanol         | a) are isomers   |
| ___ 2-Butanol         | b) have the same number of carbon atoms and same number of oxygen atoms but are not constitutional isomers |
| ___ 2-methyl propanol | c) have the same number of carbon atoms but a different number of oxygen atoms                             |
| ___ Butanal           | d) have the same number of oxygen atoms but a different number of carbon atoms                             |
| ___ 3-Chlorophenol    |  |
| ___ 3-heptanol        |  |
| ___ Cyclohexanol      |  |
| ___ Phenol            |  |
| ___ 2-methylbutanal   |  |
| ___ 2,3-pentanediol   |  |

3. True or False:

- ethylene glycol contains two carbon atoms and two hydroxyl groups \_\_\_
- acetone is the second ketone \_\_\_
- 2-propanol is a secondary alcohol \_\_\_
- ethanol is more toxic than ethanal \_\_\_
- the simplest aldehyde is ethanol \_\_\_
- the simplest ketone is acetone \_\_\_
- silver mirror is a test reaction for carbonyl group \_\_\_
- alcohol is a base \_\_\_
- test reaction for glycerol is interaction with  $\text{Cu}(\text{OH})$  \_\_\_
- phenol is ketone \_\_\_