Teacher:

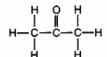
Functional Group Practice

Chemistry

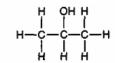
1. Given the formula for an organic compound:

This compound is classified as an

- A) aldehyde
- B) amine
- C) ester
- D) organic acid
- 2. What is the total number of carbon atoms in a molecule of ethanoic acid?
 - A) 1
- B) 2
- C) 3
- D) 4
- 3. Given the three organic structural formulas shown below:

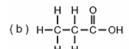






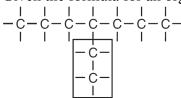
Which organic compound classes are represented by these structural formulas, as shown from left to right?

- A) ester, organic acid, ketone
- B) ester, aldehyde, organic acid
- C) ketone, aldehyde, alcohol
- D) ketone, organic acid, alcohol
- 4. Given the formulas of four organic compounds:



Which pair below contains an alcohol and an acid?

- A) *a* and *b*
- B) a and c
- C) *b* and *d*
- D) c and d
- 5. Given the formula for an organic compound:



What is the name given to the group in the box?

- A) butyl
- B) ethyl
- C) methyl
- D) propyl

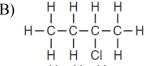
6. Given the formula:

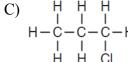
What is the chemical name of this compound?

- A) propane
- B) propanal
- C) propanol
- D) propanone
- 7. Given the formula for a compound:

A chemical name for this compound is

- A) butanal
- B) butanol
- C) butanone
- D) butanoic acid
- 8. Which formula represents a molecule of 2-chlorobutane?





- 9. Which class of compounds contains at least one element from Group 17 of the Periodic Table?
 - A) aldehyde
- B) amine
- C) ester
- D) halide
- 10. Ethanoic acid and 1-butanol can react to produce water and a compound classified as an
 - A) aldehyde
- B) amide
- C) ester
- D) ether
- 11. The reaction between an organic acid and an alcohol produces
 - A) an aldehyde
- B) a ketone
- C) an ether
- D) an ester
- 12. Which class of organic compounds contains nitrogen?
 - A) aldehyde
- B) alcohol
- C) amine
- D) ether

13. Given the formula:

This compound is classified as

- A) an aldehyde
- B) an amide
- C) an amine
- D) a ketone

14. Which compound is classified as an ether?

- A) CH₃CHO
- B) CH₃OCH₃
- C) CH₃COCH₃
- D) CH₃COOCH₃

15. Given the structural formula:

The compound represented by this formula can be classified as an

- A) organic acid
- B) ether
- C) ester
- D) aldehyde