Organic Chemistry Molecules WS

1. Name the following molecule.

2. Name the following molecule.

3. Name the following molecule.

4. Draw the structural formula for 2,2-dimethylpropane.

5	Draw the structural	formula	for 3-ethy	/l-4-methvl	hentane

6. Give the name of the molecule
$${\rm CH_3CH=CHCH_2CH_3}$$
.

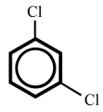
$$CH_3C = CHCH_3$$
 $|$
 CH_3

8. Name the molecule $\mathrm{CH_3C\text{-}CCH_2CH_3}$. (This has a triple bond between the 2nd and 3rd carbon.)

9. Draw the structural formula for 3-methyl-2-hexene.

10. Draw the structural formula for 4-ethyl-2-octyne.

11. Name the molecule below.



12. Draw the structural formula for 2-phenylpropane.

13. Give the name for the following molecule.

14. Write the structural formula for 3-isopropyl-3-heptanol.

15. Name the following compound.

$$\begin{array}{c|c} \mathsf{CH_3CH_2CH_2CHCH_2C=O} \\ & | & | \\ & \mathsf{Cl} & \mathsf{H} \end{array}$$

16. Name the following compound. The structure on the far left should say ${\rm CH_2}$ (not ${\rm H_3CH}$).

17. Draw the structural formula for pentanal.

18. Draw the structural formula for propanone.		
19. Name the following compound. CH ₃ COOH		
20. Draw the structural formula for 3-ethylhexanoic acid.		

Answer Key

- 1. 2-methylbutane
- 2. 2,4-dimethylpentane
- 3. 2,4-dimethylhexane
- 4. The structural formula is:

5. The structural formula is:

$$\begin{array}{c} \text{CH}_3\\ \mid\\ \text{CH}_3\text{CH}_2\text{CHCHCH}_2\text{CH}_2\text{CH}_3\\ \mid\\ \text{CH}_2\\ \mid\\ \text{CH}_3 \end{array}$$

- 6. 2-pentene
- 7. 2-methyl-2-butene
- 8. 2-pentyne
- 9. The structural formula is:

10. The structural formula is:

$$\begin{array}{c} \text{CH}_3\text{C} \equiv \text{CCHCH}_2\text{CH}_2\text{CH}_2\text{CH}_3\\ |\\ \text{CH}_2\\ |\\ \text{CH}_3 \end{array}$$

- 11. 1,3-dichlorobenzene or *m*-dichlorobenzene
- 12. The structural formula is:

13. 2-butanol

14. The structural formula is:

- 15. 3-chlorohexanal
- 16. 3-phenylpropanal
- 17. The structural formula is:

$$\begin{array}{c} \mathrm{CH_{3}CH_{2}CH_{2}CH_{2}C=O} \\ | \\ \mathrm{H} \end{array}$$

- 18. propanone (acetone)
- 19. ethanoic acid (acetic acid)
- 20. The structural formula is:

Standards Summary