

Lewis Structure Worksheet - Homework Answers

1. H ₂	H - H	10. C ₂ H ₂	H - C ≡ C - H
2. Cl ₂	$\overline{\text{Cl}} - \overline{\text{Cl}}$	11. CH ₂ O	$\begin{array}{c} \text{O} \\ \parallel \\ \text{H} - \text{C} - \text{H} \end{array}$
3. CO ₂	$\overline{\text{O}} = \text{C} = \overline{\text{O}}$	12. H ₂ SO ₄	$\begin{array}{c} \text{O} \\ \parallel \\ \text{H} - \overline{\text{O}} - \text{S} - \overline{\text{O}} - \text{H} \\ \\ \text{O} \end{array}$
4. HCN	H - C ≡ N	13. H ₂ CO ₃	$\begin{array}{c} \text{O} \\ \parallel \\ \text{H} - \overline{\text{O}} - \text{C} - \overline{\text{O}} - \text{H} \\ \\ \text{O} \end{array}$
5. CS ₂	$\overline{\text{S}} = \text{C} = \overline{\text{S}}$	14. HNO ₃	$\begin{array}{c} \text{O} \\ \parallel \\ \text{H} - \overline{\text{O}} - \text{N} - \overline{\text{O}} \\ \\ \text{O} \end{array}$
6. SO ₂	$\overline{\text{O}} - \overline{\text{S}} = \overline{\text{O}}$	15. HClO ₄	$\begin{array}{c} \text{O} \\ \parallel \\ \overline{\text{O}} - \text{Cl} - \overline{\text{O}} - \text{H} \\ \\ \text{O} \end{array}$
7. CO	$\text{C} \equiv \text{O}$	16. NF ₃	$\begin{array}{c} \overline{\text{F}} - \overline{\text{N}} - \overline{\text{F}} \\ \\ \overline{\text{F}} \end{array}$
8. C ₂ H ₆	$\begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H} - \text{C} - \text{C} - \text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$	17. SO ₄ ²⁻	$\left[\begin{array}{c} \text{O} \\ \parallel \\ \overline{\text{O}} - \text{S} - \overline{\text{O}} \\ \\ \text{O} \end{array} \right]^{2-}$
9. C ₂ H ₄	$\begin{array}{c} \text{H} \quad \text{H} \\ \diagdown \quad \diagup \\ \text{C} = \text{C} \\ \diagup \quad \diagdown \\ \text{H} \quad \text{H} \end{array}$	18. NH ₄ ⁺	$\left[\begin{array}{c} \text{H} \\ \\ \text{H} - \text{N} - \text{H} \\ \\ \text{H} \end{array} \right]^+$

$7 - (6) = +1$
 $7 - (5) = +2$

19. ClO_2^- $\left[\begin{array}{c} \text{O} \\ \\ \text{O} - \text{Cl} - \text{O} \\ \\ \text{O} \end{array} \right]^-$	23. SiO_2 $\text{O} = \text{Si} = \text{O}$
20. NO_3^- $\left[\begin{array}{c} \text{O} \\ \\ \text{O} - \text{N} - \text{O} \\ \\ \text{O} \end{array} \right]^-$	24. C_3H_8 $\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H} - \text{C} - \text{C} - \text{C} - \text{H} \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array}$
21. CO_3^{2-} $\left[\begin{array}{c} \text{O} \\ \\ \text{O} - \text{C} - \text{O} \\ \\ \text{O} \end{array} \right]^{2-}$	25. C_4H_8 $\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \quad \\ \text{H} - \text{C} - \text{C} = \text{C} - \text{C} - \text{H} \\ \quad \quad \quad \\ \text{H} \quad \quad \quad \text{H} \end{array} \text{ or } \begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H} - \text{C} - \text{C} - \text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$
22. ClO_3^- $\left[\begin{array}{c} \text{O} \\ \\ \text{O} - \text{Cl} - \text{O} \\ \\ \text{O} \end{array} \right]^-$	25. CH_3COOH $\begin{array}{c} \text{H} \quad \text{O} \\ \quad \\ \text{H} - \text{C} - \text{C} - \text{O} - \text{H} \\ \\ \text{H} \end{array}$