

# AP TUTORS

## VSEPR

For each molecule below, fill in the table to determine the electron geometry & molecular geometry about the CENTRAL ATOM. Then sketch a perspective drawing of the substance and LABEL ALL BOND ANGLES.

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|-----|----------------------|-----|-----------------------|
| 1.  | HCN                  | 11. | $\text{SbCl}_4^-$     |
| 2.  | $\text{NO}_3^-$      | 12. | $\text{IF}_4^-$       |
| 3.  | $\text{NH}_4^+$      | 13. | $\text{SO}_2$         |
| 4.  | $\text{IF}_6^+$      | 14. | $\text{SO}_3^{2-}$    |
| 5.  | $\text{H}_2\text{S}$ | 15. | $\text{ClF}_3$        |
| 6.  | $\text{NF}_3$        | 16. | $\text{IOF}_5$        |
| 7.  | $\text{SbCl}_5$      | 17. | $\text{NO}_2$         |
| 8.  | $\text{IF}_5$        | 18. | $\text{H}_2\text{CO}$ |
| 9.  | $\text{CO}_2$        | 19. | $\text{BrCl}_2^-$     |
| 10. | $\text{CO}_3^{2-}$   | 20. | $\text{SOF}_4$        |