**Let’s Build It!**

For each molecule, first draw the Lewis dot structure. Then build a three- dimensional molecular model, using the Lewis dot structures as a guide. Use black spheres to represent carbon, red for

oxygen, and white for hydrogen.

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| **Molecular Formula** | **Lewis Dot Structure** | **Describe/Name and Draw Shape****(include bond angles)** | **# of Sigma and Pi Bonds Hybridization Type****(for sp – sp3 only)** |
| 1. methaneCH4 |  |  |  |
| 2. waterH2O |  |  |  |
| 3. ammoniaNH3 |  |  |  |
| 4. carbon dioxideCO2 |  |  |  |
| 5. chloromethaneCH3Cl |  |  |  |
| 6. sulfur tetrafluoride SF4 |  |  |  |
| 7. formaldehydeCH2O |  |  |  |

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| **Molecular Formula** | **Lewis Dot Structure** | **Describe/Name and Draw Shape****(include bond angles)** | **# of Sigma and Pi Bonds Hybridization Type****(for sp – sp3 only)** |
| 8. hydrogen cyanideHCN |  |  |  |
| 9. phosphorous pentachloridePCl5 |  |  |  |
| 10. sulfur hexafluorideSF6 |  |  |  |
| 11. chlorine trifluorideClF3 |  |  |  |
| 12. iodine pentafluorideIF5 |  |  |  |
| 13. xenon tetrafluorideXeF4 |  |  |  |