AP Chemistry

Lewis Structure Practice Problems

Elements that always follow the octet rule: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Elements that can have expanded octets: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Elements that may be electron deficient: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Draw Lewis structures for the following molecules:

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| Cl2 | SiH4 | NH3 |
| CH3Cl | BF3 | PH3 |
| CH3COOH | HNNH | C2H6 |
| C2H4 | NH4+ | H2CO |
| C2H2 | XeO4 | PCl5 |
| OH- | HCN | NH2F |
| CS2 | BrF3 | XeF2 |
| CℓF5 | BeF2 | SBr6 |