**Name: Period: Seat#:**

**Worksheet #11**

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| 1. What is the main idea behind VSEPR theory? | 1. Describe what hybridization is. Give an example. |

**For each of the following compounds, draw a Lewis Structure, determine the AXE formula, steric number, electronic geometry, molecular geometry, bond angles, and hybridizations.**

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| 1. Carbon tetrachloride Lewis Structure     Formula:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. BH3 Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. Silicon disulfide Lewis Structure   Formula:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. C2H2 Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. Phosphorus trifluoride Lewis Structure   Formula:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. SF6 Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |

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| 1. Dihydrogen monoxide Lewis Structure   Formula:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. PCl5 Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. SeF2  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. CO32-  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. Xenon tetraoxide Lewis Structure   Formula:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. ClF5  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. Br3-  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. SO32-  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |

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| 1. CO2  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. KrF4  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. SF4  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. O3  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. CHCl3  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. SO2  Lewis Structure   Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |
| 1. Iodine pentafluoride Lewis Structure   Formula:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: | 1. Find a molecule not on this WS and fill out the info:   Formula:  Name:  AXE:  Steric #:  Electron Geo:  Molecular Geo:  Bond Angles:  Hybridization: |