

Name:

Period:

Seat#:

1) What is the main idea behind VSEPR theory?	2) Describe what hybridization is. Give an example.
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For each of the following compounds, draw a Lewis Structure, determine the AXE formula, steric number, electronic geometry, molecular geometry, bond angles, and hybridizations.

3) Carbon tetrachloride <u>Lewis Structure</u> <u>Formula:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	4) BH₃ <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>
5) Silicon disulfide <u>Lewis Structure</u> <u>Formula:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	6) C₂H₂ <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>
7) Phosphorus trifluoride <u>Lewis Structure</u> <u>Formula:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	8) SF₆ <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>

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9) Dihydrogen monoxide <u>Lewis Structure</u> <u>Formula:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	10) PCl_5 <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>
11) SeF_2 <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	12) CO_3^{2-} <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>
13) Xenon tetraoxide <u>Lewis Structure</u> <u>Formula:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	14) ClF_5 <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>
15) Br_3^- <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>	16) SO_3^{2-} <u>Lewis Structure</u> <u>Name:</u> <u>AXE:</u> <u>Steric #:</u> <u>Electron Geo:</u> <u>Molecular Geo:</u> <u>Bond Angles:</u> <u>Hybridization:</u>

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<p>17) CO₂ <u>Lewis Structure</u></p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>	<p>18) KrF₄ <u>Lewis Structure</u></p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>
<p>19) SF₄ <u>Lewis Structure</u></p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>	<p>20) O₃ <u>Lewis Structure</u></p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>
<p>21) CHCl₃ <u>Lewis Structure</u></p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>	<p>22) SO₂ <u>Lewis Structure</u></p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>
<p>23) Iodine pentafluoride <u>Lewis Structure</u></p> <p>Formula:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>	<p>24) Find a molecule not on this WS and fill out the info:</p> <p>Formula:</p> <p>Name:</p> <p>AXE:</p> <p>Steric #:</p> <p>Electron Geo:</p> <p>Molecular Geo:</p> <p>Bond Angles:</p> <p>Hybridization:</p>