

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) BH 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>
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) C ₂ H 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>
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) SF ₆ <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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17) CO₂ <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>	18) KrF₄ <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>
19) SF₄ <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>	20) O₃ <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>
21) CHCl₃ <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>	22) SO₂ <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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23) Iodine pentafluoride

Lewis Structure

Formula:

AXE:

Steric #:

Electron Geo:

Molecular Geo:

Bond Angles:

Hybridization:

24) Find a molecule not on this WS and fill out the info:

Formula:

Name:

AXE:

Steric #:

Electron Geo:

Molecular Geo:

Bond Angles:

Hybridization: