

AP WORKSHEET 02EG: Lewis structure, shape & hybridization

Fill in the tables. (53)

Molecule	Lewis Structure (Clearly show <u>all</u> electron pairs)	Number of Bonding Pairs around <u>central</u> atom (Count multiple bonds as ONE pair)	Number of Lone Pairs around <u>central</u> atom	Hybridization around <u>central</u> atom	Name of shape in terms of <u>atoms</u>
SiH <sub>4</sub>					
BeF <sub>2</sub> (Electron Deficient Be)					
H <sub>2</sub> S					
PCl <sub>4</sub> <sup>+</sup>					
H <sub>2</sub>		N/A – no central atom as such	N/A – no central atom as such	N/A	
SO <sub>3</sub> <sup>2-</sup>					

Molecule	Lewis Structure (Clearly show all electron pairs)	Number of Bonding Pairs around <u>central</u> atom (Count multiple bonds as ONE pair)	Number of Lone Pairs around <u>central</u> atom	Hybridization around central atom	Name of shape in terms of <u>atoms</u>
IF <sub>5</sub>				N/A	
SCl <sub>6</sub>				N/A	
XeF <sub>4</sub>				N/A	
PH <sub>3</sub>					
PBr <sub>5</sub>				N/A	
PF <sub>3</sub>					