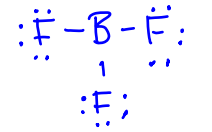
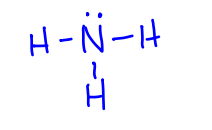
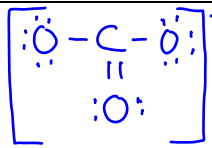
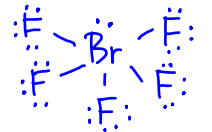
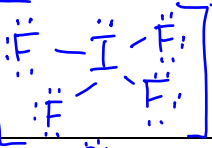
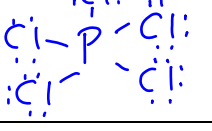
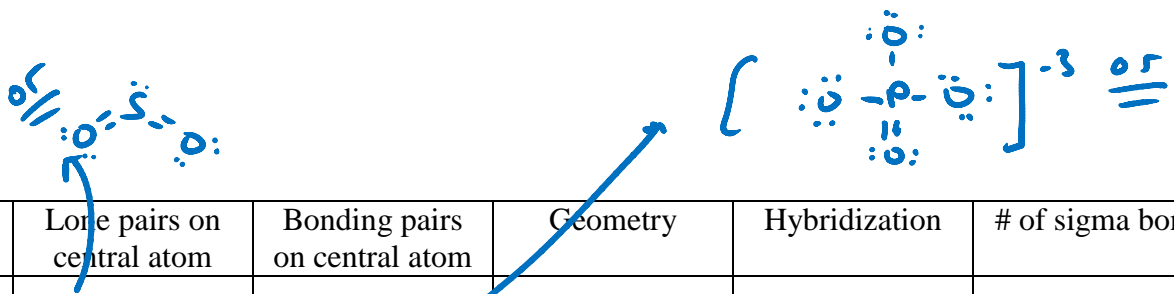


Name _____ Date _____

REVIEW FOR TEST

Formula	Lone pairs on central atom	Bonding pairs on central atom	Geometry	Hybridization	# of sigma bonds	# of pi bonds
BF ₃		3	trigonal planar	sp ²	3	0
NH ₃		3	trigonal pyramid	sp ³	3	0
CO ₃ ²⁻		4	trigonal planar	sp ²	3	1
BrF ₅		5	square pyramid	d ² sp ³	5	0
IF ₄ ⁺		4	See saw	dsp ³	4	0
PCl ₅		5	trigonal bipyramid	dsp ³	5	0



Formula	Lone pairs on central atom	Bonding pairs on central atom	Geometry	Hybridization	# of sigma bonds	# of pi bonds
SO ₂	$\text{:}\ddot{\text{O}}\text{:}-\text{S}=\text{O}$	3	bent	sp ²	2	1
PO ₄ ⁻³	$\left[\begin{array}{c} \text{:}\ddot{\text{O}}\text{:} \\ \text{:}\ddot{\text{O}}\text{:}-\text{P}-\text{:}\ddot{\text{O}}\text{:} \\ \text{:}\ddot{\text{O}}\text{:} \end{array} \right]^{-3}$	4	tetrahedral	sp ³	4	0
H ₂ O	H- $\ddot{\text{O}}$ -H	2	bent	sp ³	2	0
ICl ₃	$\begin{array}{c} \text{:}\ddot{\text{Cl}}\text{:}-\text{I}-\text{:}\ddot{\text{Cl}}\text{:} \\ \text{:}\ddot{\text{Cl}}\text{:} \end{array}$	3	Tshape	dsp ³	3	0
SF ₆	$\begin{array}{c} \text{F} \\ \text{F}-\text{S}-\text{F} \\ \text{F} \quad \text{F} \end{array}$	6	octahedral	d ² sp ³	6	0
ICl ₄ ⁻	$\left[\begin{array}{c} \text{:}\ddot{\text{Cl}}\text{:}-\text{I}-\text{:}\ddot{\text{Cl}}\text{:} \\ \text{:}\ddot{\text{Cl}}\text{:} \quad \text{:}\ddot{\text{Cl}}\text{:} \end{array} \right]^{-}$	4	square planar	d ² sp ³	4	0