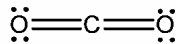

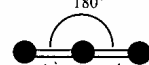
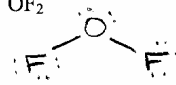


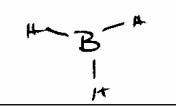


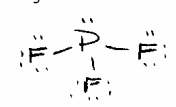


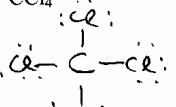

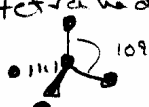
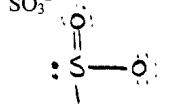


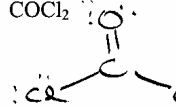


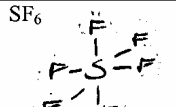


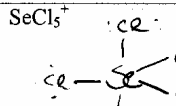
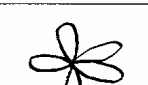
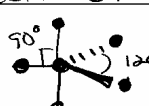


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Use the method of determining electron regions and electron arrangements to determine the MOLECULAR SHAPES and BOND ANGLE(S) in each of the following species:

Electron Dot Structure	Electron regions: Bonding & Lone Pairs (on the central atom)	Sketch & Identify Electron Arrangement	Sketch & Identify Shape Label Bond Angle(s)
Example: CO <sub>2</sub> 	2 bonding regions No lone pairs	 linear	 180° linear
1. OF <sub>2</sub> 	2 b.r. 2 lp.	 tetrahedral	 BENT ~105°
2. BH <sub>3</sub> 	3 br 1 lp	 trigonal planar	 120° trigonal planar
3. PF <sub>3</sub> 	3 b.r. 1 lp	 tetrahedral	 trigonal pyramidal ~107°
4. CCl <sub>4</sub> 	4 br 0 lp	 tetrahedral	 tetrahedral 109.5°
5. SO <sub>3</sub> <sup>2-</sup> 	3 b.r. 1 lp	 tetrahedral	 trigonal pyramidal ~107°
6. COCl <sub>2</sub> 	3 br. 0 lp	 trigonal planar	 >120° <120°
7. SF <sub>6</sub> 	6 br 0 lp	 octahedral	 90° octahedral
8. SeCl <sub>5</sub> <sup>+</sup> 	6 b.r. 0 lp	 trigonal bipyramidal	 90° 120° trigonal bipyramidal