REPORT
MOLECULAR MODELS EXP.

NAME	 	 	
SECTION			

Compound	Lewis Structure	Central Atom Hybrid	Electron Pair Geometry	Molecular Geometry	Polarity
SCl₂					
PCl₃					
O <sub>3</sub>					
SiH₂Cl₂					

Compound	Lewis Structure	Central Atom Hybrid	Electron Pair Geometry	Molecular Geometry	Polarity
PCl₅					
ICl <sub>2</sub>					
SF <sub>6</sub>					
XeF <sub>5</sub>					

Compound	Lewis Structure	Central Atom Hybrid	Electron Pair Geometry	Molecular Geometry	Polarity
СО					
PCl <sub>3</sub>					
SF <sub>4</sub>					
NO <sub>3</sub>					

- 1. Answer each of the following for the Nitrate ion  $(NO_3^-)$ .
  - a. Provide the Lewis structures (<u>including</u> resonance forms) for the Nitrate ion. In <u>one</u> of the structures <u>label</u> the hybridization of the Nitrogen and <u>each</u> of the Oxygens.

b. What are the electron pair and molecular geometries?

electron pair \_\_\_\_\_

molecular \_\_\_\_\_

- c. Is this a polar or nonpolar ion?
- 2. The Nitrite ion is slightly different than the Nitrate ion. What are the electron pair and molecular geometries for Nitrite ion? What is its polarity? Include the Lewis structure for this ion in your response.