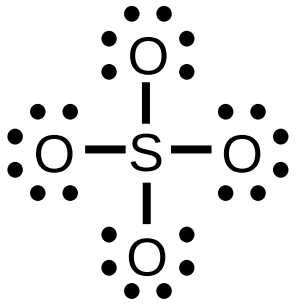
Physical Science Name: _____ Block: ___
Polyatomic Ions – Level 1

Compute the total number of valence electrons for each polyatomic ion, and then draw a Lewis diagram of its structure. The first one is completed for you as an example.

SO_4^{2-} Sulfate	Sulfur: 6 x 1 atom = 6 Oxygen: 6 x 4 atoms = 24 Extra for 2- charge = 2 Total = 6 + 24 + 2 = 32	
ClO_3^- Chlorate	Chlorine: __ x 1 atom = Oxygen: __ x 3 atoms = Extra for – charge = Total =	
CrO_4^{2-} Chromate	Hint: Cr has 6 valence electrons for this ion	
CO_3^{2-} Carbonate		Hint: There's a double bond!

PO_4^{3-} Phosphate		
NO_3^- Nitrate		
NO_2^- Nitrite		Hint: it's not symmetrical!
SO_3^{2-} Sulfite		