

IONIC RADII AND IONIC BONDS

NAME _____

SECTION _____

1. Complete the following table:

Element	Nuclear Charge	Complete Electron Configuration	Total Number of Electrons	Number of Inner Core Electrons	Number of Valence Electrons	Effective Nuclear Charge
Na						
Cl						
Na ⁺						
Cl ⁻						
Mg						
Mg ⁺						
Mg ²⁺						
S						
S ²⁻						

2. Why is the 2nd ionization energy in Na significantly greater than the first ionization energy for Na? Explain in terms of ENC.

3. Why is the 2nd ionization energy in Mg a little larger compared to the first ionization energy for Mg? Explain in terms of ENC.

4. Which is larger, a sulfur atom or a sulfide ion? Explain in terms of ENC.