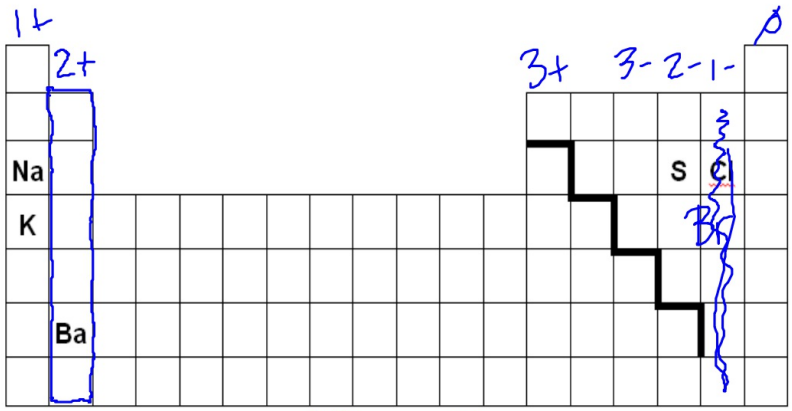
Warm Up #23

1. Outline on the periodic table the group of elements that always forms a 2^+ charge.

2. On the periodic table lightly shade the group of elements that always forms a 1^- charge



3. How many electrons does S^{2-} have? 18 2 more e⁻ than p⁺

4. How many protons does Ba^{2+} have? 56

5. What will be the ion symbol (formula), if the ion has 35 protons and 36 electrons? Br^- 1 more e⁻ than p⁺

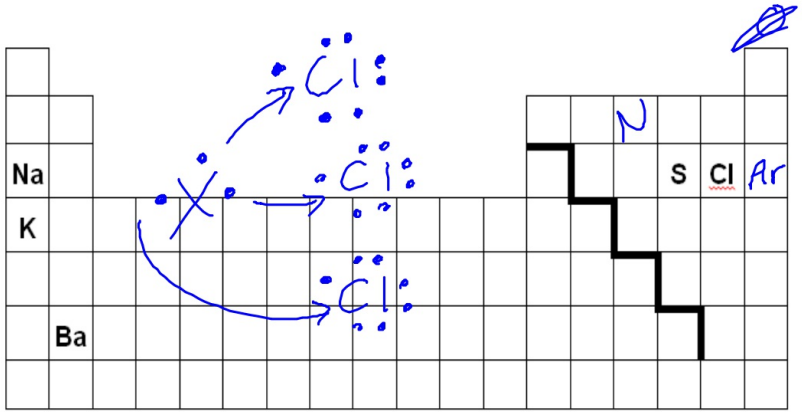
6. How many electrons does the ion have if it has 12 protons and a 2+ charge? 10 2 more p⁺ than e⁻

Warm Up #23

$X + 3(-1) = 0$

$X - 3 = 0$

$X = +3$



7. Which of the following will gain electrons to form an ion? = negative ion

   a) sodium b) argon c) sulfur d) nitrogen

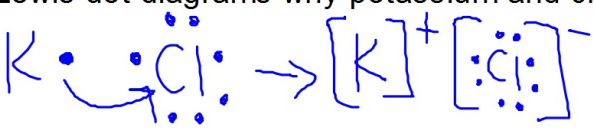
   Noble Gas Nonmetals

8. If the ion has 15 protons and 18 electrons, what will be its charge? -3

9. Given the formula XCl_3, what is the charge on ion X? Be sure to include the sign (+ or -) . X^{+3}

   -1

10. Describe with Lewis dot diagrams why potassium and chlorine form an ionic bond.



11. Write the names of the following compounds:

a. KF potassium fluoride

ionic

b. Mg_3P_2 magnesium phosphide

ionic

c. $Fe(OH)_2$ iron (II) hydroxide

ionic

$Fe + 2(-1) = 0$

$Fe - 2 = 0$

$Fe = +2$

12. Write the formulas of the following compounds:

a. calcium bromide $CaBr_2$ $CaBr_2$

ionic

b. nickel (II) nitride Ni_3N_2 Ni_3N_2

c. sodium sulfate Na_2SO_4 Na_2SO_4