

Name: \_\_\_\_\_

Period: \_\_\_\_\_

**HW3:4 Oxidation Numbers**  
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**Due: Wed., 10/18 and Thurs., 10/19**  
**Assigned: Mon., 10/16 and Tues., 10/17**

1. Metals become positive or negative ions?
  2. Why?
  3. Nonmetals become positive or negative ions?
  4. Why?
  5. Gainers of electrons become \_\_\_\_\_.
  6. Give the oxidation numbers for the following elements.
    - A. Ar = \_\_\_\_\_
    - B. S = \_\_\_\_\_
    - C. Ca = \_\_\_\_\_
    - D. B = \_\_\_\_\_
  7. Give chemical symbols with oxidation # in ion notation.
    - A. Magnesium = \_\_\_\_\_
    - B. Oxygen = \_\_\_\_\_
    - C. Potassium = \_\_\_\_\_
    - D. Chlorine = \_\_\_\_\_
  8. A) Draw a Lewis Dot Diagram for Chlorine. AND  
B) Put boxes around any empty spaces.
  9. Draw three different Lewis dot diagrams for Oxygen.
  10. How many electrons are gained or lost?
    - A.  $\text{Be}^{2+}$  = \_\_\_\_\_
    - B.  $\text{Br}^{1-}$  = \_\_\_\_\_
    - C.  $\text{O}^{2-}$  = \_\_\_\_\_
    - D.  $\text{Al}^{3+}$  = \_\_\_\_\_
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11. Given  $\text{NaNO}_3$ .
    - A. How many Sodiums are there?
    - B. How many Oxygens are there?
    - C. Is it a covalent, ionic, or polyatomic compound?
    - D. Name the compound.
  12. Given  $\text{MgF}_2$ 
    - A. How many Magnesiums are there?
    - B. How many Fluorines are there?
    - C. Is it a covalent, ionic, or polyatomic compound?
    - D. Name the compound.
  13. The elements that don't combine are called: \_\_\_\_\_
  14. Is a virus alive?
  15. How does a virus "reproduce"?
  16. Give two examples of how we have a metabolism.
  17. Give two examples of you maintaining homeostasis.
  18. (Actual TAKS question) "One characteristic shared by a virus and a living cell is that both -
    - A. store genetic information in nucleic acids.
    - B. have a crystalline structure.
    - C. gain energy directly from the sun.
    - D. use glucose for respiration."