**General: Review For Moles and Equations Test**

1. How many grams are there in 3.7 moles of BaF2?
2. How many moles are there in 0.9 grams of NH3?
3. How many grams are there in 50.7 moles of Na2CO3?
4. How many moles are there in 4.5 grams of NF3?
5. Which of these weighs more: 7.7 moles of GaF3 or 6.0 moles of Fe(NO3)2?
6. Which of these weighs more: 98 grams of NaOH or 45 grams of Na2O?
7. How many things are in a mole?
8. \_\_\_\_ NaOH + \_\_\_\_ SeI2 → \_\_\_\_ NaI + \_\_\_\_ Se(OH)2
9. \_\_\_\_ MnBr2 + \_\_\_\_ KNO2 → \_\_\_\_ Mn(NO2)2 + \_\_\_\_ KBr
10. \_\_\_\_ Be(OH)2 → \_\_\_\_ H2O + \_\_\_\_ BeO
11. \_\_\_\_ PbO2 + \_\_\_\_ H2 → \_\_\_\_ Pb + \_\_\_\_ H2O
12. \_\_\_\_ H3PO4+ \_\_\_\_ NaOH → \_\_\_\_ H2O + \_\_\_\_ Na3PO4
13. \_\_\_\_ TiF4 + \_\_\_\_ H2O → \_\_\_\_ TiO2 + \_\_\_\_ HF
14. \_\_\_\_ C2H6O + \_\_\_\_ O2 → \_\_\_\_ H2O + \_\_\_\_ CO2
15. \_\_\_\_ C2H4O2 + \_\_\_\_ Ni → \_\_\_\_ Ni(C2H3O2)2 + \_\_\_\_ H2
16. \_\_\_\_ BF3 + \_\_\_\_ I2  \_\_\_\_ BI3 + \_\_\_ F2
17. \_\_\_\_ PI5 + \_\_\_\_ H2O → \_\_\_\_ HI + \_\_\_\_ H3PO4
18. When metallic iron is exposed to oxygen (O2) in heated air, iron (III) oxide (Fe2O3) powder (also known as rust) is formed.
19. When a solution of ammonia (NH3) is combined with liquid acetic acid (C2H4O2), dissolved ammonium acetate (NH4C2H3O2) is formed in an exothermic reaction.
20. When acetylene gas (C2H2) is heated with oxygen in the atmosphere, an explosive reaction causes carbon dioxide and water vapor to be formed.

1. When zinc is exposed to a strong solution of sulfuric acid (H2SO4), a zinc sulfate (ZnSO4)solution and hydrogen gas (H2) are formed in a reaction that generates enough heat to burn one’s hand.