**SI WORKSHEET 10**

For the following reactions state the products of the reaction, if no reaction occurs, state no reaction

1. Li + NaOH 🡪 LiOH + Na
2. Ag2O + Fe 🡪 FeO + Ag
3. MgO + F2🡪 MgF2 + O2
4. NaCl + I2 🡪 NO REACTION
5. Au + H2O 🡪 NO REACTION
6. C2H6 + O2 🡪 CO2 + H2O Which element is the reducing agent and how many electrons does it lose? Carbon is the reducing agent because it is oxidized and it goes from a -3 to a +4 oxidation state which is a loss of 7 electrons
7. 2Li2O + 2F2 🡪 4LiF + O2 What it is oxidized? What is reduced? How many electrons are transferred in each case? Oxygen is oxidized, fluorine is reduced. Two Oxygens go from a -2🡪0 and four fluorines go from 0🡪-1 which add up to 4 electrons being transferred.
8. What is molarity? MOLES OF SOLUTE/ LITERS OF SOLUTION
9. 25g of NaCl is dissolved in 100 mL of water. What is the concentration for this solution? Moles of NaCl: $\frac{25 g NaCl}{}x\frac{1 mol NaCL}{58 g NaCl}=.431 mol$; Liters of water: $\frac{100ml}{}x\frac{1 L}{1000 ml}=.1L$🡪concentration = molarity = mol/L🡪.431/.1 = 4.31 M