Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Converting with Liters:**

1. 505 moles of H2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters
2. 832 grams of F2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters
3. 69 liters of N2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ moles
4. 185 grams of O2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters
5. 13.9 moles of Cl2= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters

**STP Stoichiometry:**

C3H6O + 4 O2🡪 3 CO2 + 3 H2O

1. I have 68 moles of oxygen gas. How much water vapor is produced, in liters?

2 AlBr3 + 3 Cl2 -> 2 AlCl3 + 3 Br2

1. If I mix85 moles of Cl2with aluminum bromide, how many liters of Br2are produced?

C6H12 + 9 O2🡪 6 CO2 + 6 H2O

1. If I react 0.775 moles of oxygen gas at STP, how many liters of carbon dioxide are produced?

2 C4H10 (g) + 13 O2 (g) --> 8 CO2 (g) + 10 H2O (g)

1. 9.45 moles of gaseous oxygencombines with excess C4H10 to form how many liters of carbon dioxide?

2H2 + 2 NO 🡪 2 H2O + N2

1. I have 128 moles of nitrogen monoxide. What volume ofnitrogen gas is produced?

SnO2 + 2 H2🡪Sn + 2 H2O

1. This reaction takes place at STP. How many liters of water vapor are produced if 54 liters of hydrogen gas are reacted?

2H2 + O2🡪2 H2O

1. How many liters of oxygen gas are needed to produce 55 liters of water vapor?