Name: Date: Period:

Practice: Gas Law Stoichiometry

1. Carbon monoxide reacts with nitrogen monoxide to produce nitrogen gas and carbon dioxide.

2 CO + 2 NO 🡪 N2 + 2 CO2

If 42.7 L CO is reacted completely with nitrogen monoxide at STP (0 ºC, 1 atm), what mass of nitrogen gas will be produced?

1. Ammonia is formed from the reaction of hydrogen and nitrogen.

3 H2 + N2 🡪 2 NH3

How many moles of NH3 will be produced from the reaction of 35 L of nitrogen at 25oC and 1520 mmHg?

1. When subjected to an electric current, water decomposes to hydrogen and oxygen gas.

2 H2O 🡪 2 H2 + O2

If 225.0 L of water are decomposed, how many grams of oxygen gas are produced at 65°C and 125.3 kPa?

1. How many moles of potassium chromate will be produced if 16 L of potassium nitrate reacts at 25.0°C and 3.25 atm?

2 AgNO3 + K2CrO4 🡪 Ag2CrO4 + 2 KNO3