CHEMISTRY MATTERS
gpb.org/chemistry-matters

Name:

Date:

1. Why is 22.4 liters called the molar volume of a gas?

_____

_____

_____

_____

Complete each of the following. Show your work and circle your final answer on all problems.

2. In the following equation, what volume of hydrogen will produce 0.25 mole of NH_3 at standard conditions of temperature and pressure?

$$N_2(g) + 3 H_2(g) \rightarrow 2 NH_3(g)$$
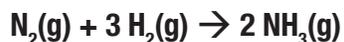
3. When magnesium burns in the presence of oxygen, magnesium oxide is formed. How many moles of magnesium were burned if at STP, the magnesium was ignited in a 0.50 L container of oxygen gas?

$$2 Mg (s) + O_2 (g) \rightarrow 2 MgO (s)$$