Gas Laws Practice

Text pages 357-358

12b. What is the volume, in liters, of 3**.**50 moles of F2 at STP?

13b. How many moles are contained in 5**.**60 L of Cl2 at STP?

14b. Find the mass in grams of 2**.**80 L of CO2 at STP.

15b. Find the volume, in Liters, of 3**.**50 g of CO.

26. Assume that 5**.**60 L of H2 at STP reacts with CuO according to the following equation (balance equation first):

 CuO(s) + H2 (g) → Cu(s) + H20 (g)

1. How many moles of H2 react?
2. How many moles of Cu are produced?
3. How many grams of Cu are produced?

35. Assume that 8**.**50 L of I2 are produced using the following reaction that takes place at STP (balance equation first).

KI(aq) + Cl2(g) → KCl(aq) + I2(g)

1. How many moles of I2 are produced?
2. How many moles of KI were used?
3. How many grams of KI were used?

38. Assume that 13**.**5 g of Al react with HCl according to the following equation at STP (balance equation first)

Al(s) + HCl → AlCl3(aq) + H2(g)

a. How many moles of Al react?

b. How many moles of H2 are produced?

c. How many liters of H2 at STP are produced?