

Topic 6: Moles and Stoichiometry

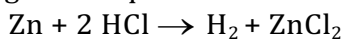
1. Vinegar is a dilute solution of acetic acid, CH_3COOH .

a. Calculate the molar mass of acetic acid.

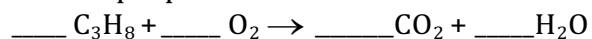
b. How many molecules of CH_3COOH are contained within 43.4 g of acetic acid?

c. How much would 0.450 moles of acetic acid weigh?

2. How many moles of hydrogen gas can be produced if 1.35 g of solid zinc reacts with excess hydrochloric acid according to the equation



3. The reaction for the combustion of propane is



a. If 20.0 g of C_3H_8 and 20.0 g of O_2 are reacted, how many moles of CO_2 can be produced?

4. If 20.0 g of C_3H_8 and 80.0 g of O_2 are reacted, how many grams of CO_2 can be produced