

Chem 11 Recap—Things you will need for Chem 122

Balancing and Types of reactions

- 1. Sb + $I_2 \rightarrow SbI_3$
- 2. Li + $H_2O \rightarrow LiOH + H_2$
- 3. $AlCl_3 \rightarrow Al + Cl_2$
- 4. $C_6H_{12} + O_2 \rightarrow CO_2 + H_2O$
- 5. $AlCl_3 + Na_2CO_3 \rightarrow Al_2(CO_3)_3 + NaCl$

Mole Calculations

Calculate the molar mass of:

- a) Carbon dioxide
- b) ammonium dichromate
- C) octane (C₈H₁₈)
- d) Convert 0.16 mol of sodium hydroxide to an amount in grams
- e) Convert 125mg of potassium permanganate into moles.

Predicting Products

State type of reaction, predict products and balance the following reactions.

a.

aluminum + oxygen →

b.

zinc + hydrochloric acid →

C. sulfuric acid + sodium hydroxide →

d_{HgO} →

 $\ell \cdot C_2H_6 + O_2 \rightarrow$