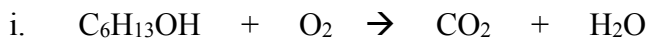
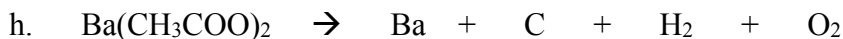
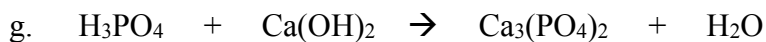
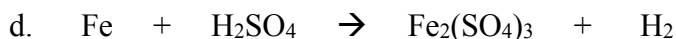
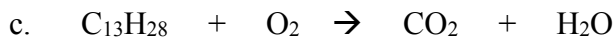
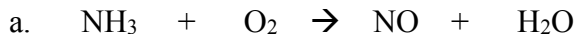


**Balancing Chemical Equations**

1. Balance the following equations



2. Write a balanced chemical equation for each of the following. Don't forget *diatomic* elements!

a. aluminum metal reacts with bromine to form aluminum bromide

b. hydrochloric acid neutralizes aluminum hydroxide to form water & aluminum chloride

c. hexane ( $\text{C}_6\text{H}_{14}$ ) burns in oxygen to produce carbon dioxide and water

d. carbon dioxide and water are reacted to produce glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) and oxygen in photosynthesis

*Chemistry 11*

- e. aluminum nitrate reacts with lithium sulphate to form aluminum sulphate and lithium nitrate
  
- f. ammonia ( $\text{NH}_3$ ) and phosphoric acid react to form ammonium phosphate
  
- g. nitrogen dioxide reacts with water to form nitric acid and nitrogen monoxide
  
- h. bromine reacts with sodium iodide to produce iodine and sodium bromide
  
- i. calcium reacts in water to produce hydrogen gas and calcium hydroxide
  
- j. butanol ( $\text{C}_4\text{H}_9\text{OH}$ ) burns in oxygen to produce carbon dioxide and water
  
- k. hydrogen peroxide ( $\text{H}_2\text{O}_2$ ) decomposes to form water and oxygen gas
  
- l. aluminum bromide reacts with ammonium dichromate to produce aluminum dichromate and ammonium bromide