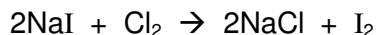
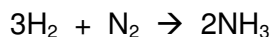


## Stoichiometry Practice Test

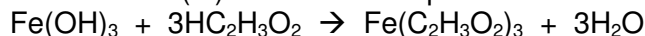
1. How many moles of iodine are produced when 7.00 moles of chlorine reacts with an excess of sodium iodide?



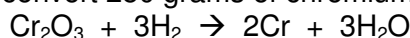
2. How many moles of hydrogen are required to react completely with 25.0 moles of nitrogen in the formation of ammonia?



3. Iron(III) hydroxide reacts with acetic acid to form iron(III) acetate and water. If 45.4 grams of water are formed, how many moles of iron(III) acetate will be produced?



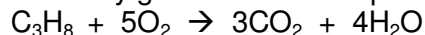
4. A chemist uses hot hydrogen gas to convert chromium(III) oxide to pure chromium. How many moles of hydrogen are needed to convert 250 grams of chromium(III) oxide?



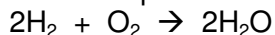
5. Ideal stoichiometric quantities of sodium and water are mixed, and 0.945 moles of hydrogen gas is recovered. How many grams of sodium hydroxide should be recovered?



6. Propane reacts with oxygen to form carbon dioxide and water. 11.0 moles of propane are mixed with oxygen and then ignited. How many grams of water vapor are produced?



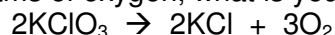
7. Hydrogen can react explosively with oxygen to form water. If 125 grams of  $\text{O}_2$  is combined with an excess of  $\text{H}_2$ , how many grams of water will be produced?



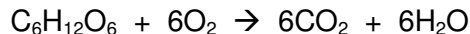
8. A 17.8 gram mass of magnesium is added to a solution of hydrochloric acid, HCl. What mass of magnesium chloride is formed?



9. When 35.9 grams of potassium chlorate is heated, it decomposes into potassium chloride and oxygen gas. If you collect 11.0 grams of oxygen, what is your percent yield?



10. If 87.2 grams of glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) are burned in 87.2 grams of oxygen, what is the limiting reactant, and how many grams of carbon dioxide will be formed?



11. When 45.5 mol of aluminum react with an excess of silver oxide in solution, how many grams of pure silver are formed?