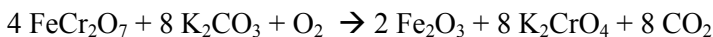
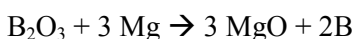


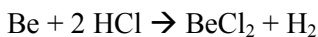
## STOICH AND MORE STOICH - Problems from Bauck and ChemTeam.com



- 1) How many L of  $\text{CO}_2$  gas at STP are made from completely reacting  $5.890 \times 10^{21}$  r.p. of  $\text{K}_2\text{CO}_3$ ?
- 2) How many r.p. of  $\text{Fe}_2\text{O}_3$  can be produced from using 23.00 g of oxygen gas?
- 3) 6.50 liters of  $\text{O}_2$  gas can produce how many grams of  $\text{CO}_2$  gas in the above reaction? Assume STP conditions.
- 4) 120.5 g of  $\text{K}_2\text{CrO}_4$  will react with how many L of  $\text{O}_2$  at STP?
- 5) How many r.p. of  $\text{Fe}_2\text{O}_3$  will be produced when 8.6 liters of  $\text{O}_2$  reacts?



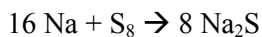
- 6) How much boron, in grams, can be obtained from 40.0 g of magnesium?
- 7)  $1.2 \times 10^{28}$  r.p. of  $\text{MgO}$  will be made from how many grams of  $\text{B}_2\text{O}_3$ ?
- 8) Calculate the number of moles of  $\text{Mg}$  needed to react completely with 2.33 mol  $\text{B}_2\text{O}_3$ .



- 9) My theoretical yield of beryllium chloride was 10.7 grams. If my actual yield was 4.5 grams, what was my percent yield?
- 10) I obtained 8.00 g of  $\text{BeCl}_2$  in the above reaction. I used 10.00 g  $\text{HCl}$ . What is my percent yield?

### GENERIC PERCENT YIELD

- 11) A group of students was supposed to produce 42.10 g of products in a reaction. The mass of their products was 35.00 g. What is their percent yield?



- 12) Calculate the number of moles of  $\text{Na}$  needed to react completely with 0.289 mol of  $\text{S}_8$
- 13) How many g of  $\text{S}_8$  are needed to produce  $3.2 \times 10^{20}$  r.p. of sodium sulfide?