BCI SCIENCE
SCH 4CI
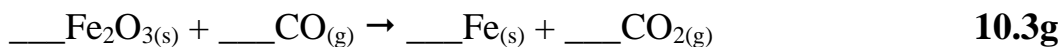
1. What mass of hydrogen, $H_{2(g)}$, is produced when 3.75 g of aluminum, $Al_{(s)}$, reacts with sulphuric acid, $H_2SO_{4(aq)}$?

   ___$Al_{(s)}$ + ___$H_2SO_{4(aq)}$ → ___$H_{2(g)}$ + ___$Al_2(SO_4)_{3(aq)}$ **0.421g**
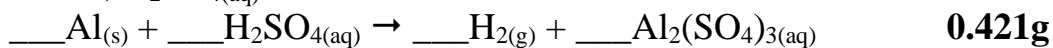
2. What mass of nitrogen dioxide, $NO_{2(g)}$, is produced from 2.84 g of nitrogen monoxide, $NO_{(g)}$?

   ___$NO_{(g)}$ + ___$O_{2(g)}$ → ___ $NO_{2(g)}$ **4.35g**
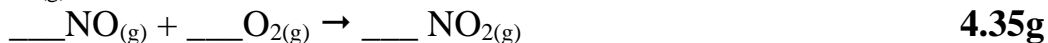
3. What mass of carbon dioxide, CO_2, is produced from 12.4 g of iron(III)oxide, $Fe_2O_{3(s)}$?

   ___$Fe_2O_{3(s)}$ + ___$CO_{(g)}$ → ___$Fe_{(s)}$ + ___$CO_{2(g)}$ **10.3g**

4. What mass of methane, $CH_{4(g)}$, is required if 4.08 g of hydrogen sulphide, $H_2S_{(g)}$?

   ___$CH_{4(g)}$ + ___$S_{8(s)}$ → ___$CS_{2(l)}$ + ___$H_2S_{(g)}$ **0.963g**