**The World of Stoichiometry! - ANSWERS**

Use the following unbalanced equation to answer the questions below:

**1** Ca(OH)2 + **2** HBr → **2** H2O + **1** CaBr2

1. How many grams of calcium bromide can I make from 53 grams of calcium hydroxide and an excess of hydrobromic acid?

**143.1 grams CaBr2**

* **MW Ca(OH)2 = 53 g/mol**
* **MW CaBr2 = 199.8 g/mol**

1. How many grams of HBr will be needed to make 118 grams of calcium bromide?

**95.6 grams HBr**

* **MW CaBr2 = 199.8 g/mol**
* **MW HBr = 80.9 g/mol**

1. If I do this reaction with 35 grams of calcium hydroxide and 45 grams of hydrobromic acid, how many grams of calcium bromide will I make? What is the limiting reagent?

**55.6 g CaBr2, Ca(OH)2 is the limiting reagent**

* **35 grams of calcium hydroxide makes 94.5 g HBr**