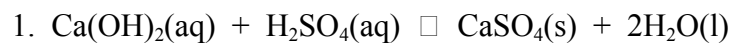


***Molarity and Stoichiometry Worksheet #1***

Using the definition of molarity, the given balanced equations, and stoichiometry, solve the following problems.



a. How many L of 0.500 M  $\text{Ca(OH)}_2(\text{aq})$  are needed in order to have 5.5 mol of  $\text{Ca(OH)}_2$ ?

b. Find the number of mol of  $\text{H}_2\text{SO}_4$  needed to react with 5.5 mol of  $\text{Ca(OH)}_2$ .

c. If the  $\text{H}_2\text{SO}_4(\text{aq})$  is 0.82 M, how many L of it are needed to react with 5.5 mol of  $\text{Ca(OH)}_2$ ?



a. How many g of  $\text{CaCO}_3(\text{s})$  are needed to make 1.2 L of 1.7 M  $\text{CaCO}_3(\text{aq})$  solution?

b. How many L of 3.00 M  $\text{HCl}(\text{aq})$  are needed to completely react with this amount of  $\text{CaCO}_3$ ?

c. How many mol of  $\text{H}_2\text{O}(\text{l})$  will be produced?