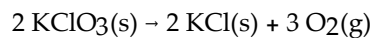


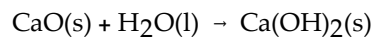
Name \_\_\_\_\_

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

- 1) If the percent yield for the following reaction is 65.0%, how many grams of  $\text{KClO}_3$  are needed to produce 32.0 g of  $\text{O}_2$ ? 1) \_\_\_\_\_



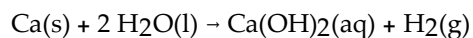
- 2) Calcium oxide reacts with water in a combination reaction to produce calcium hydroxide: 2) \_\_\_\_\_



A 4.50-g sample of  $\text{CaO}$  is reacted with 4.34 g of  $\text{H}_2\text{O}$ . How many grams of water remain after the reaction is complete?

- 3) When 11.0 g of calcium metal is reacted with water, 5.00 g of calcium hydroxide is produced. Using the following balanced equation, calculate the percent yield for the reaction?

3) \_\_\_\_\_



- 4) A student prepared a stock solution by dissolving 10.0 g of KOH in enough water to make 150. mL of solution. She then took 15.0 mL of the stock solution and diluted it with enough water to make 65.0 mL of a final solution. What is the concentration of KOH for the final solution?

4) \_\_\_\_\_

- 5) How would the concentration change if a 1.0 L flask of 1.0 M NaCl were left uncapped on a laboratory bench for several days. Why?

5) \_\_\_\_\_

## Answer Key

Testname: QUIZ 4.2-4.4 (A)

- 1) 126 g
- 2) 2.90
- 3) 24.6%
- 4) 0.274 M
- 5) The concentration would slowly increase as water from the solution evaporated. This is because the amount of NaCl in the flask would remain constant while the amount of water decreases.