

Name _____

Period _____

Section 16.2 Guided Reading (Part 3) – Percent Solutions: Use textbook page 529-531 to answer the following.

1. What is **percent by volume**?

2. What state of matter must both solute and solvent be in order to apply percent by volume?

3. What is the formula for **percent by volume**?

4. Read Sample Problem 16.5 on page 530, then answer the following:
 - a. If 10.0 mL of acetone is diluted with water to a total solution volume of 200.0 mL, what is the percent by volume of acetone in the solution?

 - b. A bottle of the antiseptic hydrogen peroxide (H_2O_2) is labeled 3.0% (v/v). How many mL of H_2O_2 are in a 400.0 mL bottle of this solution?

5. What is **percent by mass**?

6. What is the formula for **percent by mass**?

7. Read Sample Problem 16.6 on page 531, then answer the following:
 - a. Calculate the grams of solute required to make 250.0 g of 0.10% MgSO_4 (m/m).

 - b. What mass of K_2SO_4 would you need to prepare 1500. G of 5.0% K_2SO_4 (m/m) solution?