Concentration Practice Worksheet

1) What is the % by massif 8.0 g copper is added to enough zinc to produce 100 g of an alloy? **8%**
2) Brass is a copper-zinc alloy. If the concentration of zinc is relatively low, the brass has a golden color and is often used for inexpensive jewellery. If a 35.0 g pendant contains 1.7 g of zinc, what is the percentage by mass of zinc in brass? **4.9%**
3) What is the % by mass of copper in an alloy when 10 kg of Cu is mixed with 250 kg of Zn? **3.8%**
4) You have 200g of a solution that contains 30g of hydrochloric acid (HCl), what percentage of your solution is made up of hydrochloric acid (by mass)? **15%**
5) If I make a solution by adding water to 75 mL of ethanol until the total volume of the solution is 375mL, what's the percent by volume of ethanol in the solution? **20%**
6) If I add 1.65 L of water to 112 grams of sodium acetate, what is the percent by mass of sodium acetate in this solution? **6.36%**
7) Solder flux, available at hardwood stores, contains 16 g of zinc chloride in 50g of solution. What is the percentage mass of zinc chloride in the solution? **32%**
8) If 250mL of sodium chloride is present in 3 L of solution, what is the percentage by volume of sodium chloride? **8.5%**
9) Suppose you have 70g of sodium chloride salt (NaCl) in 250mL of water. Express this as a % by mass solution. **22%**

9) Suppose you have 70g of sodium chloride salt (NaCl) in 250mL of water. Express this as a % by mass solution. **22%**