

**Main Ideas, Key Points,  
Questions:**

*After watching the video segment, write down key points, main ideas and big questions.*

**Objective(s):**

- *To learn how to calculate the concentration of a solution using mass percent and molarity.*

**Notes:**

*During the video segment, use words, phrases or drawings to take notes.*

**Summary:**

*After watching the video segment, write at least three sentences explaining what you learned.  
You can ask yourself: "If I was going to explain this to someone else, what would I say?"*

**After watching the video and performing any associated labs and/or experiments, you should be able to answer the following:**

*Mass percent is calculated by taking the mass of SOLUTE in a solution and dividing it by the total mass of the SOLUTION. This figure is then multiplied by 100. Remember that the mass of a solution is the mass of the solute plus the mass of the solvent.*

1. Calculate the mass percent of salt in salt water if 1 gram of salt is dissolved into 99 grams of water. Show the steps in your calculation.

2. What lab equipment is usually used to measure mass percent?

*Molarity is calculated by dividing the moles of a solute in the numerator by the volume of the solution in liters in the denominator.*

3. Write your procedure for producing 1 liter of a 1 Molar solution of  $\text{Cu}(\text{NO}_3)_2$  and for producing 0.5 liters of a 1 Molar solution of  $\text{Cu}(\text{NO}_3)_2$ .

4. What lab equipment is usually used to measure molarity of a solution?

***You should write these procedures down before continuing to the Unit 7D video.***