

# Worksheet #8

Name: \_\_\_\_\_

Period: \_\_\_\_\_

Seat#: \_\_\_\_\_

- BRING YOUR CHROMEBOOK - Go to the following website and click begin: <http://tinyurl.com/wp8forj>
- Show all work for the problems in the Virtual Lab.

Question #1

Question #2

Question #3

Question #4

Question #5

**Dougherty Valley HS Chemistry**  
**Solutions – Making Solutions Virtual Activity**

<p><b>1)</b> What unit do we usually use when calculating concentration in chemistry class? What is the equation we use to calculate this unit?</p>	<p><b>2)</b> What type of flask do you want to use when making up accurate solutions?</p>	<p><b>3)</b> Why wouldn't you want to use a beaker when making up accurate solutions?</p>
<p><b>4)</b> List the steps used to make the solutions in this virtual lab. The list was started for you:</p> <ul style="list-style-type: none"><li>• <i>Volume - Pick the right size volumetric flask</i></li><li>• <i>Mass - Weigh the correct amount of solute</i></li><li>• <i>Dissolve</i></li></ul> <ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li><li>4.</li><li>5.</li></ol>	<p><b>5)</b> Why do you invert the flask a few times after filling up to the line?</p>	
<p><b>6)</b> If a student filled their volumetric flask up to the line before adding the solute to the flask, would the final solution have a concentration that is too high, or too low? Why?</p>	<p><b>7)</b> If a student made a solution by adding the solute, then filling the volumetric flask up to the line, but they filled it so the <u>top</u> of the meniscus touched the line, not the bottom of the meniscus, would the final solution have a [ ] that is too high, or too low? Why</p>	
<p><b>8)</b> What does the term "like dissolves like" mean? How does that relate to making a solution?</p>	<p><b>9)</b> How many grams of potassium chlorate do you need to make 500 mL of a 0.35 M solution? Show all work and units!</p>	
<p><b>10)</b> A student tries to make a solution in a volumetric flask, they put in the correct amounts of solute and solvent to make the desired concentration but they notice that some of the solute is not dissolving, it is just sitting at the bottom of the flask. What are three things the student could do in order to get it all to dissolve?</p> <ol style="list-style-type: none"><li>1.</li><li>2.</li><li>3.</li></ol>		