

Name \_\_\_\_\_ Lab Partner \_\_\_\_\_  
TA Name \_\_\_\_\_ Section \_\_\_\_\_ Date \_\_\_\_\_

## Solutions and Spectroscopy PreLab Worksheet

1. Which hazards are associated with copper(II) sulfate?

- flammable
- carcinogenic
- corrosive
- toxic
- irritant

2. What action should you take if you spill these materials on yourself?

3. Select the correct answer that completes the sentence below:

Waste solutions containing copper are to be...

- flushed down the sink.
- disposed of in the bottle for waste copper ion once the work is complete.
- ignored. No waste will be generated in this experiment.
- returned to the bottle containing 0.5 M copper sulfate solution.
- dumped in a beaker labeled "waste copper" on one's bench during the experiment.

4. Volumes obtained with volumetric flasks, pipets, and burets are recorded to the nearest \_\_\_\_\_ mL.

- 1
- 0.1

- 0.01
- 0.001

5. Absorbances should be recorded to which place value?

- 1
- 0.1
- 0.01
- 0.001

6. The balances in the lab measure to which place value?

- 1
- 0.1
- 0.01
- 0.001
- 0.0001

7. What formula is used to determine the concentration of a solution when it is diluted?

8. Define the terms in the formula:  $A = \epsilon l c$ . What are the units of each term?

- a)  $A =$
- b)  $\epsilon =$
- c)  $l =$
- d)  $c =$

9. Please describe two ways to prepare a solution of known concentration.