

## CHEMISTRY LAB: WORKING WITH LIQUIDS

### What to turn in – Chem I Honors:

Hypothesis, Data table, Calculations (N/A), Error Analysis, Conclusion, Questions #1-14

For a one-day lab, there is no skills checklist.

For a two-day lab, the group skills checklist should be completed with the teacher by the end of day 2.

### What to turn in – Chem I: Data table, Questions #1-14

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### OBJECTIVES

- To practice measuring liquids with various types of glassware.
- To practice filtration techniques.
- To practice separation of a mixture.

### PROCEDURE

- 1) Read all pages before lab.
- 2) Identify all pieces of equipment at your station, including:

|                    |                      |
|--------------------|----------------------|
| beaker             | graduated cylinder   |
| buret              | pipet                |
| double buret clamp | ring clamp           |
| evaporating dish   | ring stand           |
| funnel             | suction pump or bulb |
- 3) Follow all steps in PART 5: MEASURING LIQUIDS and PART 6: FILTRATION (the four page supplement). We are using hotplates instead of burners.
- 4) Complete all relevant parts of the rubric on your own paper.

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**DATA TABLE**

**DATE** \_\_\_\_\_ **LAB STATION #** \_\_\_\_\_

| <u>DESCRIPTION</u> | <u>HOW TO USE</u> |
|--------------------|-------------------|
| beaker             |                   |
| buret              |                   |
| evaporating dish   |                   |
| funnel             |                   |
| graduated cylinder |                   |
| pipet              |                   |

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**MORE →**

## QUESTIONS

Define the following terms in your own words:

- 1) decant
  - 2) filtrate
  - 3) filtration
  - 4) insoluble
  - 5) meniscus
  - 6) precipitate
  - 7) solubility
  - 8) supernatant
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- 9) Why must you never pipet by mouth?
  - 10) Describe how liquids are poured into a buret.
  - 11) Describe how to fold filter paper properly in this lab.
  - 12) "A filter should not be wet with water when the liquid to be filtered does not mix with water." Why?
  - 13) How can a soluble salt be recovered from a filtrate?
  - 14) What property of salt prevents it from being separated from water by filtration?