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| **Chemistry 11**  **Lab 15C: Preparation of a Soap** | **Name: Date: Block:** |

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| **For Students:**  Lab performed:  Lab due: | **For Teacher:**  Pre-lab completion:  Yes  No  Lab Submitted:  On Time  Late |

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| **Pre-Lab** |

1. What are the objectives for this lab?
2. What is saponification?
3. What two chemicals are reacting together in Part 1 of this lab?
4. What other chemical will be added to speed up the reaction?
5. In your own words, describe what you will do during Part 1 of this lab.
6. In your own words, describe what you will do during Part 2 of this lab.
7. What are 3 safety concerns in this lab? For each safety concern, describe a way that you will stay safe during this lab.
8. How will you dispose of your lab materials?

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| **Observations** |

**Part I: Saponification**

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| **Time** | **Chemical(s) added** | **Observations** |
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**Part II: Laboratory Tests**

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| **Test** | **Lard** | **Lab Soap** | **Commercial Soap** |
| Apparent solubility in water | Low / High  (circle one) | Low / High  (circle one) | Low / High  (circle one) |
| Height of suds (cm) |  |  |  |
| Neutral litmus paper test | Acid / Neutral / Base  (circle one) | Acid / Neutral / Base  (circle one) | Acid / Neutral / Base  (circle one) |

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| **Lab Report** |

*Attached to this sheet of paper, please include answers to the following questions:*

1. Describe the soap you prepared.
2. The soap you prepared is likely to be harsh on the skin. Why?
3. In Part 2, what properties of your soap were similar to those of a commercially prepared soap?
4. What are 3 possible sources of error in this lab? If you list human error, please explain what you will do to reduce/eliminate that problem in the next lab.
5. Did you meet the objectives of this lab? Why or why not?

This lab report is due on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_