Name: _____   Section: _____

Data and Calculations for Experiment 19

A. pH

Solution   pH

   1. Prepared Soap   _____

   2. Commercial Soap   _____

   3. Commercial Detergent   _____

   4. D.I. Water   _____

B. Emulsifying Properties

Solution   Initial Observations   Observations After 1 Minute

   1. Prepared Soap

   2. Commercial Soap

   3. Commercial Detergent

   4. D.I. Water

Name: _____   Section: _____

C. Effect of Hard Water

      <u>Solution</u>   <u>Initial Observations</u>   <u>Observations After 5 Minutes</u>

    1. Prepared Soap

    2. Commercial Soap

    3. Commercial Detergent

D. Describe the washing properties of your soap in terms of lathering ability and feel.

<u>Questions</u>

1. Which solution was most basic according to pH measurements?

2. Which solution(s) show(s) the best ability to emulsify oil?

3. Explain your observations for the addition of hard water. What is happening in each test tube and why?