

Soap-Making Kit Worksheet

Data Tables

Observations of Soap Sample

	Commercial Soap	Homemade Soap
Smell		
Color		
Texture		
Other Observations		

Test 1. Determination of pH

	Commercial Soap	Homemade Soap
pH		

Test 2. Lathering Ability

	Commercial Soap	Homemade Soap
Observations		
Height of Lather (cm)		

Test 3. Behavior of Soap in "Hard" Water

	Commercial Soap	Homemade Soap
Observations in "Hard" Water		

Test 4. Ability to Cut through Grease

	Commercial Soap	Homemade Soap
Observations of Rinsing Oil with Water Only		
Observations of Rinsing Oil with Soap		

Questions

1. Based on your data, does the homemade soap behave like the commercial soap sample? How is it similar? How is it different?
2. Compare your homemade soap to a soap that was made from a different oil by a different group. How do these soaps compare?
3. Why do soaps made from different oils have different properties, even if the properties are only slightly different?
4. Generate a list of properties that are important when buying a commercial soap product. (*Hint:* Think of what brands you buy and why you buy them.)
5. Do you think your “homemade” soap would sell as is? Why or why not?
6. If your goal (as a soap chemist) is to make a soap that is marketable and appealing to the general public, what changes would you make to your “homemade” soap?

Extension

7. Design a name and a slogan for your new soap. Draw a logo (optional) and write a commercial to market your soap.