

Soap Lab Quiz

Name: _____

1. Your soap should not be used on the skin because it may contain some unreacted alkali (NaOH). How could you test for the presence of unreacted alkali? (1 mark)

2. To what class of compounds do fats belong? (1 mark)

3. To what class of compounds do soaps belong? (1 mark)

4. What substances might have been used instead of the sodium hydroxide? (1 mark)

5. Why was the saturated sodium chloride solution added? (1 mark)

6. In step 7 a white precipitate (scum) appear in the second test tube with tap water. Give a possible chemical formula for soap scum using the following soap $\text{C}_5\text{H}_{11}\text{COONa}$. (2 marks)

7. The formula for the hydrocarbon radical (R) in the fat glycerol stearate is $\text{C}_{17}\text{H}_{35}$ (Remember that there is a carboxylic acid group to consider). The reaction of glycerol stearate with sodium hydroxide to produce the soap sodium stearate. What is the mass of 2.2 moles of glycerol stearate? (2 marks)
