

Name \_\_\_\_\_

## Chemical Substances Survey (Set D)

1. There are white, crystalline granules on the table in front of you. How would you be able to determine if this is sucrose (also known as table sugar)? Please explain your response.

2. Let's assume the white granules are sucrose (table sugar). You take the sucrose and heat it over a flame until it turns from a solid into a liquid. The liquid now has a brown, caramel color. Is the liquid still sucrose, or is it a different substance? Please select your choice below.

\_\_\_\_\_ Still Sucrose

\_\_\_\_\_ Different Substance

Please explain your choice. How do you know whether it is still sucrose or a different substance? What evidence do you have?

Is there any additional information would you like to know to help you make a decision? If so, what information? How would this information help you determine if the brown liquid is sucrose or not?

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3. You have a cup of an unidentified liquid in front of you. How would you determine whether or not this is ethanol?



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4. You heat a pot of ethanol and it begins to boil. What is in the bubbles that are rising to the surface?

Please justify your response. How do you know what is in the bubbles?

Is there any additional information you would like to know in order to determine what is inside the bubbles? If so, what information? How would this information help you determine what is inside the bubbles?