**Evaluating Reasoning as an Individual**

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| **Question: Are Item #1 and Item #2 the same substance or different substances?**  |
| **Given Scientific Reasoning****Directions:** Evaluate each reasoning statement given below by answering yes or no for each question on this rubric. After evaluating each, answer the questions at the bottom of the page.  | Includes appropriate science vocabulary?(Yes or No) | Explains the science facts (big ideas) behind the Evidence and Claim?(Yes or No) | Connects Claim and Evidence and/oranswers why or how the evidence supports the claim (Yes or No) | Reasoning Total Score(Add # yes ) |
| (a) Color, hardness, solubility, melting point and density are all properties of matter. Because the two substances have different properties, I know they are different. |  |  |  |  |
| (b) Because of the data I collected, I know that #1 and #2 are not the same substance |  |  |  |  |
| (c) In science I have learned that properties are characteristics of a substance that are independent of the amount of the sample. The properties are solubility, density and melting.  |  |  |  |  |
| (d) In science we know that all matter is defined by its properties (density, solubility, melting/boiling points) and that different matter has different properties. As a result, if two substances are shown to have different properties, then the two substances must be different.  |  |  |  |  |

**Answer the following questions:**

1. Which scientific reasoning statement is the strongest: (circle one) a, b, c, d

Why?

1. Which scientific reasoning statement is the weakest: (circle one) a, b, c, d

 Why?