Name	Teacher	Period
		Date

Evaluating Claims as an Individual

Example: Below is a description of a scientific investigation and the data collected by students in a science classroom.

Investigation: School students collected data on two unknown items to find out if they were different substances. The students ran an investigation and collected data on color, melting point, solubility, density and hardness for both items. The data collected is shown in table below.

Student Data Collection for Item #1 and Item #2 Class Investigation					
	Color (Average for 5 samples)	Hardness (Average for 5 samples)	Solubility Yes/No (Average for 5 samples)	Melting Point (°C) (Average for 5 samples)	Density (g/mL) (Average for 5 samples)
Substance #1	Off White or Yellow	Soft-Squishy	Water (No); Oil (Yes)	37 (°C)	0.92 (g/mL)
Substance #2	Milk White	Hard	Water (Yes); Oil (No)	100 (°C)	0.74 (g/mL)

Question: Are Item #1 and Item #2 the same substance or different substances?				
Claim Statements Given	**Does Claim answer the question ASKED?** Yes or No	**Does Claim explain the cause and effect "….because….."** Yes or No	**Is the Claim a complete sentence?** Yes or No	**Claim Total Score** (Count # yes)
(a) The two substances are both stuff, but they are different types.				
(b) Yes, they are different.				
(c) Substance #1 and #2 are different because one looks like something you eat and the other looks like something you wash with.				
(d) Substance #1 and #2 are different substances because they have different properties.				

(McNeill & Krajceik, 2012)

Answer the following questions:
1. Which Claim is the strongest claim: (circle one) a, b, c, d   Why?
2. Which Claim is the weakest claim: (circle one)   a, b, c, d   Why?