

Lab 2; crushing: The hypothesis was correct and incorrect. Salt and UK1 were crushed harder and that is in sync with the hypothesis. However, UK2 was extremely hard to crush and skewed from the hypothesis. Key:  $\otimes$  = Hard,  $\oplus$  = medium hard,  $\&$  = medium,  $\circ$  = medium soft, and  $\delta$  = soft. Salt was  $\otimes$ , sugar was  $\delta$ , UK1 was  $\oplus$ , and UK2 was  $\otimes$ . Even though UK2 is covalent and supposed to be very easy to crush, it was the hardest out of all. It probably did this because even though it was hard to crush it was brittle, bringing it back to "being" covalent.

Lab 3; conductance: The hypothesis was incorrect. The hypothesis stated that electricity in  $H_2O$  flows better with ionic molecules. Electricity flows better in covalent molecules. For ionic (salt and UK1) the results were; salt = steady/bright and UK1 = flickering/very light. For Covalent (sugar and UK2) the results were; sugar = very bright and UK2 = light. It probably did this because the molecules aren't as closely bonded together.

Some errors could have been not measuring exact enough, not holding things in the correct position. Similar labs could be trying it with different conductors/meters/crushers.