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2nd Period
Density lab #2.2

Research question-How can we experimentally determine the difference between ionic and covalent compounds?

Introduction-Ionic bond occurs to the permanent transfer of one or more electrons from one atom to another while a covalent bond occurs due to sharing of electrons between two atoms. Ionic compounds are solid at room temperature, while covalent compounds are sometimes liquid or sometimes gaseous at room temp.

Procedures-

First, we poured approximately 150 ml of H₂O into each beaker. After that we mixed 1 spatula of baking soda into one beaker and used the other spatula and 1 spatula of sugar into the other beaker, mixing both of them up. Next we prepared the battery with lead attachment and inserted it into the cup of sugar and observed it.

Data/Observation;

Nothing happened with the sugar but when we put it in the baking soda beaker, it started to fizz/bubble.

Conclusion:

The red wire on the lead is discolored and the silver wire (copper) turned into a bluish green. The ionic compound in this situation would be the baking soda. Ionic compounds conduct electricity, and covalent doesn't.