

Ionic and Covalent Compound Lab

Research Questions: What is the difference between Ionic and Covalent compounds experimentally?
How can we break the bonds of compounds?

Introduction: A covalent compound usually has a low melting and low boiling point. They also have a definite shape.
Ionic bonds are solid at room temperature. Ionic bonding only forms between metals and nonmetals.

Procedure: First, pour approximately 150 milliliters of water into each beaker.
Second, put one rounded spatula full of sugar into one beaker of water and mix thoroughly.
Third, put one rounded spatula full of baking soda into the other beaker or water and mix thoroughly. (Use a different spatula)
Fourth, you will prepare your battery with leads.
Fifth, stick the battery with attached leads into sugar water first.
Sixth, stick the battery with the leads into the baking soda solution next.

Observation: Nothing happened in the sugar. In the baking soda, it started bubbling at the ends of the leads.

Conclusion: Ionic compounds conduct electricity. Covalent compounds don't. Ionic compounds have metals in them and metals conduct electricity. The water started to turn blue in the baking soda.