How Does Matter Change? Part 1

Objective: These activities will allow you to observe ways that matter can change.

Materials:

spoonful of sugar 200 mL of water beaker 100 mL graduated cylinder glass stirring rod

Procedure:

- 1. Use a balance to measure a spoonful of sugar. Make sure to place a slip of paper on the balance first, zero it and then add the sugar. Record the mass in the data section.
- 2. Use the graduated cylinder to measure 200 mL of water. Pour the water into the beaker. Use a balance to measure the mass of the beaker and the water. **Record the mass in the data section.**
- 3. Add the sugar to the beaker of water and stir with the stirring rod until it is dissolved.
- 4. What do you think the mass of the new mixture and the beaker is? Write your prediction in the data section.
- 5. Use a balance to measure the mass of the mixture and the beaker. Record the mass in the data section.
- 6. Describe the appearance of the mixture in the data section.

Data:

Organize your data so I can understand it.

Analyze and Conclude:

- 1. Was your prediction close to the actual mass of the mixture and the beaker? Why or why not?
- 2. Did the identity of the sugar change when you added it to the water? (Was it still sugar?)
- 3. How did the sugar change when you added it to the water?
- 4. Can the sugar be changed back to its original form? If so, how?