**Calorimetry Practice Problems Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. How much energy is needed to change the temperature of 50.0 g of water by 15.0⁰C?

2. 600.0mL of water in an electric kettle is heated from 20.0⁰C to 85.0⁰C to make a cup of tea. How much thermal energy is absorbed by the water?

3. 50.00mL of aqueous copper (II) sulfate reacts with 50.00mL of aqueous sodium hydroxide in a calorimeter. The initial temperature of both solutions is 21.40⁰C and the highest temperature reached in the calorimeter is 24.60⁰C. Determine the quantity of thermal energy transferred by the reaction to the water, and state whether the reaction was endothermic or exothermic.

