

Coffee Cup Calorimeter

Chemicals and Equipment Needed

- d-H₂O
- CaCl₂ — **E4**
- Styrofoam cup — **P4**
- Dewar lid with small hole — **A3**
- Thermometer (analog) — **U1**
- Short ring stand and buret clamp — **J**

Preparation

- Add ~50 mL d-H₂O to the coffee cup. Measure out ~10 g CaCl₂ into a weigh boat, wrap with aluminum foil and label.
- Set the coffee cup on the base of the ringstand. Thread the dewar lid onto the thermometer, and use the buret clamp to secure the thermometer so that the bulb is submerged in the water.

Presentation

- Read the temperature of the water, or have a student read it. Add the CaCl₂ to the cup and use the thermometer to stir it. Re-read the temperature.

Clean-Up

- Solution can go down the drain.