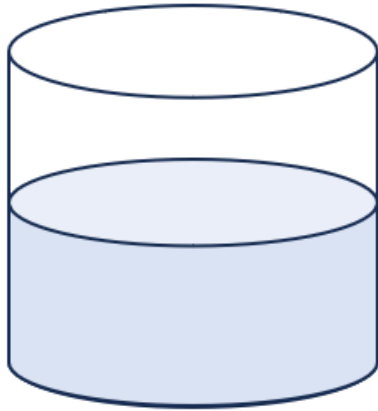


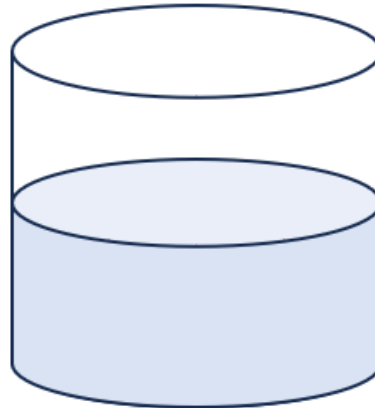
## Thermal Equilibrium

### Activity 1: Planning the Investigation

Students were given the task of comparing the heat lost by one object to heat gained by another when they are in contact with each other. Students decide to do an investigation by mixing two beakers of different temperature water and let the mixture come to an equilibrium temperature.



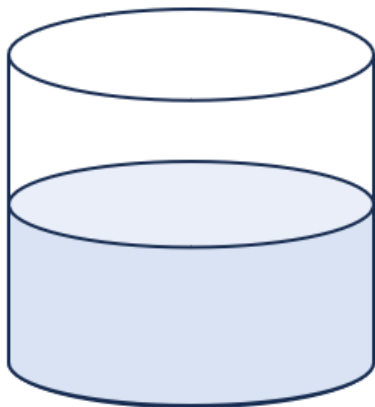
**Sample A**



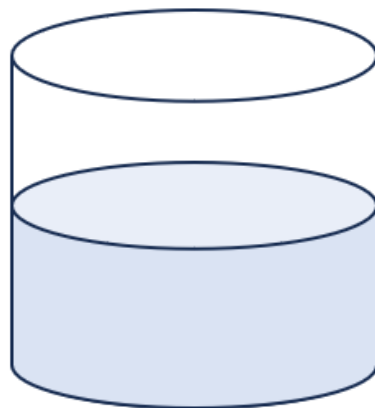
**Sample B**

### Activity 2: Conducting the Investigation

Students conduct an investigation in which they mixed two beakers of different temperature water and let the mixture come to an equilibrium temperature.



**Sample A**

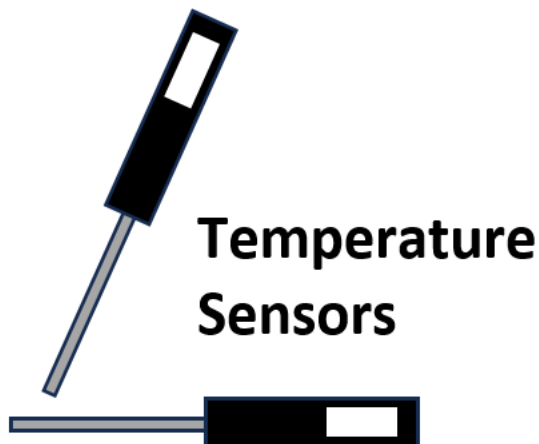
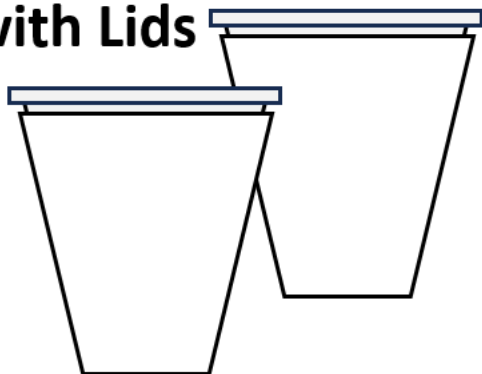


**Sample B**

### Activity 3: Analyzing Data

Students decided to repeat their thermal equilibrium experiment making some modifications. Rather than use beakers, they decided to use insulated cups with lids. They also decided to use temperature sensors that record the temperature of the sample every second and send this data to a computer.

### Styrofoam Cups with Lids



### Activity 5: Next Steps

The teacher told students that they could design their own experiment to investigate some aspects of thermal equilibrium. Each group needed to come up with either a testable question or a problem that they were trying to solve.