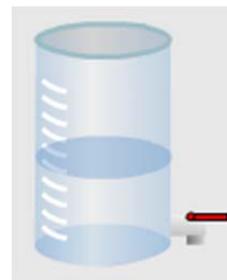
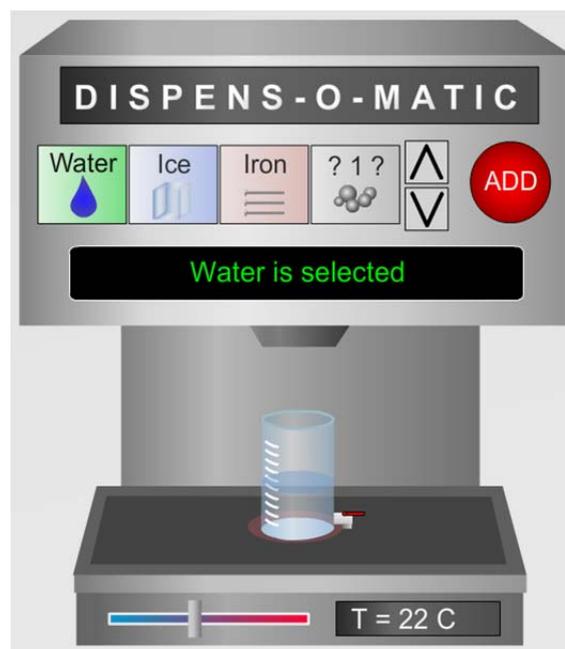


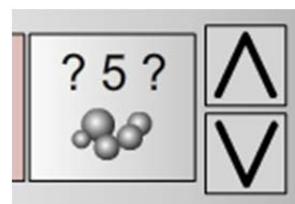
**The beaker.** The beaker is found in the center of the screen and is the smaller of the two containers. It is used for transferring materials from the Dispens-O-Matic to the calorimeter. To move the beaker, simply click, hold, and drag it around the screen. If dropped under the spout on the Dispens-O-Matic, it will automatically snap into place. After materials are added, simply drag the beaker over the calorimeter and release, and they will be transferred. Similarly, the beaker can be dropped over the sink and the contents will be whisked away down the drain. The contents of the beaker at any given time can be found in the Beaker Info reader in the top right of the screen. **Note: Only two transfers from beaker to calorimeter are allowed per investigation, and this can be reset when the calorimeter is emptied in the sink.**



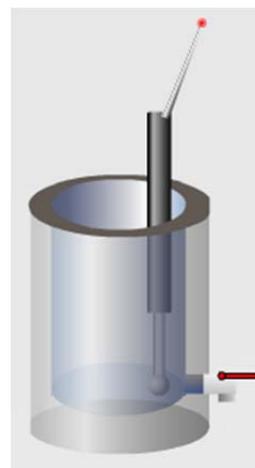
**The Dispens-O-Matic.** The largest item on the screen, the Dispens-O-Matic is also the one of the most important parts of the lab. To select the active material, just click on the corresponding button. To change the temperature of the material, click and drag the slider on the bottom of the machine. Note: You can't make water less than 0 degrees just like you can't make ice more than 0 degrees. When the beaker is in place under the spout, contents can be added by pressing and holding the red "Add" button. The longer the button is held, the more materials are added. **Only one material can be added to the beaker at once.**



**Mystery Elements.** One of the options on the Dispens-O-Matic is a Mystery material. Click the arrows to scroll through 6 possible options then hit the Add button to add it to the beaker.



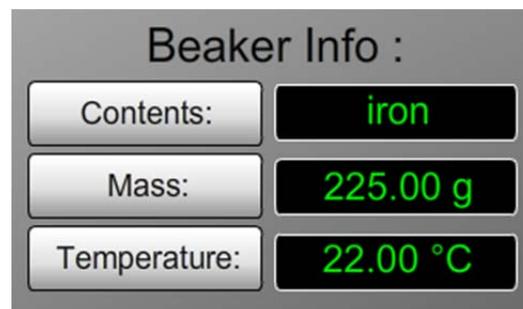
**The calorimeter.** The calorimeter is where all of the magic happens. That being said, not much is done with it by the student in this lab. Materials are added to it with the beaker, and the temperature of its contents is displayed on the DigiTherm. The only active process to carry out is to dump its contents at the end of an investigation down the drain by dragging and dropping it over the sink. Try not to lose it. That wireless transmitter is quite expensive.



**The DigiTherm.** In the center of the screen, along the bottom, is the DigiTherm digital wireless thermometer. This is where the temperature of the contents of the calorimeter is displayed. It's very accurate, but it does take some time to reach the correct temperature.



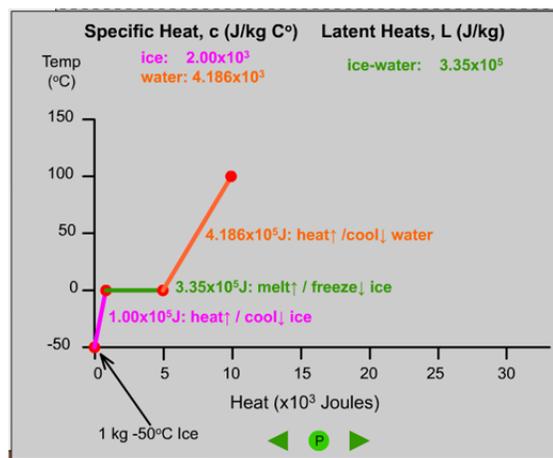
**Beaker Info.** The top right hand corner of the screen displays the Beaker Info. This shows the content type, mass, and temperature of whatever is in the beaker at that moment. When using the Dispens-O-Matic, this is a good place to look to figure out how much of any substance is being added to the beaker.



**The Data Table.** On the top of the screen above the Beaker Info there is a data table that records the info for the materials that are in the Calorimeter.



**The Graph.** As a bonus, clicking on the 4x3 graph icon to the right of the DigiTherm brings up a graph that will illustrate some important stuff about what is going on with calorimetry. Once opened, click the green arrows to step through the process, or keep hitting the green play (P) button to advance one step at a time. To close the graph, just click the 4x3 graph again.



**Snapshot.** As with most of our labs, you can take a screenshot of any portion of the screen by clicking on the Snapshot icon and then clicking and dragging a box around what you want to capture. A dialog will then appear asking you what you want to call the image and where you want to save it. In most labs, a timestamp will be added to the image to keep track of it better.

