Hello

- Get goggles, beaker, temperature probe, and a laptop.
- Please take a lab sheet from the front of the room.
- Begin reading the description over.

Homework Review

- I will put my solutions on the board.
- They are numbered differently from the form online.

Calorimetry Lab

- You will be determining the heat of reaction when you introduce about 0.5g of calcium metal to 100 ml of 0.5M hydrochloric acid.
- Please hold off on setting up the computers.

Safety First

- Goggles must be work at all times.
- Hydrochloric acid is corrosive. If you get it on you, wash your hands with soap immediately.
- Watch for any other spills.
- All stools and bags under your desk.

Procedure

- Mass the dry calorimeter. Record.
- Get 95 to 105ml of 0.5M HCl from under the fume hood.
- Mass filled calorimeter. Record.
- Weigh out about the specified mass of calcium metal. Record the exact value.
- Get initial temp of acid. Record.

Procedure

- Add the calcium to the calorimeter.
- Be sure not to let any acid splash out.
- Cover with the lid and go back to your station.
- Place filled calorimeter in the beaker for stability.

Procedure

- The reaction take a moment to start.
- Once it does, you will see the temperature begin to change.
- Stir solution **gently** with the temp probe every 20 to 30 seconds.
- Once the temperature plateaus, record the final temperature.

Clean Up

- Remove sponges from the sink.
- With the water running, pour your solution down the drain.
- Rinse the calorimeter and temp probe with ample water.
- Dry all items and return them to where you got them.

Data Analysis

- Get a sheathed periodic table.
- Begin writing any calculations and/or observations that you think will help you when we begin the quiz.
- We need to allow at least 30 min for the quiz.

Quiz

- You may use your data sheet, periodic table, calculator and a pencil.
- When you are finished, place the quiz and data sheet in the folder.
- Make sure that your name is on both pieces of paper.