

Name _____

Class _____ Date _____

SPECIFIC HEAT CAPACITY LAB

In this lab you will use what you know of specific heat capacity, and heat transfer, to try and estimate the temperature of a Bunsen burner flame. Today you will design the proposed method, and hand it in. When it is approved you will perform the experiment in the next lab lesson.

Equipment you may use:

Bunsen burner; tripod; gauze; copper mass; iron mass; aluminium mass; electronic balance; water; calorimeter or insulated cup; thermometer; matches; copper wire; tongs; beaker; test tube; stirring rod.

If there is equipment you need which is not listed here, by all means request it. This is meant to give you some ideas, but not be prescriptive.

Your **proposal** should contain the following:

Aim

Hypothesis. This should be quantitative, with the reasons you made the prediction.

Variables. Both variables to be controlled and the experimental variables.

Equipment.

Method.

Data that will be collected. Either set out the table or tables that will be needed, or in some other way explain what will be recorded.

The assessment of these aspects will be covered under Planning A and Planning B of the IB requirements.

When you have completed the laboratory work, you will then write a formal report. As you will probably modify your method from what is described in the proposal, you will then report the full experiment as **Aim, Hypothesis, Method, Results, Discussion, Conclusion.**

As a reminder, in a normal layout, the Method of a lab usually includes the variables, equipment used and experimental method. I've asked you to separate them out here to remind you what should always be present.