Name_____

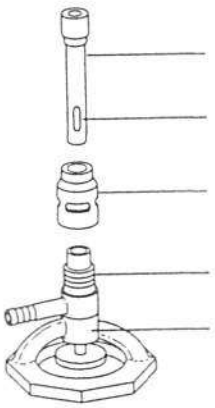
Section_____Date_____

Report for Experiment 1

Chemistry of Fire

Prelaboratory Questions

1. Label the Bunsen burner parts shown below.

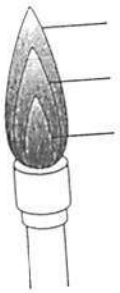


2. What is the proper color for a burner flame?

Data/Observations

Part 1 Use of the Burner

1. Draw a copper wire within the flame. Indicate the color of the copper wire at several places within the flame:



Report for Experiment 1

Name_____

Part 2 **Efficiency of the Bunsen Burner**

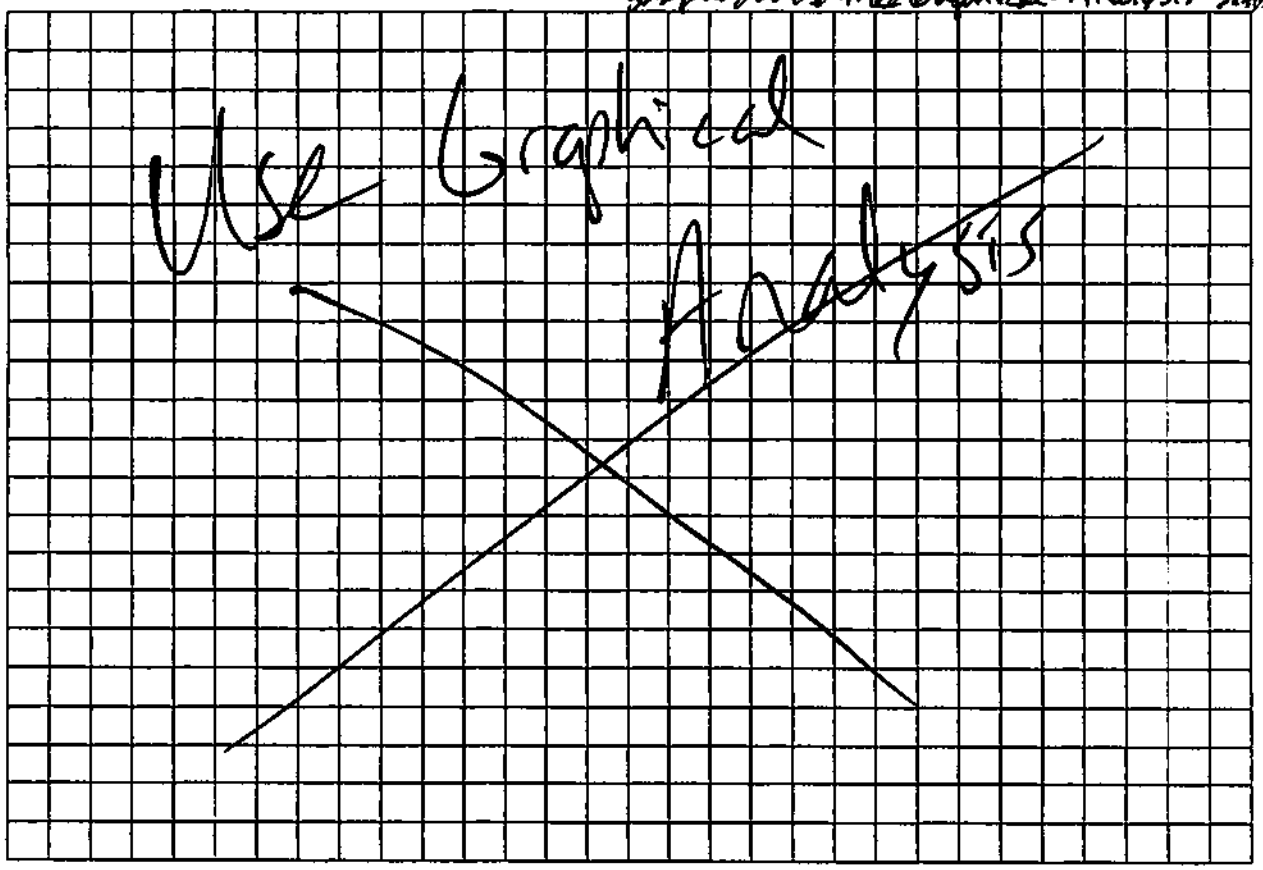
Record the information from each of the five trials in the table below:

Trial	Volume of water	Height of beaker over burner	Temp Reading 1	Temp Reading 2	Temp Reading 3	Temp Reading 4	Temp Reading 5
1							
2							
3							
4							
5							

Analysis and Conclusions

Use Graphical Analysis for graph.

1. Make a graph of temperature versus time. Plot time on the x- axis (horizontal) and temperature on the y-axis (vertical). Place the plots for all of the trials on the same graph. Label each line with the height of the beaker above the burner. 2 points extra credit if you make the graph using the Graphical Analysis software.



Report for Experiment 1

Name_____

2. Which line shows the most efficient heating of the water? Explain why you chose this line.

3. What are the advantages of using a blue flame instead of a yellow one for heating objects in the laboratory?

4. Where is the hottest part of the blue flame?

5. When heating a substance over a Bunsen burner where should the object be placed for most efficient heating? Why?

6. How does graphing the data help to determine the most efficient height for heating a liquid in a beaker?