

Group # _____

Working in the Chemistry Laboratory

Name(s) _____

Class _____ Date _____

PRELAB QUESTIONS

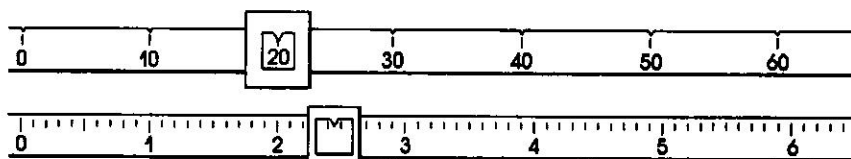
1. What is the purpose of mixing the air with the gas when using a lab burner? _____

2. Describe how glass tubing is cut in the chemistry lab. _____

3. What is fire-polishing? _____

4. What is the purpose of using glycerin when inserting glass tubing into a rubber stopper? _____

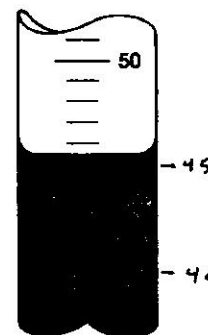
5. Read the mass shown on the balance diagram below. Record to the nearest 0.01 g. _____



6. Read the temperature shown on the diagram of a metric thermometer. Record to the nearest 0.5 °C: _____



7. Read the graduated cylinder shown at the right. Record the liquid volume to the nearest 0.5 mL: _____



8. What is a precipitate? _____

DATA AND RESULTS

Part III

Mass of beaker _____

Mass of beaker + calcium hydroxide _____

Mass of calcium hydroxide alone _____

Laboratory Experiments

Part IV

Observation from Step 2. _____

Part V

Hydrochloric Acid/Magnesium Reaction

Temperature before _____

Temperature after _____

What happens in the reaction? _____

What happens to the limewater? _____

Hydrochloric Acid/Sodium Carbonate Reaction

Temperature before _____

Temperature after _____

What happens in the reaction? _____

What happens to the limewater? _____

CONCLUSIONS

1. In Part V, was carbon dioxide produced in either of the reactions? _____
How do you know? _____
2. Were the reactions exothermic or endothermic? _____
3. Why is it necessary to filter the limewater before using it in Parts IV and V? _____
4. Why is it necessary to use a beaker or the equivalent when finding the mass of solids?

SYNTHESIS

1. If you were to find the mass of the hydrochloric acid and the mass of the magnesium strip before the reaction, how would that mass compare with the mass of material that remained in the flask after the reaction was complete? _____
If you could contain the gas that was produced, how would the "before" and "after" masses compare?

2. A number of SI units were used in this experiment. Review the procedure and make a list of all of the units that you used in the measurements. _____
3. Matter in three different phases was observed in this experiment. Give examples from the experiment that are:
solids _____
liquids _____
gases _____