SNC 2P **pH Lab** **Name: _____**

Purpose: To determine whether a substance is an acid or a base.

Hypothesis: see chart below

Materials:

5 substances	well plate	pH paper
phenolphthalein	bromothymol blue	red litmus paper
blue litmus paper	safety goggles	

Procedure:

1) Obtain a well plate.
2) In three wells of the first column of the well plate put three drops of one of the five solutions.
3) Into the first well put three drops of bromothymol blue. Record your observations in the chart
4) Into the second well put three drops of phenolphthalein. Record your observations
5) Into the third well place 1/2 a piece of red litmus paper. Record your observations
6) Into the third well place 1/2 a piece of blue litmus paper. Record your observations
7) Into the third well place 1/2 a piece of pH paper. Match the colour up to the colour scheme on the paper in the tube of pH paper. Record your observations
8) Repeat steps 2-7, using different columns on the well plate for each of the remaining solutions.

Observations

Substance	Prediction (acid, base, neutral)	Phenolphthalein	Bromothymol blue	Red litmus paper	Blue litmus paper	pH paper

Analysis:

1) What substances were acids?

2) What substances were bases?

3) What substances were neutral?

4) How did this compare to your predictions? For which substances were you right or wrong?

5) Draw and label the pH scale from 0 – 14. Label “acid”, “base” and “neutral”. Indicate where the 5 substances would be located on the pH scale

Conclusions

Was the lab successful? Why or why not?