

Name: \_\_\_\_\_

## Buffer inquiry lab

You will create a buffer in two different ways using the following chemicals.

- 0.10 M acetic acid,  $\text{HC}_2\text{H}_3\text{O}_2$ ,  $K_a = 1.75 \times 10^{-5}$
- Solid sodium acetate  $\text{NaC}_2\text{H}_3\text{O}_2$
- 0.10 M sodium hydroxide,  $\text{NaOH}$

To create the buffers,

- (1) Must contain 10 mL of  $\text{HC}_2\text{H}_3\text{O}_2$  solution.
- (2) The buffer must have a pH of 4.76

In the space provided, come up with a plan. You must include all amounts used of chemical used. When finished, come check the pH of the buffer solution with me. I will initial if you are close enough to the pH.

Buffer one	Buffer two
Containing $\text{HC}_2\text{H}_3\text{O}_2$ solution and $\text{NaC}_2\text{H}_3\text{O}_2$ solid	Containing $\text{HC}_2\text{H}_3\text{O}_2$ solution and $\text{NaOH}$ solution
Calculations:	Calculations:
Procedure:	Procedure:
Signature	Signature