Name:	Date:	Block:
Name.	Date.	DIUUK.

## What's in the Beaker? Acids, Bases, Salts, and Buffers

Beaker	Contents		
A	30.0 mL of 0.20 M NaOH		
В	50.0 mL of 0.30 M HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>		
С	50.0 mL of 0.40 M NH <sub>4</sub> Cl		
D	60.0 mL of 0.10 M HCl		
Е	$50.0 \mathrm{\ mL}$ of $0.50 \mathrm{\ M\ NaC}_2\mathrm{H}_3\mathrm{O}_2$		
F	100. mL of 0.20 M NH <sub>3</sub>		
G	75.0 mL of 0.20 M NaOH		
Н	37.5 mL of 0.20 M NaOH		
I	90.0 mL of 0.20 M NaOH		

Answer Choices		
Strong acid		
Strong base		
Weak acid		
Weak base		
Acidic Salt		
Basic Salt		
Neutral Salt		
Acidic Buffer		
Basic Buffer		

$${
m HC_2H_3O_2} \qquad {
m K_a} = 1.8 \times 10^{-5}$$
  
 ${
m NH_3} \qquad {
m K_b} = 1.8 \times 10^{-5}$ 

## **QUESTIONS**

In the following questions, describe what would be in the beaker (using the answer choices above) when either one of the beakers above is used or a combination of the beakers above is poured together. In addition, calculate the pH of the resulting solution.

#	Question	Answer	рН
1	В		
2	D		
3	B + E		
4	C + F		
5	A + B		
6	B + G		
7	B + I		
8	F + D		
9	A + D		
10	D + G		
11	D + I		
12	А		
13	F		