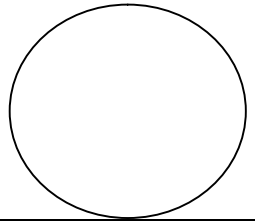
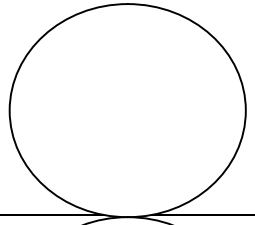
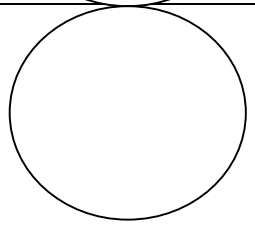
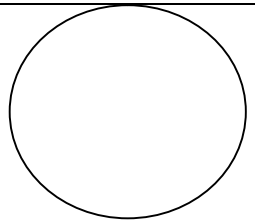
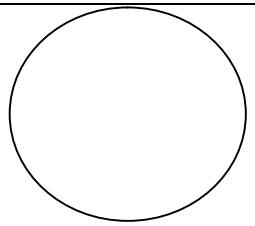
Name _____ Period _____ Date _____

PhET Lab: Acid/Base Solutions

Solutions	View (draw ions)	Equation	Color of pH paper	pH	Strength of Conductivity
Water					
Strong acid					
Weak acid					
Strong base					
Weak base					

Discussion Questions:

1. Which ions are most abundant in an acid? _____

2. Which ions are most abundant in a base? _____

3. Which ions are most abundant in water? _____

4. How does the concentration of ions in a strong acid differ from a weak acid?

5. How does the concentration of ions in a strong base differ from a weak base?

6. Explain to someone in 3-4 steps how to use pH paper to determine the pH of a substance:

   Step 1 –

   Step 2-

   Step 3-

Custom Solution

1. Set Strength to a strong acid. Adjust the concentrations and record the pH of the solutions.

Concentration	pH meter
0.001	
0.01	
0.1	
1	

2. Set Strength to a strong base. Adjust the concentrations and record the pH of the solutions.

Concentration	pH meter
0.001	
0.01	
0.1	
1	

3. As concentration increases by a tenth, what happens to the pH?

4. As concentration increases, what happens to the number of ions in the solution?