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## My Prediction:

Artificial cytosol and water are both buffers.

## My Strategy:

I will measure the pH of the solution before and after acid is added.

## Lab summary:

What best describes the result you observed when you added HCl (acid) to artificial cytosol?

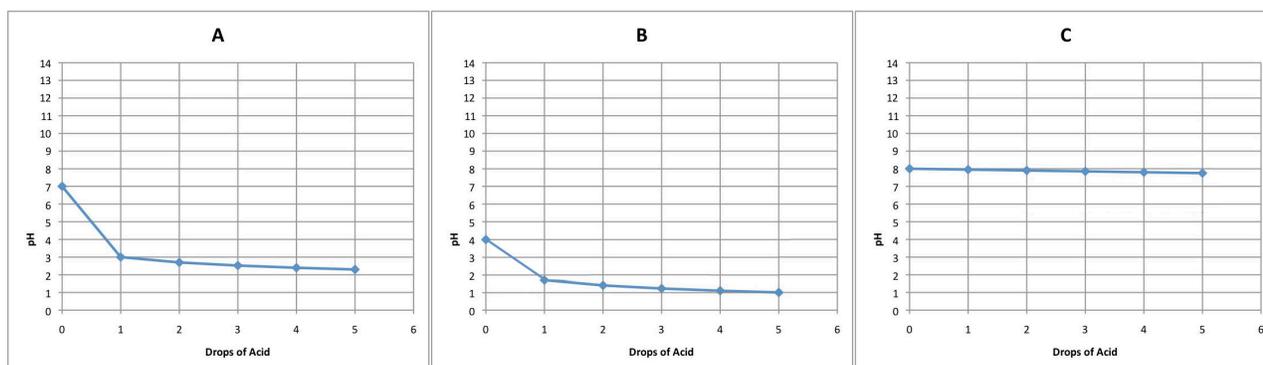
There was minimal or no change in pH. The artificial cytosol acted as a buffer.

In this experiment, how do you know that a solution contains a buffer?

The pH does not change when acid is added.

## Apply what you have learned:

The pH of three solutions was measured as acid was added drop-by-drop. Use the data shown in the graphs above. Match the graph to the correct initial solution.



Water : A

Acid : B

Buffer : C

## Collected Lab Data

HCl (drops)	Tube 1 Water (pH)	Tube 2 Buffer (pH)	Tube 3 Cytosol (pH)
0	7	9	7

HCl (drops)	Tube 1 Water (pH)	Tube 2 Buffer (pH)	Tube 3 Cytosol (pH)
1	3	9	7
3	2	9	7
5	2	9	7
<b>Change in pH = Final pH - Initial pH</b>	-5	0	0

## Saved Graphs

Graph 1

