Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_

**Science 10 Activity – Acid/Base Indicators, pH, and Ion Concentrations**

1. Complete the ‘comic strip’ below. Each diagram should show:

* The relative concentrations of H+ and OH- ions
* The colour of the solution

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Erlenmeyer flask drawing Silhouette Vector, Clipart Images, Pictures | Erlenmeyer flask drawing Silhouette Vector, Clipart Images, Pictures | Erlenmeyer flask drawing Silhouette Vector, Clipart Images, Pictures | Erlenmeyer flask drawing Silhouette Vector, Clipart Images, Pictures | Erlenmeyer flask drawing Silhouette Vector, Clipart Images, Pictures |
| Event A: Add water | Event B: Add phenolphthalein | Event C: Add several drops of HCl | Event D: Add NaOH until a colour change is observed | Event E: Add HCl until a colour change is observed |

1. In the space provided, create a graph showing the relationship between pH and the events taking place in the flask.

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chart

Description automatically generated with low confidence

**A**

**B**

**C**

**E**

**D**