

"Chem"-eleon Indicators Worksheet

Results Table

Solution	Indicator Color Change	pH Estimate
Hydrochloric acid, HCl, 0.1 M		
Sodium hydroxide, NaOH, 0.1 M		

Post-Lab Analysis and Questions

- Obtain a Universal Indicator Red Cabbage Extract Color Chart. *Note:* One chart can be shared by several students. Complete the above table by comparing the color of the test solutions spotted on the blotting paper to the colors on the chart. Estimate as closely as possible the pH of each solution tested. A yellow-green to yellow color indicates a pH greater than 11.
- Which tested solutions are acidic? What evidence supports this?
- Which tested solutions are basic? What evidence supports this?
- Are any of the tested solutions neutral or nearly neutral (pH 6–8)? If so, which one(s)?
- Based on the results, which solutions would be considered strongly acidic? Which are strongly basic?
- Compare your results with those of other students. (a) In what types of products are most household bases found? What characteristics do bases have in common? (b) In what types of products are most household acids found? What characteristics do acids have in common?