

## pH Investigation Using Red Cabbage Juice Indicator

Purpose: to investigate the pH of common household items using red cabbage juice indicator and universal indicator.

Apparatus (include equipment for both parts of the lab)

Materials (include all household items)

Procedure (follow instructions carefully)

Part #1 - Extracting Red Cabbage Juice (include diagram of experimental setup)

Part #2 - Testing Various Household Items with Red Cabbage Juice and Universal Indicator

Observations:

Part #1 - fairly short

Part #2 - include your observation table

Concluding Questions:

1. Draw a detailed pH scale from 1 to 14. Include acidic, neutral and basic regions on your scale. Based on your observations, place all 12 household items on this scale. You may wish to draw your scale vertically.
2. Which of the household items were acidic? Which were neutral, which were basic?
3. Which of the household items were the most dangerous? Why?
4. If a change of 1 on the pH scale results in a 10 times change in acidity or basicity, how many more times acidic is pH = 2 compared to pH = 5? How many more times basic is pH 13 compared to pH = 11?