

Testing pH with a homemade edible indicator Lab

Chem IH

Type into a WORD doc OR write in your lab notebook: Theory, Procedure, Data (including at least ONE picture of YOUR FACE experimenting), Conclusion, & Resources (URLs from Web) – TURN IN ON TEAMS

I. Theory: Acid-Base Theory (Describe the three theories), pH (define it), & solutions (how do you measure concentration?)

II. Procedure/Safety: Let your family know what's going on. I'm sure they will want to help & join in the fun:)

- Make an homemade edible indicator with any dark-colored flower, fruit, or vegetable. (see below of examples) Red Cabbage is common. Research how this can be done and adapt the procedure at home in your kitchen. Write your experimental design as your procedure.
- Set up a step-by-step procedure to make an indicator and test it on some household substances at home. When you test these substances, you need to make sure they are in a solution or liquid state. So, mix some water with your baking soda, for example. You'll need to test at least 8 substances from your home such as: vinegar, baking soda, lemonade, laundry detergent, bubbles or, sprite—whatever seems interesting to you.

III. Data:

Make a pH scale with all substances on it. Label each substance with its name and estimated pH of all substances tested. So, line them all up according to rank on the pH scale and take a picture with YOU in it. Where would they fall?

0-----14

IV. Conclusion:

Compare and contrast your results. Which were acids and why? Which were bases and why? Discuss the chemistry involved in generating your indicator and what happened chemically when it reacted with household substances.

V. Resources: List any that you used (even if it is a picture!) URLs, cookbooks, or kid's books,

