

Neutralizing an Acid

EXPLORE FIRST: I wonder what would happen to the temperature of vinegar as baking soda is added? Will the temperature change?

Question to Investigate: Can adding baking soda to vinegar change the pH of vinegar? If so, how much baking soda is needed to raise the pH of vinegar to a 7?

Prediction:

Independent variable:

Dependent variable:

Procedure:

1. Measure 5 milliliters of vinegar into a plastic cup. Take the pH level of the vinegar and record your data.
2. Shake the baking soda/water solution and use dropper to add 1 milliliter of baking soda solution to the vinegar.
3. Use a pH strip to test and record the pH of the mixture.
4. Repeat steps 2 and 3 until the pH reaches 7.

Data:

TOTAL amount of baking soda added to 5 ml of vinegar	pH level
0 ml baking soda	
1 ml of baking soda	
2 ml of baking soda	
3 ml of baking soda	
4ml of baking soda	

Results: