

Diluting an Acid

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

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

Prediction:

Independent variable:

Dependent variable:

Procedure:

1. Measure 1 ml of vinegar into a plastic cup. Take the pH level of the vinegar and record your data.
2. Add 1 ml of water to the vinegar.
3. Use the pH strip to test and record the pH of the solution in the cup.
4. Repeat steps 2 and 3 until the pH reaches 7.

Data:

TOTAL amount of water added to 1 ml of vinegar	pH level
0 ml water	
1 ml of water	
2 ml of water	
3 ml of water	
4ml of water	

Results: