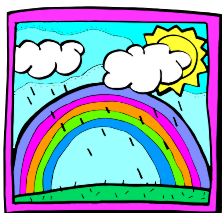


Name: _____ Date: _____



Cabbage Juice Rainbow Data Sheet

You have 10 cups with different solutions. First, predict the color change of each solution. Next, test each substance by pouring some cabbage juice in each cup until you see a color change. Remember: Acids turn the cabbage juice more red, and bases turn the cabbage juice blue, yellow or green. Calculate the average pH. Indicate whether the substance is an acid or base.

Solution	Predicted Color Change	Actual Color Change	Acid or Base?
Vinegar			
Lemon Juice			
Tomato/Apple Juice			
Distilled Water			
Salt Water			

Calculating Averages Example:

If $pH_1 = 5$, $pH_2 = 6$ and $pH_3 = 5$, then, the average $pH = (5 + 6 + 5) \div 3 = 16 \div 3 = 5.3$

Turn over for more →

Cabbage Juice Rainbow Data Sheet, continued

Solution	Predicted Color Change	Actual Color Change	Acid or Base?
Bleach (ammonia)			
Milk of Magnesia			
Baking Soda			
Alka-Seltzer in Distilled Water			
Alka-Seltzer in Vinegar			

Calculating Averages Example:

If $pH_1 = 5$, $pH_2 = 6$ and $pH_3 = 5$, then, the average $pH = (5 + 6 + 5) \div 3 = 16 \div 3 = 5.3$