

Bio-131-55

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PH Lab Report

Solution	pH	Color w/ Bromothymol Blue	Color w/ Phenolphthalein
A	7	Dark Blue pH 8	Clear Color pH 6
B	12	Dark Blue pH 12	Hot Pink pH 14
C	5	Olive Green pH 6	Faint Pink Hue pH 7
D	4	Yellow pH 4	Clear Color pH 4
E	1	Orange/Yellow Color pH 1	Clear Color pH 1

Bromothymol Blue in an acidic solution turns it to a yellow orange color. Bromothymol Blue in a basic solution turns it to a dark blue color. Bromothymol Blue in a neutral solution turns it to a dark blue color also.

Bromothymol Blue is a more useful indicator dye because it changed all the colors based on their pH, but Phenolphthalein only changed two solutions colors.

The advantage of using pH paper over an indicator dye is that pH paper gives you a more accurate reading and the indicator dye is more of a broad answer. The pH paper provides a numerical value.

Solutions Mixed	pH	Color w/ Bromothymol Blue
A-E	6 pH	Orange/Yellow Color

Bromothymol Blue when combined with the mixed solutions of A-E provides a pH of 6 and the color becomes orange/yellow.

Solution	Color of extract with Anthocyanin	PH Reading	Acid/Base/Neutral
A	Light purple	5 pH	Acid
B	Green	12 pH	Base
C	Light Blue	7 pH	Neutral
D	Light purple	4 pH	Acid
E	Dark pink	1 pH	Acid

Anthocyanin in acid solutions A, D and E proved to have different pH readings, Solution A turned a light purple color with a pH of 5 indicating this is an acidic solution. Solution D also turned a light purple color but it had a pH of 4 also indicating it's an acidic solution. Solution E turned dark pink, had a pH of 1 and