

The Indicator/pH Lab

Indicator	Transition
phenolphthalein	clear - 8 pink
methyl orange	red 3.2 - 4.4 yellow
bromocresol green	yellow 3.8 - 5.4 blue
thymol blue	hot pink 1.2 - 2.8 yellow 8.2 - 9.6 blue
bromothymol blue	yellow 6.8 - 7.6 blue
alizarin yellow	yellow 10.1 - 12 red

Determine the identity of substances A - E.

They are Hydrochloric acid Acetic acid. Water Ammonia (a weak base) Sodium Hydroxide
appx pH **1** **3** **7** **10** **13**

Substance letter and IDENTITY	Methyl Orange	Bromocresol Green	Bromothymol Blue	Thymol Blue	Phenolphthalein	Alizarin Yellow	pH
A	Red	Yellow	Yellow	Hot pink	Clear	yellow	
B	Yellow	Blue	Blue	Blue	Pink	Yellow	
C	Red	Yellow	Yellow	Yellow	Clear	yellow	
D	Yellow	Blue	Blue	Blue	Pink	orange	
E	Yellow	Blue	Blue	Blue	Pink	red	

On the back side of the sheet, explain the logic you used to identify one of the liquids.