4. Cresol red is an acid-base indicator with the following colour changes:

Indicator	pH for colour change	colour change Colour change	
cresol red	7.2 – 8.8	yellow to purple	

A few drops of cresol red were added to four 1 mol L^{-1} solutions. Which of the responses below gives the correct colour for each solution?

	Sodium ethanoate	Potassium hydroxide	Sulfuric acid	Ammonium chloride
(a)	yellow	purple	yellow	yellow
(b)	purple	purple	yellow	yellow
(c)	purple	yellow	purple	purple
(d)	yellow	purple	yellow	purple