

CHAPTER 6	Acid-Base Indicators	BLM 6.3.6
ASSESSMENT		

Use your table of indicators, located on p. 230 of the text, to answer the following questions:

1. Fill in the spaces in the following table:

pH	colour of orange IV	colour of bromocresol green	colour of bromothymol blue	colour of phenol red
1.0				
4.2				
5.8				
9.0				

2. Use the results displayed below to determine the pH ranges of the solutions.

Solution	colour of bromocresol green	colour of bromothymol blue	colour of phenolphthalein	pH
A	yellow	yellow	colourless	
B	blue	blue	pink	
C	blue	blue	colourless	
D	green	yellow	colourless	

3. What indicator could you use to distinguish between two solutions, one that has a pH of 8 and one that has a pH of 11?
4. Using three indicators, design a procedure that would be able to identify four solutions that have pHs of 3, 6, 8, and 11, respectively.
5. What colour would bromocresol green be in an acid solution made by dissolving 4.3 g of pure hydrochloric acid in 20 L of water?