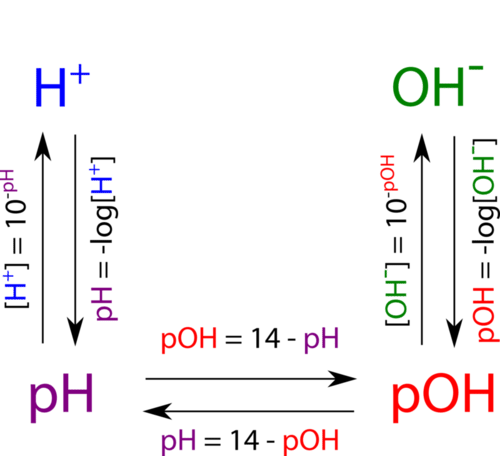
**pH Scale**

You will not be given any of these formulae!!



pH = -log [H+]

pOH = -log [OH-]

pH + pOH = 14

Kw = [H+] [OH-] = 1 x 10-14

**Problems**

1) What is the pH of a solution with an H+ ion concentration of 1 x 10-8 M?

2) What is the pOH of a solution with an OH- ion concentration of 1 x 10-5 mol/L?

3) What is the pOH of a solution with a pH of 9?

4) What is the pH of a solution with a pOH of 3?

5) What happens to the concentration of hydronium ion as you go from pH 5 to pH 2?

M and E!

6) What happens to the concentration of hydroxide ion as you go from pH 10 to pH 8?

M and E!

7) What kind of solution is made by mixing 0.365 g of HCl into a 100.0 mL volumetric flask?

8) What kind of solution is made by mixing 4.00 g of NaOH into a 10.0 L volumetric flask?

9) What happens if 10.0 mL of the solution from 8) is placed into a 1.0 L flask and water is added to the line?