

Equilibrium – Weak acids and K_a

Pre-lesson assignment – textbook p319-321

Define the following terms

- Define Acid dissociation constant (K_a) in terms of an acid HA

Now watch the video tutorial on Weak Acids.

Make notes on the acid dissociation constant

Use the following questions as guidance:

1. Show that weak acids exist in equilibrium, and have an equilibrium constant K_a . Give the units of K_a and show how they are derived.
2. Explain why temperature must be stated when giving values of K_a for reference.
3. Describe the relationship between K_a and the strength of the acid.
4. Write an expression for the calculation of pK_a
5. Describe the relationship between pK_a and acid strength