Guiding Question revisited

What happens when protons are transferred?

In this chapter we have seen:

- [ ] A proton is $[H^+]$.
- [ ] Brønsted–Lowry acids are proton donors and Brønsted–Lowry bases are proton acceptors.
- [ ] A conjugate acid–base pair differs by a single proton.
- [ ] Amphiprotic species can act as both Brønsted–Lowry acids and bases.
- [ ] The pH scale is the negative base 10 logarithm of $[H^+]$.
- [ ] The ion product constant of water, K_w, is temperature dependent. It shows the inverse relationship between $[H^+]$ and $[OH^-]$.
- [ ] Strong acids and bases are fully ionized in solution, weak acids and bases are only partially ionized.
- [ ] Acids and bases react together in neutralization reactions to form salts. The overall reaction is $H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$ which is exothermic.
- [ ] The equivalence point in a titration is where the acid and base have exactly neutralized each other in a stoichiometric ratio.
- [ ] pH curves show the change in pH as an acid and base react together in titration.
- [ ] Neutralization involving a strong acid and strong base gives a characteristic pH curve. The pH at the equivalence point is 7.