

Redox Titrations – MnO_4^-

Pre-lesson assignment – Textbook p. 376-380

Make notes on redox reactions involving Manganate VII ions

1. Demonstrate, using oxidation numbers, that MnO_4^- is correctly called a manganate VII ion.
2. Write a procedure for the titration of potassium manganate against a reducing agent.
Include:
 - a. Why acid is added in excess.
 - b. An explanation of why an indicator is not necessary.
 - c. The colour change at the End point.
 - d. An explanation as to why the value of the burette is valid despite the readings being taken from the top, rather than the bottom, of the meniscus.
3. Write an equation for the reduction of potassium manganate VII with iron II ions. Show both half equations.
4. Read through the green box and worked example, and check that you can follow the stoichiometry.