

CHEM 1000 Reading List

Silberberg 1st Canadian edition

| Topic | Readings |
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| 1 Math and Stoichiometry Review | Chapter 1 (sections 1.4 – 1.6) Chapter 3 (sections 3.1 – 3.5) |
| 2 Atoms, Isotopes and Nuclear Chemistry | Chapter 2 (sections 2.1 – 2.5) Chapter 25 |
| 3 Light and the Atom | Chapter 6 (sections 6.1 – 6.3) |
| 4 Electrons, Orbitals and Quantum Numbers | Chapter 6 (section 6.4) Chapter 7 (section 7.1) |
| 5 Electron Configurations and Periodic Trends | Chapter 7 (sections 7.2 – 7.4) |
| 6 Metals of Groups 1 and 2 | Chapter 2 (sections 2.6 – 2.7, pp. 59 – 61) Chapter 13 (sections 13.2 – 13.4) Chapter 23 (pp. 1026 – 1028: production of Na) Chapter 23 (pp. 1040 – 1041: production of NaOH) |
| 7 More Metals and Ionic Solids | Chapter 8 (sections 8.1 – 8.2 except Born-Haber cycles) Chapter 13 (section 13.5 except boron) Chapter 23 (pp. 1031 – 1034: production of Al) |
| 8 Lewis Diagrams and VSEPR Geometries | Chapter 8 (sections 8.3 – 8.6) Chapter 9 (section 9.1) |
| 9 Polarity, Intermolecular Forces and Kinetic Molecular Theory | Chapter 9 (section 9.2) Chapter 11 (section 11.3) Chapter 4 (sections 4.5 – 4.6; the earlier sections of this chapter review gases from high school; if you are weak on this topic, read them too) |
| 10 Nonmetals Part 1 (Hydrogen and Acids) | Chapter 2 (pp. 62 – 65) Chapter 13 (section 13.1) Chapter 16 (sections 16.1 – 16.2, 16.5 and 16.8) |
| 11 Nonmetals Part 2 (Groups 14-17 and Boron) | Chapter 13 (sections 13.5 – 13.9) Chapter 15 (section 15.6 focusing on pp. 631 – 633) Chapter 23 (pp. 1017 – 1018: production of NH ₃) Chapter 23 (pp. 1035 – 1040: production of S ₈) |
| 12 Co-ordination Chemistry and Colour | Chapter 24 (sections 24.1 and 24.3) Chapter 24 (section 24.4 starting at p. 1066) |