IB Chemistry SL Summer Assignment **Summer 2026**

Directions: Download and print a copy of each of the assignments. You will turn this in to Mrs. Martin or Mr. Eggleston when you return to school in August.

Link to IB Chemistry Book (Pearson 3rd Edition)

Unit 1: Chemistry Review

- Uncertainties
  - Types of Errors and Uncertainties notes
  - Types of Errors: Uncertainties practice Worksheet 1
  - Uncertainties practice Worksheet 2
  - Graphing with Error Practice Worksheet
  - Propagating uncertainties and graphing notes
  - Propagating uncertainties practice Worksheet 1
  - Helpful uncertainties videos
    - All msjchem measurement videos
- Significant Figures
  - Sig figs notes and rules
  - Calculating with sig figs notes and rules
  - Sig figs practice worksheet (LONG ASSIGNMENT – Contains scientific notation, sig figs, and calculating with sig figs)
  - Sig figs puzzle
- Dimensional Analysis
  - Using dimensional analysis in chemistry notes
  - Using SI units and Converting between different SI units worksheet
  - Dimensional analysis practice 2
  - Density worksheet
  - SI Units notes

Unit 2 – Structure 1.1

- Kinetic Molecular Theory, Density, Temperature vs. Heat, Elements, Compounds, Mixtures
  - Kinetic Molecular Theory notes
  - States of Matter Practice Worksheet 1
  - States of Matter Practice 2
  - Balancing chemical reactions worksheet 1
  - Balancing chemical reactions worksheet 2
  - Naming ionic and covalent worksheet
  - Physical vs. Chemical Properties notes
  - Lab – Online density lab: use this URL
  - Physical vs. Chemical Properties Assignment
  - Practice identifying elements, compounds, mixtures worksheet

Unit 3 – Structure 1.2

- Structure of the Atom, Ions, and Isotopes
  - Structure of the Atom, Avg. Atomic Mass, Ions, and Isotopes notes

    - Structure of the atom, ions and isotopes, nuclear symbols, hyphen notation worksheet practice worksheet 1
    - Structure of the atom, ions and isotopes, nuclear symbols, hyphen notation worksheet practice worksheet 2
    - Ions vs. isotopes using nuclear symbols and hyphen notation worksheet
- Periodicity
    - Periodic table notes
    - Periodic table worksheet
    - Periodicity notes - 1
    - Identifying periodic trends worksheet
    - Electron orbitals and Quantum numbers notes
    - Quantum mechanical model worksheet
    - Quantum numbers assignment worksheet
- Electron Configuration
    - Bohr's Model and electron energy states in the atom
    - POGIL: Bohr's model with ground and excited state electron emission
    - Online flame test lab
    - Orbital notation, standard electron configuration and Noble gas configuration, valence electron notes
    - Orbital notation assignment, worksheet
    - Standard and Noble Gas EC assignment worksheet 1
    - Standard and Noble gas EC assignment worksheet 2