

# SCH4U - Grade 11 Review: Assignment 11

SCH4U is designed to be a challenging course in which you will extend your knowledge of chemistry and improve and refine your skills.

SCH4U builds upon the knowledge you gained in SCH3U and concentrates on expanding your knowledge and understanding of the principles of chemistry.

Due to the continuum formed between SCH4U and SCH3U, it is vital that you recall and understand many of the topics covered in SCH3U.

The objective of this assignment is to help you review some of the topics covered in SCH3U.

Listed below are topics that you studied in grade 11. You will be responsible for one topic. When complete, you will hand in your assignment to me on the assigned date.

## Criteria for the Assignment:

1. A summary of your topic. The summary can be in point form or based on examples. Some topics may have more formulas, charts/tables, calculations, etc. 5 marks
2. Review questions for the topic. Depending on the topic, you may have anywhere from 5 - 20 questions. 5 marks
3. A complete solution for the questions you have asked 5 marks

## Topics for Assignment:

**Chemical Bonding:** electronegativity, covalent bonds, ionic bonds, lewis dot structures, shapes of molecules

**Chemical Nomenclature:** Binary compounds, Polyatomic ions, Binary Acids, Oxyacids

**Chemical Reactions:** Balancing Chemical Reactions, Single & Double Displacement, Decomposition, Synthesis and Combustion

**Stoichiometry 1:** Significant Figures, The Mole, Avogadro's Number, Molar Mass, Molecular Mass

**Stoichiometry 2:** Mole Relationships

**Solutions:** Solubility & Precipitation Reactions, Net ionic Equations, Molarity, Dilution

**Acids & Bases:** General Properties, Neutralization Reactions, Titrations

**Gases & Atmospheric Chemistry**

**Due Date:** Your assignment is due on : \_\_\_\_\_