Year 10 – CHEMISTRY(Revised)

SC4-The periodic table

SC4 a –Elements and the periodic table

SC4b- Atomic number and the periodic table

SC4c- Electronic configurations and periodic table

SC5-Ionic Bonding

SC5a – Ionic bonds

SC5b – Ionic lattices

SC5c- Properties of ionic compounds

SC6-Covalent Bonding

SC6a – Covalent bonds

SC7-Types of Substance

SC7a – Molecular compounds

SC7b- Allotropes of carbon

SC7c – Properties of metals

SC7d – Bonding models

SC8-Acids and alkalis

SC8a – Acids ,alkalis and indicators

SC8b – Looking at acids

SC8c – Bases and salts

SC8d – Alkalis and balancing equations

SC8e – Alkalis and neutralization

SC8f – Reactions of acids with metals and carbonates

SC8g - Solubility

SC9 – Calculations involving masses

SC9a-Masses and empirical formulae

SC9b-Conservation of mass

SC9c – Moles

SC10 – Electrolytic process

SC10a – Electrolysis

SC10b – Products from electrolysis

SC11- Obtaining and Using metals

SC13 – Transition metals , Alloys and Corrosion

SC25 – Qualitative Analysis

Extra topics included for GL Assessment

SC1-States of matter

SC2-Methods of separating and purifying substances

SC2a – Mixtures

SC2b – Filtration and crystallization

SC2c – Paper chromatography

SC2d – Distillation

SC3-Atomic structure

SC3a – Structure of atom

SC3b – Atomic number and mass number

SC3c – Isotopes

Know about exothermic and endothermic chemical reactions - Bond breaking, bond making, activation energy and reaction profiles (qualitative).

Know the general equation for neutralization reactions between acids and alkalis.

Factors that influence the rate of reaction: varying temperature or concentration, changing the surface area of a solid reactant or by adding a catalyst.

Chemical analysis - pure and impure substances - separation techniques for mixtures of substances.

Earth and atmospheric science - composition and evolution of the Earth's atmosphere - causes of climate change- common atmospheric pollutants - the Earth's water resources and obtaining potable water- the rock cycle and the formation of igneous, sedimentary and metamorphic rocks.

Select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate.

Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety.

Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions.