

Secondary 4 Science 2011-12

Mid-year examination (ST & EST Honours)

Topic study sheet

The mid-year examination will take place on Monday, January 30 2012 from 9:00 am - 12:00 pm. Listed below are the topics that are included on the exam. You can refer to this list in order to focus your studying. Good luck!

1. Matter

Atoms, ions, isotopes, sub-atomic particles, bonds (ionic, covalent), molecules (ionic, covalent, naming), atomic models, electrolytes (identification, properties)

2. Periodic table

Columns, periods, valence electron, electron shells and organization

3. Concentration

Moles, molarity, molar mass, ppm, unit conversions

4. Chemical reactions

Writing balanced chemical equations, stoichiometry, balancing equations, molar ratio, types of reactions

5. Ecology

Contaminant concentration, lethal dose, toxicity limits, ecological succession, population size, carbon cycle, economic impact, disturbances, bioconcentration, trophic relationship, communities