



# Definitions and Concepts for Edexcel Chemistry A-level

## Topic 4: Inorganic Chemistry and the Periodic Table

*This chapter is based purely on explanations of trends in Groups II and VII. Make sure you understand the properties of these elements and their compounds and know how to examine various trends, e.g. in reactivities. There are also a few practical concepts you have to be familiar with, e.g. tests for halide ions.*

**Thermal stability:** Refers to the extent to which a compound decomposes when subjected to heating.

**Electronic transition:** Movement of electrons between energy levels. When an electron in a ground state (a state when atom has all the electrons in lowest possible energy levels) absorbs some energy (e.g. thermal, from a flame), it can move to the excited state (a state of higher energy). When electrons get back from the excited state to the ground state, energy is released. **If this energy corresponds to a particular wavelength in the visible light spectrum**, we can observe colours (this is the explanation behind the flame test for Group I and Group II metal cations).