

Things to know:

Relative wavelength to frequency

- inversely proportional
- longer wavelength, lower frequency
- shorter wavelength, higher frequency

Electron dropping back from $n=4$ to $n=3$ OR $n=4$ to $n=2$ means light is emitted as energy is released

Bohr's theory

Lowest energy level occupied first

Isotopes

- atomic mass closest to whole number means most likely single natural isotope
- in middle means at least two common isotopes

Know types of light in either increasing or decreasing energy or wavelength

Energy and frequency directly proportional

Colors (wavelength)

Red longest Orange Yellow Green Blue Violet shortest

Measurements must have number and unit

Understand precision and accuracy and uncertainty

Significant figures

Scientific notation

Conversions within SI

Conversions between English and SI

Why elements placed in groups and periods

Names of groups

What makes emission spectra occur

Names of electromagnetic radiation and relative position on scale

Molecular elements

Why objects appear in color

Number of electrons in outer shell (valence)