

## Foundations of Physics Study Guide for Chapter 5:

- Section 5.1 “Organizing the Elements”
  - Definitions of Periodic & Periodic Law
  - Mendeleev’s contribution to the PT
    - †Alien Periodic Table Findings
  - Moseley’s contribution to the PT
  - Elements become less metallic across each period
  - Groups have similar properties
- Section 5.2 “Exploring the Periodic Table”
  - Electron arrangement and periodic table shape
  - Ion Formation (Charge & Electron Configuration for H→Ca)
    - Know the *Ion Chart*
    - †Use the knowledge from *Ion Chart* to predict the charge of other elements in a group and its electron arrangement
  - Metals, Nonmetals, Metalloids (Semiconductor): Location on the PT
- Section 5.3 “Families of Elements”
  - Metal Properties
  - Metal Groups: Location, Properties, & †Identification/Classification elements in these groups
    - Alkali
    - Alkaline Earth
    - Transition
    - Rare Earth
  - Nonmetal Properties
  - Nonmetal Groups: Location, Properties, & †Identification/Classification elements in these groups
    - Noble Gases
    - Halogens
    - Oxygen
    - Nitrogen
    - Carbon
  - Semiconductors: Location, Properties, & †Identification/Classification elements in these groups
  - Hydrogen: Location & Properties

## †Application Questions