

Ch 4
Sec 4.3A IIV: See Asses 29,33 Rev Con 56,57,71,73,84,86
obj: Why is the Periodic table useful?

Periodic Table

- An organized List of the elements.
 - * The elements are listed in increasing atomic number.
- The Periodic Table follows a Periodic Law.
- Table has columns + Rows.
 - * Rows are called Periods. \Rightarrow Represents Energy levels
 - * Columns are called Groups or Families. Represents valence electrons.
 - * Columns are numbered

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- Groups of Elements.
 - * 4 Groups of Elements
 - 1) Noble Gases (Inert Gas)
 - * Group 18 or VIII A
 - * Helium only has 2 valence electrons.
 - 2) Representative Elements
 - * Group A Elements (1, 2, 13-17)
 - 3) Transition Elements (Metals)
 - * Group B Elements (3-12)
 - 4) Inner Transition Elements
 - * Lanthanide Series
 - * Actinide Series.

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- Types of Elements

1) Metals

- * Have 3 or fewer valence electrons
- * Most elements are metals.
- * Located on the Lft side of the Table.

2) Nonmetals

- * Have 5 or more valence electrons.
- * Most Nonmetals exist as gases @ room temp.

3) Metalloids

- * Have properties of both nonmetals and metals.

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