CHEMISTRY CHAPTER 5 NOTEPACKET: THE PERIODIC TABLE

5.1 ORGANIZING THE ELEMENTS

The Search for Order

Mendeleev’s Periodic Table

1. Mendeleev’s Proposal
2. Mendeleev’s Prediction
3. Evidence Supporting Mendeleev’s Table

5.2 THE MODERN PERIODIC TABLE

The Periodic Law

1. Periods
2. Groups

Atomic Mass

1. Atomic Mass Units
2. Weighted Averages and how they are determined

Classes of Elements

1.

2.

3.

1. Metals
2. Nonmetals
3. Metalloids

Variation Across a Period

5.4 Representative Groups

Valence Electrons

The Alkali Metals

The Alkaline Earth Metals

The Boron Family

The Carbon Family

The Nitrogen Family

The Oxygen Family

The Halogens

The Noble Gases

MATH SKILLS: DIMENSIONAL ANALYSIS

UNITS

English System

Metric System

International System of Units

Common base words that can be used with the prefixes listed below

Common prefixes

Kilo-

Deci-

Centi-

Milli-

PROBLEM SOLVING AND DIMENSIONAL ANALYSIS

Conversion factor

Dimensional Analysis

CONVERSION FACTORS: ONE STEP PROBLEMS

* 1. How many in. are there in 62 cm?
  2. How many meters are there in 55 cm?
  3. How many meters are there in 2.55 km?
  4. How many g are there 2500 dg?
  5. How many pounds in a 50. kg bag of flour?

CONVERSION FACTORS: MULTIPLE-STEP PROBLEMS

* 1. How many km are in 25,000 cm?
  2. How many inches in 4.25 miles?
  3. How many mm are there in 2.66 km?
  4. How many pints in 4.50 gallons of Kool-Aid?
  5. How many seconds in 1.00 day?