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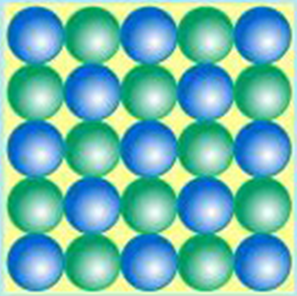
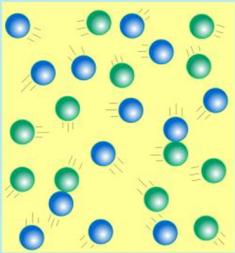
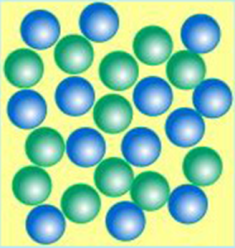
**Unit I**

**Chemical Interactions**

**Review Sheet**

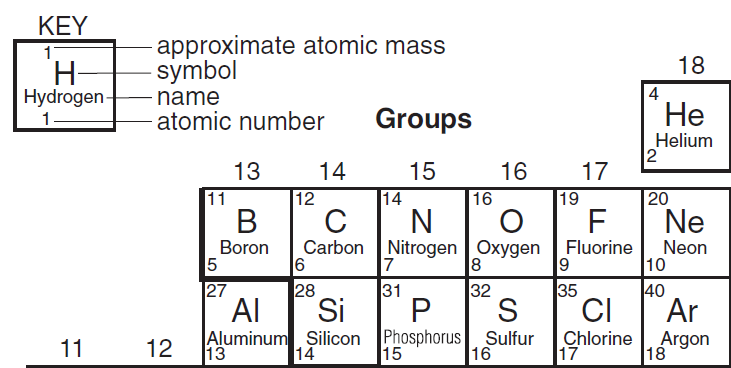
1. **Introduction to Matter – (Notebook pages 1-6)**

* Define:
  + Matter
  + Element
  + Compound
  + Solution
  + Solid
  + Liquid
  + Gas
* What are the properties of matter?
* What does a chemical change alter?
* What does a physical change alter?
* In this change you cannot get the original substance back:
* In this change you can get the original substance back:
* What are two kinds of pure substances?
* What are two kinds of mixtures?
* Is this an example of a physical (P) or chemical (C) change:
  + Digesting food
  + Burning a match
  + A car rusting
  + Mixing sugar in ice tea
  + Tearing a piece of paper
  + Baking bread
  + Crushing a can
* Blood is an example of a:
* CO2 is an example of a:
* O2 is an example of a:
* Salt Water is an example of a:
* Na is an example of a:
* **Solid, Liquid or Gas**



1. **Particles of Matter – (Notebook pages 7-13 & 16)**

* Define:
  + Proton
  + Neutron
  + Electron
  + Atom
  + Atomic Number
  + Atomic Mass
* How many electrons can the 1st orbit hold?
* How many electrons can the 2nd orbit hold?
* How many electrons can the 3rd orbit hold?
* Protons are always equal to:
* The nobel gases are located in this group:
* Groups are located where on the periodic table?
* Periods are located where on the periodic table?
* What are the characteristics of metals?
* What are the characteristics of nonmetals?
* Use the periodic table to answer the following questions:



* + What is the atomic number of Argon?
  + What is the atomic mass of Boron?
  + What is the element symbol for Hydrogen?
  + What is the element name for Si?
* Complete the chart

(p+n)

(p=e-)

**Element Atomic # Atomic Mass p n e-**

Sulfur 16 \_\_\_\_\_\_\_ \_\_\_\_\_ 16 \_\_\_\_\_

Phosphorus \_\_\_\_\_ 31 15 \_\_\_\_\_ 15

* Electron Dot Configuration

**Carbon**  p = \_\_\_\_\_ Diagram

Atomic Number = 6 n = \_\_\_\_\_

Atomic Mass = 12 e- = \_\_\_\_\_

**Hydrogen** p = \_\_\_\_\_ Diagram

Atomic Number = 1 n = \_\_\_\_\_

Atomic Mass = 1 e- = \_\_\_\_\_

### Acids and Bases – (Notebook pages 17-20)

* Define:
  + Indicator
  + Hydrogen Ion
  + Acid
  + Hydroxide Ion
  + Base
* What are the characteristics of acids?
* What are the characteristics of bases?
* What do chemists use to measure the concentration of hydrogen ions in a solution with?
* What color does cabbage turn when in the presence of:
  + Acids:
  + Bases:
* What substance has a pH of 7 and is considered neutral?
* Define:
  + Solute
  + Solvent

1. Short Answer Essay

* Use each diagram to answer each of the bullets that follow:

1.

* + What **phase change** is being shown?
  + What **state changes** are taking place?
  + Is heat being released or absorbed?

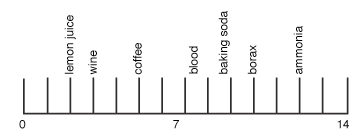


2.

* + What **phase change** is being shown?
  + What **state changes** are taking place?
  + Is heat being released or absorbed?

3.

* + What **phase change** is being shown?
  + What **state changes** are taking place?
  + Is heat being released or absorbed?
* **pH Scale**



* Label the pH scale correctly with **acid, base, neutral**
* What is the approximate pH of:
  + Lemon juice
  + Wine
  + Coffee
  + Blood
  + Baking soda
  + Borax
  + ammonia