Name:		Date:
Points:		Score:

I. WRITE IF "P" A PHYSICAL OR "C" CHEMICAL CHANGE (6 Points)

____ Cooking an egg
____ Breaking a glass
____ Chopping wood
____ Rotting bananas
____ Milk going sour
____ Boiling water

II. IDENTIFY WITH AND "R" IF THE ELEMENTS OR COMPOUNDS IS A REACTIVE (REACTANT) AND "P" IF IS PRODUCTS OF A CHEMICAL REACTION. (4 Points)

1. Gasoline provides the energy that powers many car engines. In an engine, gasoline and oxygen are mixed together and burned, creating carbon dioxide gas and water vapor. This process releases energy that the engine uses to turn the wheels, making the car move.
The Oxygen is: _____ The water vapor is :

2. When the Statue of Liberty in New York City was built in the late 1800s, it was reddish-brown. Today, a green layer, called a patina, covers the statue's surface. This layer formed over time as copper in the statue combined with oxygen and other gases in the air to form the patina.
The Patina is: _____ The Cooper is:

III. RELATE BOTH COLUMNS DESCRIBING THE CHEMICAL REACTION TRHU IS CHEMICAL EQUATION. (5 Points)

1. Reaction between copper and oxygen to form copper oxide,
2. Adding sodium oxide to water produces sodium hydroxide.
3. Iodine crystals and chlorine gas react to make solid iron and carbon dioxide gas.
4. Gaseous propane, C3H8 , burns in oxygen gas to produce gaseous carbon dioxide and liquid water.
5. Hydrogen gas reacts with nitrogen gas to produce gaseous ammonia.

( ) none

( ) $3H\,(g) + N\,(g) \rightarrow NH_3(g)$

( ) $Cu\,(s) + O\,(g) \rightarrow CuO\,(s)$

( ) $C_3H_8(g) + O_2\,(g) \rightarrow CO_2\,(g) + H_2O\,(l) + \Delta E$

( ) $Na_2O + H_2O\,(l) \rightarrow 2NaO$

Name:		Date:
Points:		Score:

IV. BALANCING THE FOLLOWING CHEMICAL REACTIONS. (2 Points)

1) $H_2(g) + I_2(s) \rightarrow HI(s)$ ___$H_2(g) +$ ___$I_2(s) \rightarrow$ ___ $HI(s)$

2) $Fe(s) + O_2(g) \rightarrow Fe_2O_3(s)$ ___$Fe(s) +$ ___$O_2(g) \rightarrow$ ___$Fe_2O_3(s)$

V. ACCORDING TO ITS NUTRITION FACTS PLEASE DETERMINATE THE FOLLOW. (3 Points)

Total Kilocalories per package: kcal

Total Carbohydrate per package: g

Total Lipids per package: g

Total Proteins per package: g

CIDEA
COLEGIO

Name:		Date:
Points:		Score:

VI. ACCORDING TO ITS NUTRITION FACTS PLEASE DETERMINATE THE FOLLOW. (4 Points)

1. It is the measure of the ability of the atom of a molecule to attract the electrons of another atom with which it is bonding:

a) Molar affinity.   b) Electronegativity.   c) Ionization.

2. In these bonds electrons are attracted to atoms with the same force by the elements of the compound:

a) Covalent Polar bond.   b) Covalent Non-polar   c) Neutral bond

3. In these bonds electrons are attracted more strongly by one of the elements of the compound:

a) Covalent Polar bond.   b) Covalent Non-polar link.   c) Neutral link.

4.) He is an american Scientist that established the electronegativities of the element. He was double prized with a Nobel.

 a) Gilbert N. Lewis   b) Linus Pauling   c) Amedeo Avogadro

VII. CALCULATE DE ELECTRONEGATIVITY AND PREDICT THE TIME OF BONDING . (6 Points) Non Polar, Polar or Ionic

Electronegativity   Type of Bonding

Na - N

O - H

S   - Cl