Things to think about for Quiz 6
This is not the grand total of all the questions.
This is to get you thinking. For each question you should try to dream up another similar question for the same group (or a different group).
I have written many of these questions as T/F questions for the sake of time (rather than coming up with 4-5 other "bad" choices.) You should not expect quiz 6 to all be T/F

I. Hydrogen

What are two reactions for the formation of H_2?

Why are the properties of H so different than those of the rest of group 1?

II. Alkali Metals

T/F All alkali metals will react with acidic solution.

T/F All alkali metals will react with N_2.

T/F All alkali metals will react with water.

You make a basic solution by mixing water and

A. NaH
B. Na_2O
C. NaH and Na_2O both yield basic solutions

In what form will I find nearly all the K atom on earth?

III. Alaki Earth Metals

T/F To put out a Mg fire you can smother it with CO_2

T/F Beryllium is typical found as a carbonate

T/F CaO reacts violently with water to form an acidic solution

T/F Ca^{2+} has higher charge density than Na^{+}.

III. Group III

Aluminum is typically found on earth as a

A. chloride
B. oxide
C. sulfide
D. carbonate

$B(OH)_3$ is a

A. Strong base
B. Weak base
C. Strong acid
D. weak acid

$NaBH_4$ is a

A. Strong reducing agent
B. Strong oxidizing agent
C. neither

IV. Group IV

T/F Carbon is always found in a crystalline form with sp2 hybridized carbons

T/F Silicon forms a crystal much like graphite

To dope silicon into a "negative" form you can add

A. Boron
B. Carbon
C. Phosphorous
D. Xenon

V. Group V

The major industrial use of ammonia is as a_____.

T/F Nitrogen oxides play a major role in the formation of smog

Nitrogen is found mostly in

A. Silicon Nitrides
B. Salts in the ocean
C. Sand
D. Air

Phosphorous is found mostly in

A. Phosphates in rocks
B. Ocean salts
C. Sand
D. Air

The manufacturing of ammonia from hydrogen and nitrogen is known as

A. The Bayer Process
B. The Haber Process
C. The Diels-Alder Reaction
D. The Oswaldt Reaction

VI Group VI

T/F Sulfuric Acid can be used to dehydrate compounds

T/F One of the main uses of sulfuric acid is in the formation of useful phosphates

T/F Ozone is an allotrope of oxygen

VII Halogens

T/F Halogen as excellent reducing agents

T/F Halogens are found in nature as diatomic molecules

T/F Fluorine salts are less soluble because of the high charge density of F^-

Most Cl_2 is manufactured by

A. Electrolysis of molten NaCl
B. Reduction of $CHCl_3$
C. Seperated from natural deposits of methane gas
D. Oxidation of silicates

Teflon is a halogenated compound containing

A. Fluorine
B. Chlorine
C. Bromine
D. Iodine

VIII Nobel gas

The Nobel gases that are most likely to react form molecules are

A. The smallest
B. The most polarizable
C. The least polarizable
D. Those with the largest dipole moment
E. The most electronegative

T/F Most nobel gases are found in minerals