

LAMC Physical Science 1 Homework #8

Ch 11

Matching

a.12(representative group)

b.14(inner transition elements)

c.13(transition elements)

f.1(chemistry)

o.4(mixture)

Multiple Choice

2.c ,5.d,9.b,11.a,12.c

Fill in the Blank 8. Mendeleev

Ch 12

Matching

b.18(polar molecule)

d.14(covalent compound)

h.8(Lewis symbol)

s.7(ionic compounds)

Multiple choice

1.b, 10.a

Fill in the Blank 7.two

Ch 11

1. (a) Air is homogeneous mixture

Air contains about 78% Nitrogen, 20% Oxygen, 1% Argon, 0.04% Carbon dioxide and small amount of other gases.

(b) Water is a compound made of Hydrogens and oxygens



(c) diamond is an element.
since diamond is pure carbon.

(d) soil is a heterogeneous mixture
since it is a non-uniform mixture of sand, rocks and various minerals.

8. (a) Lithium \rightarrow Li

(b) lead \rightarrow Pb

(c) xenon \rightarrow Xe

11 (a) Magnesium (Mg) period 3 and group 2A

(b) Zinc (Zn) Period 4 and group 2B

(c) tin (Sn) Period 5 and group 4A

- 29 (a) $\text{CaBr}_2 \rightarrow$ calcium bromide
 (b) $\text{N}_2\text{S}_5 \rightarrow$ dinitrogen pentasulfide
 (e) $\text{AgNO}_3 \rightarrow$ silver nitrate.
 (f) $\text{IF}_7 \rightarrow$ iodine heptafluoride.

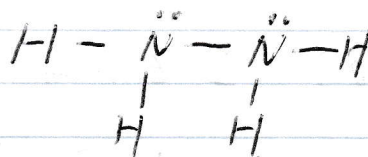
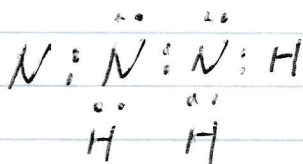
* NO_3^- is a polyatomic ion and its name is "nitrate"

ch 12

21 (d) N has 5 valence electrons
 so it needs three covalent bonds
 to have 8 electrons on its outer shell.

(e) C has 4 valence electrons
 so it needs 4 covalent bonds
 in order to have 8 electrons on its outer shell.

23.



- 27 (a) $\text{N}_2\text{H}_4 \rightarrow$ Covalent, Nonmetal + Nonmetal
 (b) $\text{NaF} \rightarrow$ Ionic, Metal + Nonmetal
 (c) $\text{Ca}(\text{NO}_3)_2 \rightarrow$ Ionic, Metal + Nonmetal (polyatomic ion)
 (d) $\text{CBr}_4 \rightarrow$ Covalent, Nonmetal + Nonmetal