

Chapter 1

Homework 3

B a) I, VII

b) hydrogen, ~~and~~ Lithium, Sodium, Potassium, Rubidium, Cesium, francium

c) Group I \rightarrow very reactive (1 valence electron)

14b) Iron: Fe
Magnesium: Mg
Aluminum: Al
Sodium: Na
Potassium: K
Silver: Ag

15 a) compound
b) compound
c) mixture
d) element
e) mixture
f) element

16 a) Potassium oxide
b) Aluminum chloride
c) sodium iodide
d) magnesium bromide

17. a) N_2O
b) O_3
c) NaF
d) CCl_4

18 CH_2O
a) 1C, 2H, 1O
b) H_2O_2 : 2H, 2O
c) CH_3Br : 3H, 1C, 1Br

19. a) $N_2 + O_2 \rightarrow 2NO$
b) $O_3 \rightarrow O_2 + O$
c) $2S + 3O_2 \rightarrow 2SO_3$

Chapter 2

7. oxygen: 8 protons, 8 electrons
nitrogen: 7 protons, 7 electrons
magnesium: 12 protons, 12 electrons
sulfur: 16 protons, 16 electrons

8.

a) II

b) Beryllium, Magnesium, Calcium, Strontium, Barium, Radium

c) 4 12 20 38 56 88

d) 2

9.

a) He : helium

b) K : Potassium

c) Cu : Copper