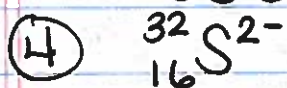
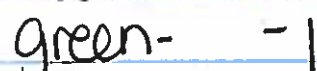
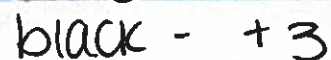
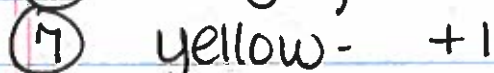
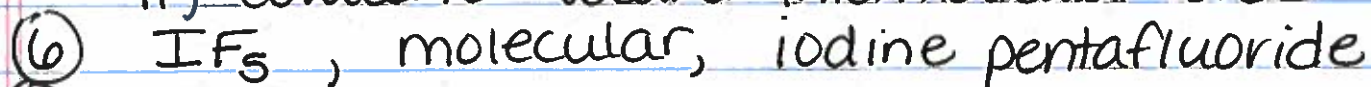


## Chapter 2

- ③ metals - red, green  
nonmetals - blue, yellow  
alkaline earth - red  
noble gas - yellow

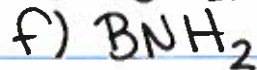
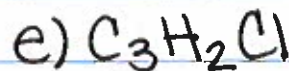
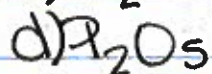
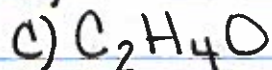
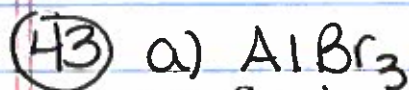


- ⑤ i) ionic - lattice structure  
ii) covalent - weaker intermolecular forces



⑨

Symbol	${}^{52}\text{Cr}$	${}^{55}\text{Mn}$	${}^{112}\text{Cd}$	${}^{222}\text{Rn}$	${}^{207}\text{Pb}$
protons	24	25	48	86	82
neutrons	28	30	64	136	125
electrons	24	25	48	86	82
mass#	52	55	112	222	207



## Chapter 2 continued

49

symbol	$^{59}\text{Co}^{+3}$	$^{80}\text{Se}^{2-}$	$^{192}\text{Os}^{2+}$	$^{200}\text{Hg}^{2+}$
protons	27	34	76	80
neutrons	32	46	116	120
electrons	24	36	74	78
net charge	3+	2-	2+	2+

51

- a) +2
- b) +3
- c) +1
- d) -2
- e) -1

53

- a)  $\text{Ga}^{+3} \text{F}^{-1}$        $\text{GaF}_3$
- b)  $\text{Li}^{+1} \text{H}^{-1}$        $\text{LiH}$
- c)  $\text{Al}^{+3} \text{I}^{-1}$        $\text{AlI}_3$
- d)  $\text{K}^{+1} \text{S}^{2-}$        $\text{K}_2\text{S}$

55

- a)  $\text{CaBr}_2$
- b)  $\text{K}_2\text{CO}_3$
- c)  $\text{Al}(\text{CH}_3\text{COO}^{\ominus})_3$
- d)  $(\text{NH}_4)_2\text{SO}_4$
- e)  $\text{Mg}_3(\text{PO}_4)_2$

63

- a) magnesium oxide
- b) aluminum chloride
- c) lithium phosphate
- d) barium perchlorate
- e) copper (II) nitrate
- f) iron (II) hydroxide
- g) calcium acetate
- h) chromium (III) carbonate
- i) potassium chromate
- j) ammonium sulfate

## Chapter 2 continued

- (67) a)  $\text{Al}(\text{OH})_3$   
b)  $\text{K}_2\text{SO}_4$   
c)  $\text{Cu}_2\text{O}$   
d)  $\text{Zn}(\text{NO}_3)_2$   
e)  $\text{HgBr}_2$   
f)  $\text{Fe}_2(\text{CO}_3)_3$

- ~~68~~  
(69) b) hydrobromic acid  
c) phosphoric acid

- (71) a) sulfur hexafluoride  
b) iodine pentafluoride  
c) xenon trioxide  
d)  $\text{N}_2\text{O}_4$   
e)  $\text{HCN}$   
f)  $\text{P}_4\text{S}_6$