

Chapter 13 Review

P. 314 # 1-8

P. 322 # 1-8

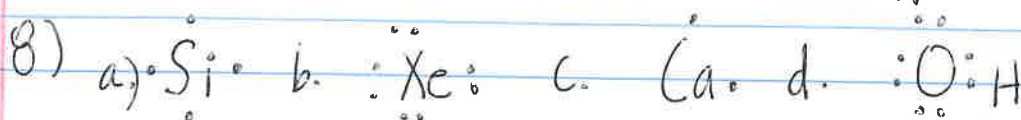
P. 330 Vocab # 1-10

P. 331-332 Problems # 1-7

P. 314

- 1) b. covalent bonds
- 2) 4 chlorine atoms in CCl_4
- 3) C
- 4) True
- 5) b. atoms form chemical bonds using electrons in the outermost energy level.
- 6) b. Boron
- 7) could be... N, P, As, Sb, Bi, Mc

nitrogen, phosphorus, arsenic, antimony
bismuth, moscovium



P. 322 # 1-8

1) b. the positive or negative charge acquired by the atom in a chemical bond.

2) boron, aluminum, gallium, indium, thallium

B, Al, Ga, In, Tl

or nihonium Nh

3) -1

4) a. the sum of the oxidation numbers must equal zero

5) False

6) c. beryllium (+2) + oxygen (-2) = 0

7) a. NaHCO_3 = sodium hydrogen carbonate

b. BaCl_2 = barium chloride

c. LiF = lithium fluoride

d. $\text{Al}(\text{OH})_3$ = aluminum hydroxide

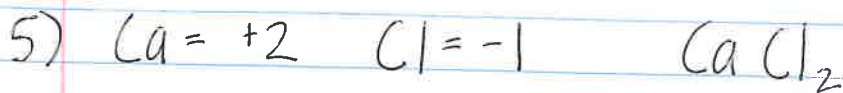
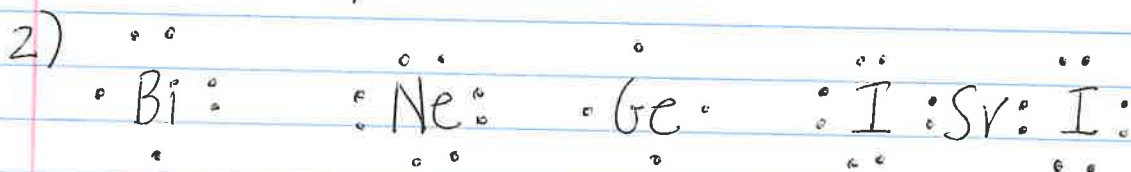
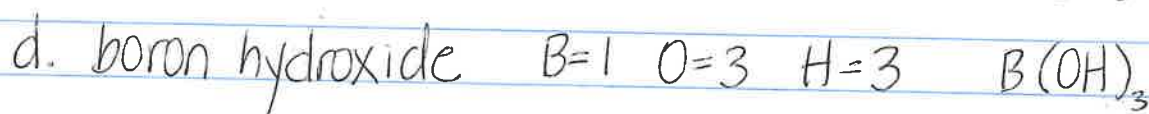
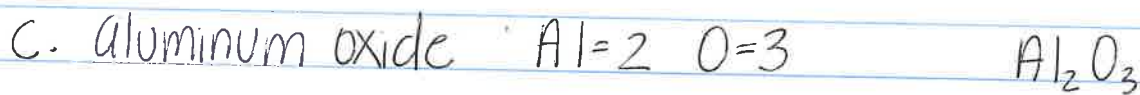
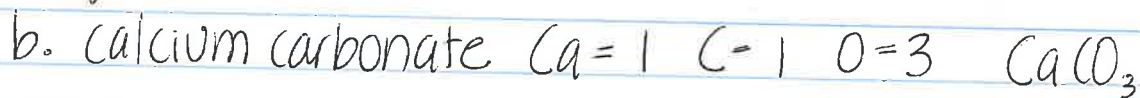
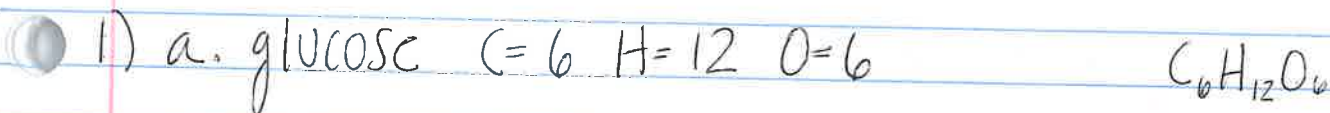
e. SrI_2 = strontium iodide

8) The bond would most likely be ionic because potassium is an alkali metal + iodine is a halogen = both have strong tendencies to form ions.

P. 330 Vocab # 1-10

- 1) chemical formula
- 2) covalent bond
- 3) chemical bond
- 4) ionic bond
- 5) Lewis dot diagram
- 6) ion
- 7) valence electrons
- 8) oxidation number
- 9) binary compound
- 10) polyatomic ion

P. 331-332 Problems # 1-7



6) a. NaI

b. Al(OH)_3

c. MgS

d. NH_4NO_3

7) a. potassium iodide

b. strontium chloride

c. potassium nitrate

d. aluminum oxide