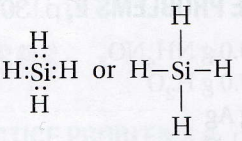
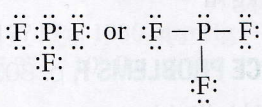
3. 

4. 

PRACTICE PROBLEMS D, p. 184

1. $\ddot{O}=C=\ddot{O}$
2. $H-C\equiv\ddot{N}:$

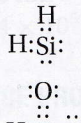
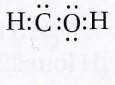
PRACTICE PROBLEMS E, p. 194

1. a. linear
   b. tetrahedral
   c. tetrahedral

PRACTICE PROBLEMS F, p. 197

1. a. tetrahedral
   b. trigonal-pyramidal

MATH TUTOR PRACTICE, p. 210

1. a. $\cdot\dot{\underset{\cdot}{Si}}\cdot$
   b. $\dot{\underset{\cdot}{Sr}}\cdot$
2. a. 
   b. 

CHAPTER 7
Chemical Formulas and Chemical Compounds

PRACTICE PROBLEMS A, p. 217

1. a. KI
   b. $MgCl_2$
   c. Na_2S
   d. Al_2S_3
   e. AlN
2. a. silver chloride
   b. zinc oxide
   c. calcium bromide
   d. strontium fluoride
   e. barium oxide
   f. calcium chloride

PRACTICE PROBLEMS B, p. 219

1. a. $CuBr_2$; copper(II) bromide
   b. FeO; iron(II) oxide
   c. $PbCl_2$; lead(II) chloride
   d. HgS; mercury(II) sulfide
   e. SnF_2; tin(II) fluoride
   f. Fe_2O_3; iron(III) oxide
2. a. cobalt(II) iodide
   b. iron(II) sulfide
   c. copper(I) selenide
   d. lead(IV) oxide

PRACTICE PROBLEMS C, p. 221

1. a. NaI
   b. $CaCl_2$
   c. K_2S
   d. $LiNO_3$
   e. $CuSO_4$
   f. Na_2CO_3
   g. $Ca(NO_2)_2$
   h. $KClO_4$
2. a. silver oxide
   b. calcium hydroxide
   c. potassium chlorate
   d. ammonium hydroxide
   e. iron(III) chromate
   f. potassium hypochlorite

PRACTICE PROBLEMS D, p. 223

1. a. sulfur trioxide
   b. iodine trichloride
   c. phosphorus pentabromide
2. a. CI_4
   b. PCl_3
   c. N_2O_3

PRACTICE PROBLEM E, p. 227

a. +3, −2
b. +1, +5, −2
c. 0
d. +1, −1
e. +1, −2
f. +2, +7, −2
g. +1, +6, −2
h. +5, −2
i. +4, −2
j. −3, +1, −2

PRACTICE PROBLEM F, p. 232

a. 98.09 u
b. 164.10 u
c. 94.97 u
d. 95.21 u

PRACTICE PROBLEMS G, p. 233

1. a. 2 mol Al; 3 mol S
   b. 1 mol Na; 1 mol N; 3 mol O
   c. 1 mol Ba; 2 mol O; 2 mol H
2. a. 150.17 g/mol
   b. 85.00 g/mol
   c. 171.35 g/mol

PRACTICE PROBLEMS I, p. 235

1. a. 0.0499 mol
   b. 61 mol
2. a. 1.53×10^{23} molecules
   b. 2.20×10^{23} molecules
3. 1170 g

PRACTICE PROBLEMS K, p. 237

1. a. 81.7% C; 18.3% H
   b. 19.15% Na, 0.840% H, 26.71% S, 53.30% O
2. 43.85% H_2O
3. 96.0 g O; 6.00 mol O

PRACTICE PROBLEMS M, p. 242

1. HO
2. $K_2Cr_2O_7$
3. $CaBr_2$

PRACTICE PROBLEMS N, p. 243

1. C_6H_6
2. H_2O_2

MATH TUTOR PRACTICE, p. 244

1. 43.38% Na; 11.33% C; 45.29% O
2. 61.13% I