

P. 118

- b. Calcium fluoride
- d. calcium bromide
- e. strontium oxide
- g. cesium iodide

- 8 b. manganese (II) chloride
- d. copper (I) oxide
- f. tin (IV) bromide

21.

- b. cobalt (II) phosphate
- d. aluminum sulfate
- f. ammonium sulfite

- 24 b. sulfuric acid
- d. hydroiodic acid
- f. chloric acid
- h. hydrofluoric acid
- i. acetic acid

- 25 b.  $AlI_3$        $Al^{3+} I^-$
- d.  $K_3N$        $K^+ N^{3-}$
- f.  $MgF_2$        $Mg^{2+} F^-$
- h.  $BaH_2$        $Ba^{2+} H^-$

- 27 b.  $NH_4NO_3$        $NH_4^+ NO_3^-$
- d.  $BaSO_4$        $Ba^{2+} SO_4^{2-}$
- f.  $CuOH$        $Cu^+ OH^-$

- 28 b.  $HNO_3$       -ic = -ate
- d.  $H_3PO_4$       -ous = -ite
- f.  $HBr$       hydro = no oxygen
- h.  $HF$

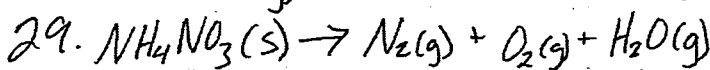
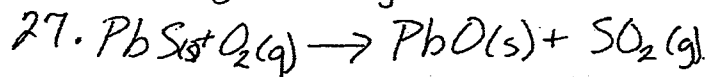
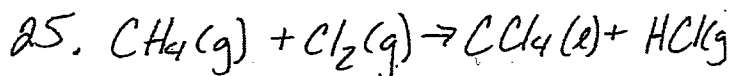
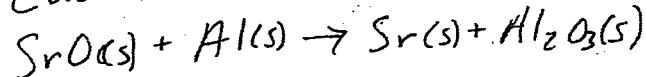
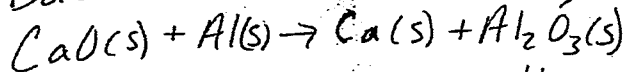
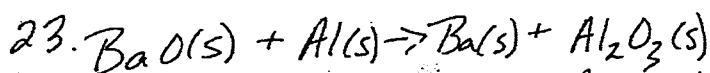
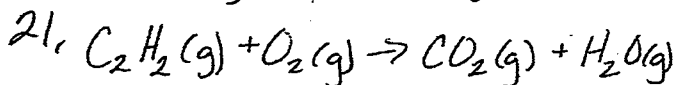
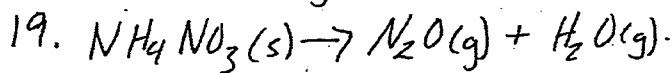
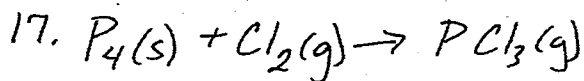
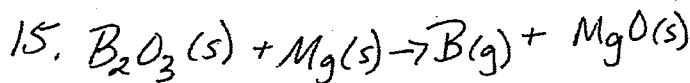
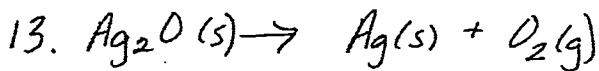
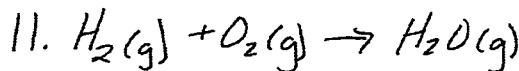
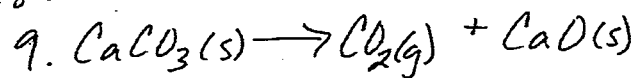
- 29 b.  $Cu_2CO_3$        $Cu^+ CO_3^{2-}$
- d.  $Ca(NO_3)_2$        $Ca^{2+} NO_3^-$
- f.  $Al(OH)_3$        $Al^{3+} OH^-$
- h.  $FeSO_4$        $Fe^{2+} SO_4^{2-}$
- j.  $PBr_5$       nonmetals
- l.  $Ba(C_2H_3O_2)_2$        $Ba^{2+}$   
 $Ba(CH_3COO)_2$        $C_2H_3O_2^-$

P. 234

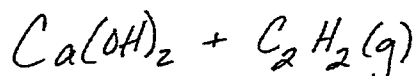
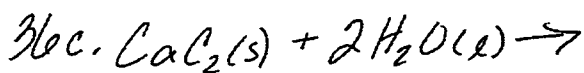
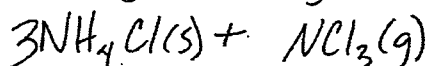
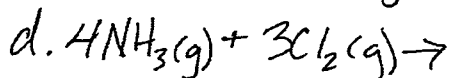
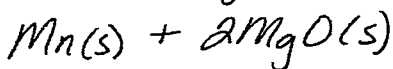
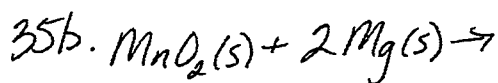
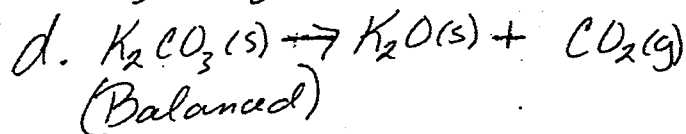
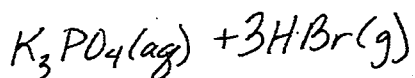
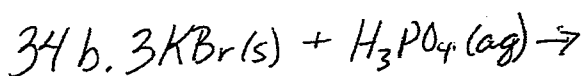
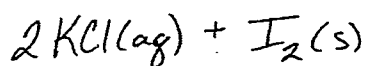
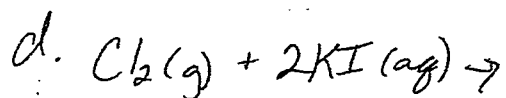
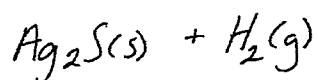
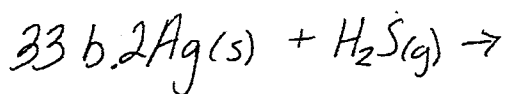
5. reactants, products

7. gaseous

8. water



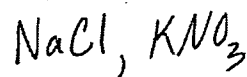
31. subscripts (or formula)



P. 271

4. It separates into positive cations and negative anions.

5. The ions completely separate when dissolved in water.



6.  $\text{NaNO}_3$  is soluble in water.

8b. yes -  $\text{K}^+$  salts are soluble.

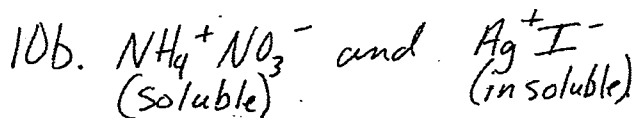
d. no -  $\text{OH}^-$  compounds are insoluble

f. yes -  $\text{NH}_4^+$  salts are soluble

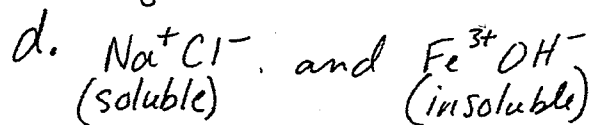
h. no - exception to the rule

9b. Rule 6: most carbonates are insoluble

d. Rule 3: most chlorides are soluble except for  $\text{Ag}^+$



$\text{AgI}(s)$  is silver iodide



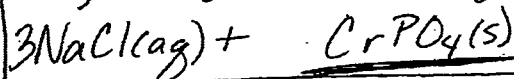
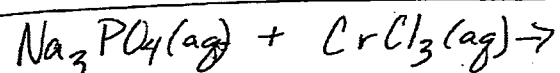
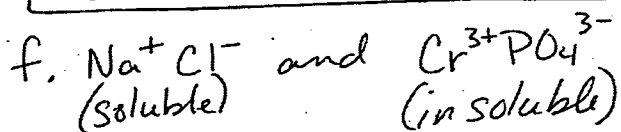
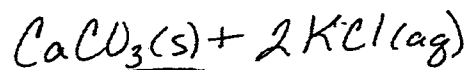
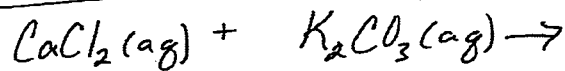
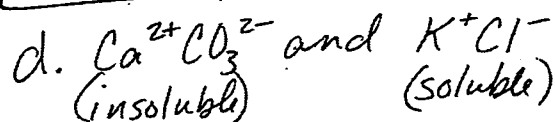
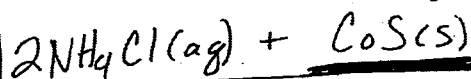
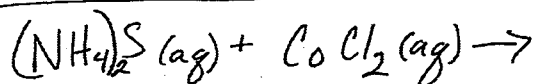
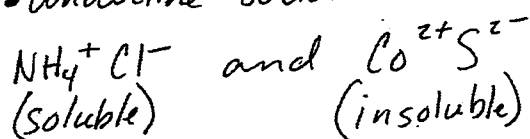
$\text{Fe(OH)}_3$  is iron(III) hydroxide

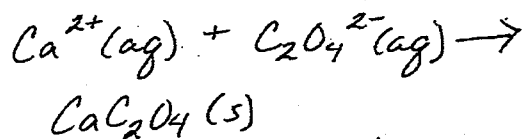
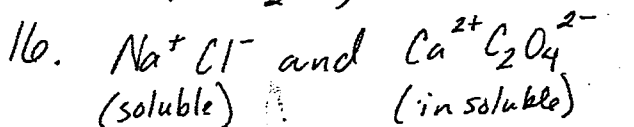
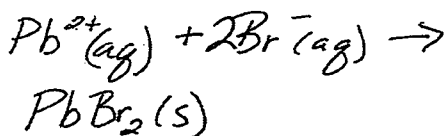
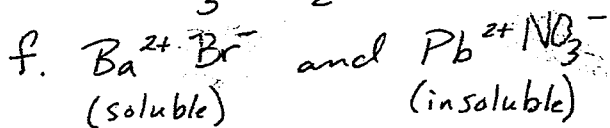
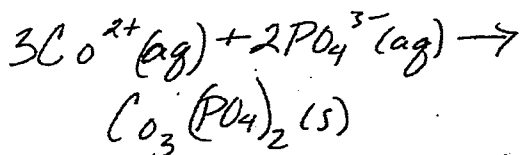
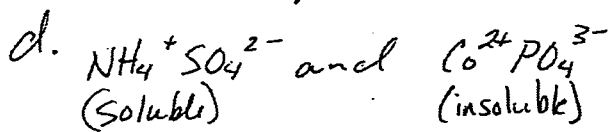
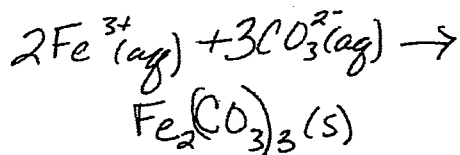
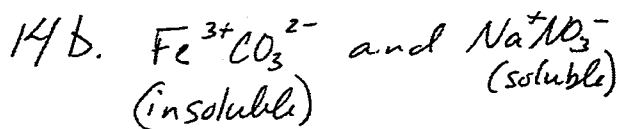
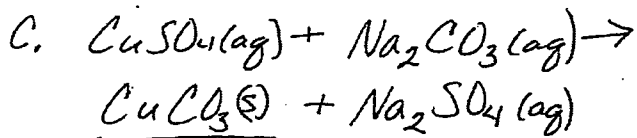
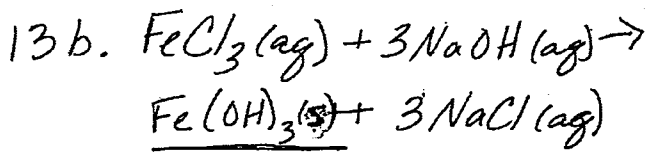
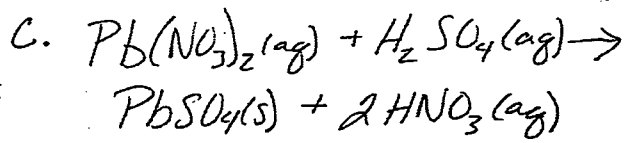
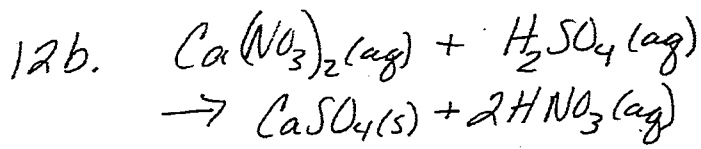


$\text{BaCO}_3$  is barium carbonate

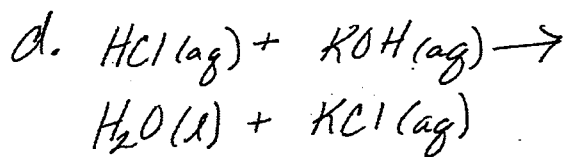
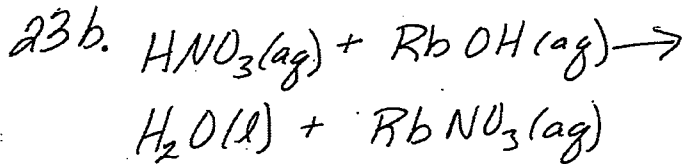
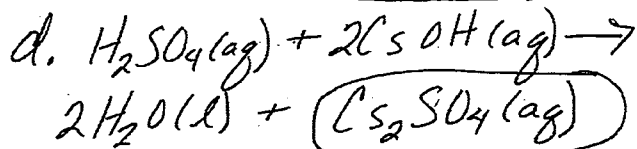
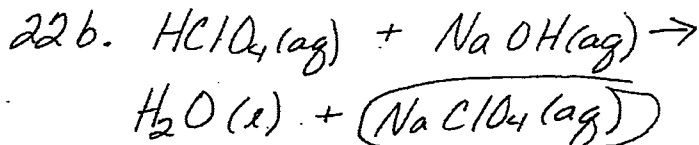
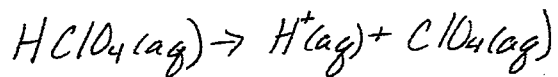
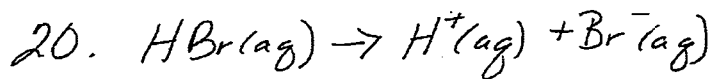
11b. molecular equation (balanced)

• underline solid





17. Strong Acids completely ionize in water. Strong Electrolytes conduct electricity.



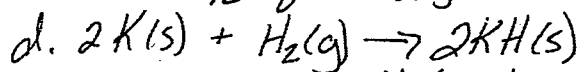
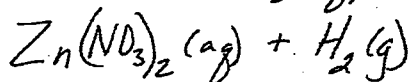
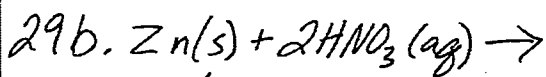
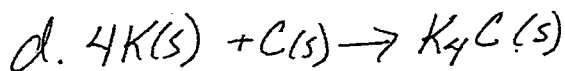
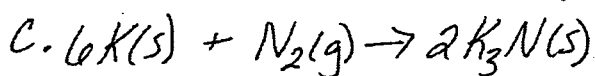
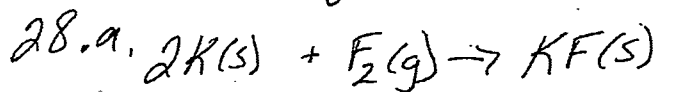
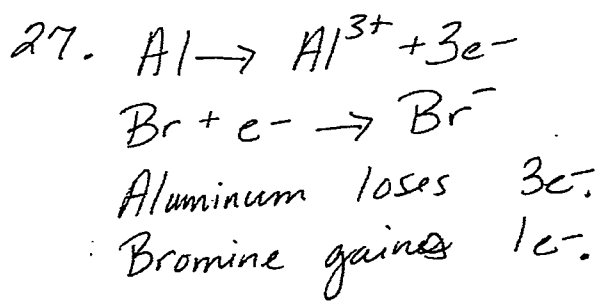
24. A driving force helps convert reactants into products. When metals react with nonmetals, metals lose electrons and nonmetals gain electrons.

ex. Na becomes  $\text{Na}^+$   
Cl becomes  $\text{Cl}^-$

25. Na loses electrons. (metals)  
S gains electrons. (nonmetals)

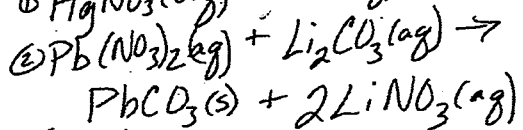
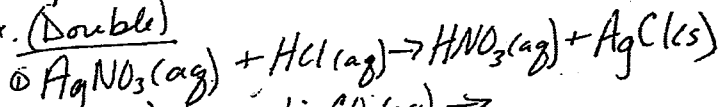
26. K loses one electron.  
S gains two electrons.

Two K react with one S.  
K would become  $\text{K}^+$   
S would become  $\text{S}^{2-}$

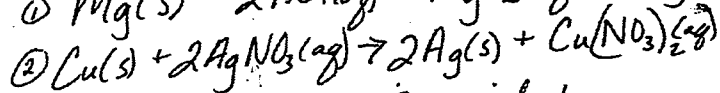
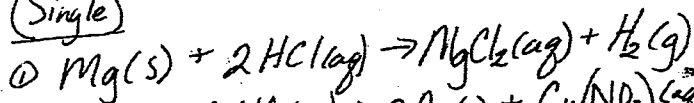


30. Positive ions switch places and bond to the other negative ion.  
 A pure element reacts with a compound and a different pure element is produced in single replacement reactions.

Ex. (Double)



Ex. (Single)



32 a. precipitation

b. redox

c. precipitation

d. acid-base

e. redox

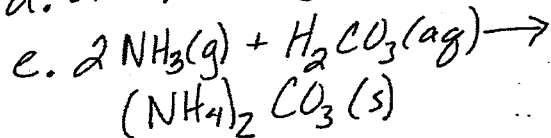
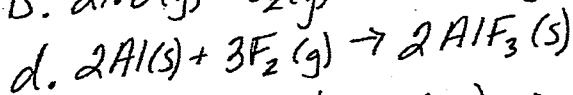
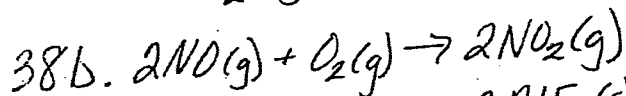
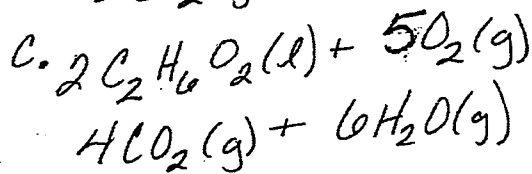
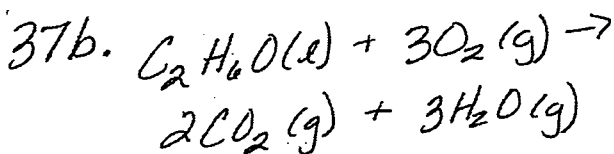
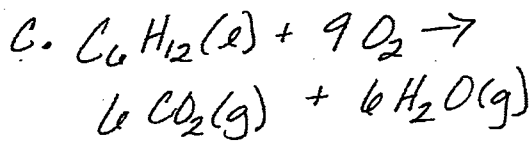
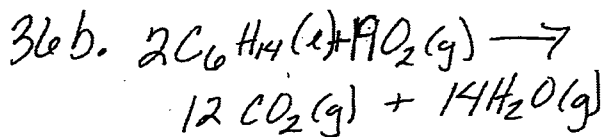
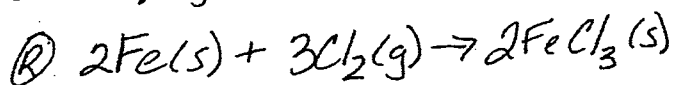
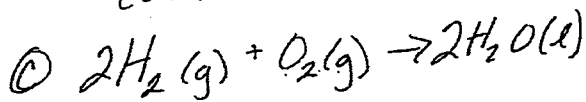
f. acid-base

g. acid-base and precipitation

h. redox

i. precipitation

34. Many reactants produce one compound.  
 It can be a redox and combustion reaction



39 b. Balanced as it is

