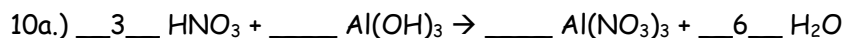
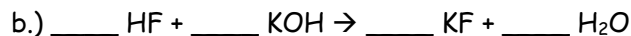


Review - Acids, Bases, and Organics

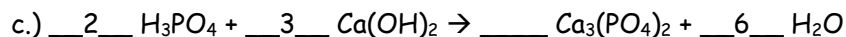
- 1.) State the pH value or range for the following.
 - a.) Neutral = 7
 - b.) Bases = $7 < pH \leq 14$
 - c.) Acids = $1 \leq pH \leq 7$
- 2.) The increase in acidity associated with a decrease in one unit of pH is an increase of 10 or 10^1 .
- 3.) Litmus paper can be used to discover acidic, basic, or neutrality by looking at color change. Litmus is blue in base, red in acid and has no change if neutral.
- 4a.) If the formula contains an H at the beginning than it is an acid.
 - b.) You can identify a base by looking at its formula for an OH at the end. If it contains this then it is a base.
- 5.) State whether the following describes an acid, a base, or both.
 - a.) Sour = acid
 - b.) Bitter = base
 - c.) Slippery = base
 - d.) Conducts electricity = acid and base
 - e.) pH greater than 7 = base
 - f.) Produce H^+ ions in solution = Acid
 - g.) React with metal causing corrosion = acid
- 6.) The two elements present in all hydrocarbons are carbon and hydrogen.
- 7.) The three elements present in all alcohols are Carbon, Hydrogen, and Oxygen.
- 8.) pH of 11 is 100 times or 10^2 times more basic than a pH of 9.
- 9a.) Blue b.) Yellow c.) Pink d.) Clear e.) Blue



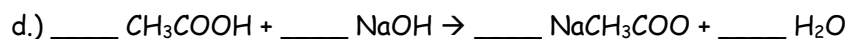
nitric acid aluminum hydroxide aluminum nitrate water



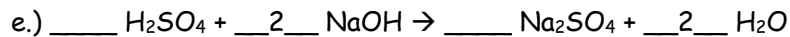
hydrofluoric acid potassium hydroxide potassium fluoride water



phosphoric acid calcium hydroxide calcium phosphate water



acetic acid sodium hydroxide sodium acetate water



sulphuric acid sodium hydroxide sodium sulphate water

11a.) HCl = acid

b.) KOH = base

c.) Sr(OH)_2 = base

d.) MgCl_2 = salt

e.) K_3PO_4 = salt

f.) H_2SO_4 = acid

12a.) CH_3OH = organic (alcohol)

e.) FeBr_3 = inorganic (salt)

b.) $\text{Mg(HC}_2\text{O}_4)_2$ = organic (salt)

f.) CH_4 = organic (methane or natural gas)

c.) SiC = inorganic (carbide)

g.) NH_3 = inorganic (ammonia)

d.) Na_2CO_3 = inorganic (carbonate)

h.) CO = inorganic (carbon oxide)