

Molar Mass

Name: _____

1) Complete each of the following charts, filling in the items listed and determine the molar mass, in grams of each substance.

a) Ammonia, NH_3

Name of component atom	Mass of element	Number of that kind of element in molecule	Mass of all of that element

Overall Molar Mass = _____

b) Sulfuric acid, H_2SO_4

Name of component atom	Mass of element	Number of that kind of element in molecule	Mass of all of that element

Molar Mass = _____

c) Sodium bicarbonate, NaHCO_3

Name of component atom	Mass of element	Number of that kind of element in molecule	Mass of all of that element

Molar Mass = _____

c) Iron (III) oxide, Fe_2O_3

Name of component atom	Mass of element	Number of that kind of element in molecule	Mass of all of that element

Molar Mass = _____

e) Glucose, $C_6H_{12}O_6$

Name of component atom	Mass of element	Number of that kind of element in molecule	Mass of all of that element

Molar Mass = _____

2) Determine the molar masses of the following compounds:

a) methane, CH_4 _____

e) ozone, O_3 _____

b) hydrochloric acid, HCl _____

f) ethanol, C_2H_5OH _____

c) benzene, C_6H_6 _____

g) sodium hydroxide, $NaOH$ _____

d) oxygen gas, O_2 _____

h) acetylene, C_2H_2 _____

3) Determine the formulas and the molar masses of the following compounds:

Name	Formula	Molar Mass
water		
sodium carbonate		
calcium bromide		
copper (II) sulfate		
iron (III) fluoride		
sodium phosphide		
magnesium oxide		
barium chloride		