Name Selected Answers Period _____

College Prep Chemistry of the Earth

Assignment 5E – Molar Mass (*single polyatomic ions*) 20 Points

For the following ionic compounds or covalent molecules, calculate the molar mass

Sodium Hydroxide [NaOH]		
Element	#	Molar Mass
Sodium (Na)		
Oxygen (O)		
Hydrogen (H)		
Sodium Hydroxide [NaOH]		

Zinc(I)Chlorate [$ZnClO_3$]		
Element	#	Molar Mass
Zinc (Zn)	1	65.39 g/mol
Chlorine (Cl)	+ 1	35.45 g/mol
Oxygen (O)	+ 3	16.00 g/mol
Zinc(I) Chlorate [$ZnClO_3$]		148.84 g/mol

$ZnClO_3$

Zn Cl O

1 1 3

65.39

+35.45

+48.00

148.84

Copper(II)Sulfate [$CuSO_4$]		
Element	#	Molar Mass
Copper (Cu)		
Sulfur (S)		
Oxygen (O)		
Copper(II)Sulfate [$CuSO_4$]		

Aluminum Phosphate [$AlPO_4$]		
Element	#	Molar Mass
Aluminum (Al)		
Phosphorous (P)		
Oxygen (O)		
Aluminum Phosphate [$AlPO_4$]		

Iron(II)Carbonate [$FeCO_3$]		
Element	#	Molar Mass
Iron (Fe)		
Carbon (C)		
Oxygen (O)		
Iron(II)Carbonate [$FeCO_3$]		

Tin(II)Dichromate [$SnCr_2O_7$]		
Element	#	Molar Mass
Tin (Sn)	1	118.71 g/mol
Chromium (Cr)	2	52.00 g/mol
Oxygen (O)	7	16.00 g/mol
Tin(II)Dichromate [$SnCr_2O_7$]		334.71 g/mol

$SnCr_2O_7$

Sn Cr Cr O O O O O O O

1 2 2 7

118.71

104.00

112.00

334.71

$Co(HCO_3)_2$ *

Co H C O

1 2 2 6

* 2 HCO_3

$HCO_3 + HCO_3$

2H 2C 6O

58.93

+ 2.02

+ 24.02

+ 96.00

180.97

Cobalt(II) Bicarbonate [$Co(HCO_3)_2$]		
Element	#	Molar Mass
Cobalt (Co)	1	58.93 g/mol
Hydrogen (H)	2	1.01 g/mol
Carbon (C)	2	12.01 g/mol
Oxygen (O)	6	16.00 g/mol
Cobalt(II) Bicarbonate [$Co(HCO_3)_2$]		180.97 g/mol

Sodium Acetate [$NaC_2H_3O_2$]		
Element	#	Molar Mass
Sodium (Na)		
Carbon (C)		
Hydrogen (H)		
Oxygen (O)		
Sodium Acetate [$NaC_2H_3O_2$]		

Rhodium(III) Permanganate [$Rh_2(MnO_4)_3$]		
Element	#	Molar Mass
Rhodium (Rh)		
Manganese (Mn)		
Oxygen (O)		
Rhodium(III) Permanganate [$Rh_2(MnO_4)_3$]		

Iron(II) Phosphate [$Fe_3(PO_4)_2$]		
Element	#	Molar Mass
Iron (Fe)		
Phosphorous (P)		
Oxygen (O)		
Iron(II) Phosphate [$Fe_3(PO_4)_2$]		