

Naming Ionic Compounds

Give the name and molar mass of the following ionic compounds:

	Name	Molar Mass
1)	Na ₂ CO ₃ _____	
2)	NaOH _____	
3)	MgBr ₂ _____	
4)	KCl _____	
5)	FeCl ₂ _____	
6)	FeCl ₃ _____	
7)	Zn(OH) ₂ _____	
8)	Be ₂ SO ₄ _____	
9)	CrF ₂ _____	
10)	Al ₂ S ₃ _____	
11)	PbO _____	
12)	Li ₃ PO ₄ _____	
13)	TlI ₄ _____	
14)	Co ₃ N ₂ _____	
15)	Mg ₃ P ₂ _____	
16)	Ga(NO ₂) ₃ _____	
17)	Ag ₂ SO ₃ _____	
18)	NH ₄ OH _____	
19)	Al(CN) ₃ _____	
20)	Be(CH ₃ COO) ₂ _____	

For the following compounds, give the formulas and the molar masses:

	Formula	Molar Mass
22)	sodium phosphide	
23)	magnesium nitrate	
24)	lead (II) sulfite	
25)	calcium phosphate	
26)	ammonium sulfate	
27)	silver cyanide	
28)	aluminum sulfide	
29)	beryllium chloride	
30)	copper (I) arsenide	
31)	iron (III) oxide	
32)	gallium nitride	
33)	iron (II) bromide	
34)	vanadium (V) phosphate	
35)	calcium oxide	
36)	magnesium acetate	
37)	aluminum sulfate	
38)	copper (I) carbonate	
39)	barium oxide	
40)	ammonium sulfite	
41)	silver bromide	
42)	lead (IV) nitrite	

Naming Ionic Compounds – Answer Key

Give the name and molar mass of the following ionic compounds:

		Name	Molar Mass
1)	Na ₂ CO ₃	sodium carbonate	129 grams/mole
2)	NaOH	sodium hydroxide	40 grams/mole
3)	MgBr ₂	magnesium bromide	184.1 grams/mole
4)	KCl	potassium chloride	74.6 grams/mole
5)	FeCl ₂	iron (II) chloride	126.8 grams/mole
6)	FeCl ₃	iron (III) chloride	162.3 grams/mole
7)	Zn(OH) ₂	zinc hydroxide	99.4 grams/mole
8)	Be ₂ SO ₄	beryllium sulfate	114.1 grams/mole
9)	CrF ₂	chromium (II) fluoride	90.0 grams/mole
10)	Al ₂ S ₃	aluminum sulfide	177.3 grams/mole
11)	PbO	lead (II) oxide	223.2 grams/mole
12)	Li ₃ PO ₄	lithium phosphate	115.7 grams/mole
13)	TiI ₄	titanium (IV) iodide	552.3 grams/mole
14)	Co ₃ N ₂	cobalt (II) nitride	204.7 grams/mole
15)	Mg ₃ P ₂	magnesium phosphide	134.9 grams/mole
16)	Ga(NO ₂) ₃	gallium nitrite	207.7 grams/mole
17)	Ag ₂ SO ₃	silver sulfite	311.9 grams/mole
18)	NH ₄ OH	ammonium hydroxide	35.0 grams/mole
19)	Al(CN) ₃	aluminum cyanide	105.0 grams/mole
20)	Be(CH ₃ COO) ₂	beryllium acetate	127.0 grams/mole

For the following compounds, give the formulas and the molar masses:

		Formula	Molar Mass
22)	sodium phosphide	Na_3PO_4	164.0 grams/mole
23)	magnesium nitrate	$\text{Mg}(\text{NO}_3)_2$	86.3 grams/mole
24)	lead (II) sulfite	PbSO_3	287.3 grams/mole
25)	calcium phosphate	$\text{Ca}_3(\text{PO}_4)_3$	310.3 grams/mole
26)	ammonium sulfate	$(\text{NH}_4)_2\text{SO}_4$	132.1 grams/mole
27)	silver cyanide	AgCN	133.9 grams/mole
28)	aluminum sulfide	Al_2S_3	150.3 grams/mole
29)	beryllium chloride	BeCl_2	80.0 grams/mole
30)	copper (I) arsenide	Cu_3As	265.4 grams/mole
31)	iron (III) oxide	Fe_2O_3	159.6 grams/mole
32)	gallium nitride	GaN	83.7 grams/mole
33)	iron (II) bromide	FeBr_2	215.6 grams/mole
34)	vanadium (V) phosphate	$\text{V}_3(\text{PO}_4)_5$	627.7 grams/mole
35)	calcium oxide	CaO	56.1 grams/mole
36)	magnesium acetate	$\text{Mg}(\text{CH}_3\text{COO})_2$	142.3 grams/mole
37)	aluminum sulfate	$\text{Al}_2(\text{SO}_4)_3$	342.3 grams/mole
38)	copper (I) carbonate	Cu_2CO_3	187.0 grams/mole
39)	barium oxide	BaO	153.3 grams/mole
40)	ammonium sulfite	$(\text{NH}_4)_2\text{SO}_3$	116.1 grams/mole
41)	silver bromide	AgBr	187.8 grams/mole
42)	lead (IV) nitrite	$\text{Pb}(\text{NO}_2)_4$	391.2 grams/mole