

Name: _____

Naming Practice

Name the following substances and determine their molar mass. Indicate if it is ionic, covalent, or an acid.

Type	Name	Molar Mass
_____ 1)	NH ₄ F _____	_____
_____ 2)	H ₂ CO ₃ _____	_____
_____ 3)	NO ₃ _____	_____
_____ 4)	CaCO ₃ _____	_____
_____ 5)	NiPO ₄ _____	_____
_____ 6)	F ₂ _____	_____
_____ 7)	H ₃ P _____	_____
_____ 8)	Li ₂ SO ₃ _____	_____
_____ 9)	HClO ₄ _____	_____
_____ 10)	Zn ₃ P ₂ _____	_____
_____ 11)	Sr(C ₂ H ₃ O ₂) ₂ _____	_____
_____ 12)	C ₄ H ₈ _____	_____
_____ 13)	HClO _____	_____
_____ 14)	Cu ₂ O _____	_____
_____ 15)	Ag ₃ PO ₄ _____	_____
_____ 16)	HClO ₃ _____	_____
_____ 17)	P ₂ Cl _____	_____
_____ 18)	HNO ₂ _____	_____
_____ 19)	SnS ₂ _____	_____
_____ 20)	Ti(CN) ₄ _____	_____
_____ 21)	Pb ₃ N ₂ _____	_____
_____ 22)	HF _____	_____
_____ 23)	Fe ₂ S ₃ _____	_____
_____ 24)	HBr _____	_____
_____ 25)	CoCO ₃ _____	_____

Formulas Practice

Write the formula for the following substances and determine their molar mass. Indicate if it is ionic, covalent, or an acid.

Type	Formula	Molar Mass
_____ 26)	lithium acetate _____	_____
_____ 27)	iron (II) phosphate _____	_____
_____ 28)	Diboron heptafluoride _____	_____
_____ 29)	Acetic acid _____	_____
_____ 30)	titanium (II) selenide _____	_____
_____ 31)	Carbon monoxide _____	_____
_____ 32)	Sulfurous acid _____	_____
_____ 33)	Ammonia _____	_____
_____ 34)	calcium bromide _____	_____
_____ 35)	Hydrocyanic acid _____	_____
_____ 36)	Carbon Tetrahydride _____	_____
_____ 37)	sodium hydride _____	_____
_____ 38)	zinc carbonate _____	_____
_____ 39)	manganese (III) selenide _____	_____
_____ 40)	copper (II) chlorate _____	_____
_____ 41)	Chromic acid _____	_____
_____ 42)	ammonium oxide _____	_____
_____ 43)	Hexaphosphorous tribromide _____	_____
_____ 44)	lead (IV) sulfate _____	_____
_____ 45)	silver cyanide _____	_____
_____ 46)	Hydrochloric acid _____	_____
_____ 47)	strontium acetate _____	_____
_____ 48)	Hydroiodic acid _____	_____
_____ 49)	platinum (II) sulfide _____	_____
_____ 50)	ammonium sulfate _____	_____

Writing and Balancing Equations Practice

- Write out the chemical equation for each of the following chemical reactions.
- Balance each chemical equation.

- 1) Zinc and lead (II) nitrate react to form zinc nitrate and lead.
- 2) Aluminum bromide and chlorine gas react to form aluminum chloride and bromine gas.
- 3) Sodium phosphate and calcium chloride react to form calcium phosphate and sodium chloride.
- 4) Potassium metal and chlorine gas combine to form potassium chloride.
- 5) Aluminum and hydrochloric acid react to form aluminum chloride and hydrogen gas.
- 6) Calcium hydroxide and phosphoric acid react to form calcium phosphate and water.
- 7) Copper and sulfuric acid react to form copper (II) sulfate and water and sulfur dioxide.
- 8) Hydrogen gas and nitrogen monoxide react to form water and nitrogen gas.
- 9) When lithium hydroxide pellets are added to a solution of sulfuric acid, lithium sulfate and water are formed.
- 10) If a copper coil is placed into a solution of silver nitrate, silver crystals form on the surface of the copper. Additionally, highly soluble copper (I) nitrate is generated.
- 11) When crystalline $C_6H_{12}O_6$ is burned in oxygen, carbon dioxide and water vapor are formed.
- 12) Sodium metal and chlorine gas combine to form sodium chloride.

- 13) Aluminum combines with iron (II) nitride to form aluminum nitride and iron.
- 14) Calcium phosphate and carbonic acid are produced when calcium carbonate and phosphoric acid are mixed together.
- 15) Silver sulfide, when heated, decomposes into silver and sulfur.
- 16) In a reaction, a cobalt (II) hydroxide precipitate forms is formed when potassium hydroxide and cobalt (II) phosphate are combined. Potassium phosphate is the aqueous byproduct of the reaction.
- 17) Chromium (II) nitrite and ammonium sulfate react to form chromium (II) sulfate and ammonium nitrite.
- 18) Lead (IV) hydroxide and copper (I) oxide react to form lead (IV) oxide and copper (I) hydroxide
- 19) Potassium nitrate and carbonic acid react to form potassium carbonate and nitric acid.
- 20) Lithium bromide and water are produced when hydrobromic acid and lithium hydroxide react.