Properties Sort

DIRECTIONS: Sort the following properties of molecular (covalent), ionic, and metallic compounds:

Phrases to Sort:

Form crystals with repeating patterns

Good conductor of electricity

High luster

Higher melting and boiling points

Lower melting and boiling points

Malleable and ductile

Poor conductor of electricity

Sea of electrons

Ionic Compounds	Molecular Compounds (Covalent)	Metallic Compounds
• Form crystals with repeating patterns • Good conductor of electricity • Higher melting and boiling points	• Poor conductor of electricity • Lower melting and boiling points	• High luster • Malleable and ductile • Good conductor of electricity • Sea of electrons

Name: _____
Date: _____ Per: _____

Ionic & Covalent Sorting

Objective: To classify substances using their chemical formula and properties

Formulas to sort:

AgF_2
AlF_4K
$BaWO_2$
$BrCl$
$C_6H_{10}O_3$
$CaCl_2$
CH_2O
CH_3COOH
CH_4
FeO_3
HBr
$HgSe$
$LaPO_4$
LiF
$MnCO_3$
$NaCl$
$NaHCO_3$
NH_3
NiS_2
O_2
OF_2
P_2O_3
P_2Se_3
$SeOF_2$,

IONIC			COVALENT (MOLECULAR)	
Formula	Metal Elements	Nonmetal Elements	Formula	Names of Nonmetals
$NaCl$	Na	Cl	**$C_6H_{10}O_3$**	Carbon, Hydrogen, Oxygen
FeO_3	Fe	O	**CH_2O**	Carbon, Hydrogen, Oxygen
AgF_2	Ag	F	**CH_3COOH**	Carbon, Hydrogen, Oxygen
$BaWO_2$	Ba, W	O	**CH_4**	Carbon, Hydrogen
$MnCO_3$	Mn	C, O	**HBr**	Hydrogen, Bromine
$HgSe$	Hg	Se	**NH_3**	Nitrogen, Hydrogen
LiF	Li	F	**O_2**	Oxygen
$LaPO_4$	La	P, O	**OF_2**	Oxygen, Fluorine
AlF_4K	Al, K	F	**P_2O_3**	Phosphorous, Oxygen
NiS_2	Ni	S	**P_2Se_3**	Phosphorous, Selenium
$NaHCO_3$	Na	H, C, O	**$SeOF_2$,**	Selenium, Oxygen, Fluorine
$CaCl_2$	Ca	Cl	**$BrCl$**	Bromine, Chlorine