White Board Practice Types of Bonds and Nomenclature

Write down your answer on the white board and hold it up when you think that you have the answer!

How many valence electrons does **Oxygen have?** 6 valence electrons

What charge will oxygen have when it forms an ion? What will its name be?

Oxide

2-

CCI4 Type of bond? Name?

Covalent,

Carbon tetrachloride

Mg(OH)₂ Type of bond? Name?

lonic, Magnesium hydroxide

NaCl Type of bond? Name?

lonic,

Sodium chloride

NaF **Type of bond? Name?** lonic, sodium fluoride

Ba(NO₃)² Type of bond? Name?

lonic,

Barium nitrate

Li₂SO₄ Type of bond? Name?

lonic, Lithium sulfate

S₂**F**₄ Type of bond? Name?

Covalent,

Disulfur tetrafluoride

CO₃ Type of bond? Name?

Covalent,

Carbon trioxide

How many valence electrons does Sulfur have? 6 valence electrons

What charge will sulfur have when it forms and ion? What will its name be?



sulfide

What are the names for the common ions SO4²⁻ and SO3²⁻

Sulfate and Sulfite

CS₂S **Type of bond? Name?** lonic, **Cesium Sulfide**

How many valence electrons does **Radium have?** 2 valence electrons

What charge will Radium have when it forms and ion? What will its name be?

2+

Radium

CoF₃ Type of bond? Name?

lonic, Cobalt (III) Fluoride

NO₂ Type of bond? Name?

Covalent,

Nitrogen dioxide

How many valence electrons does **Nitrogen have?** 5 valence electrons

What charge will Nitrogen have when it forms and ion? What will its name be?

3-

Nitride

MgCl₂ Type of bond? Name?

lonic,

Magnesium chloride

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$Al_2(SO_4)_3$ Type of bond? Name?

lonic,

Aluminum sulfate

AgNO³ Type of bond? Name?

lonic, Silver nitrate

Rb₃**N** Type of bond? Name?

lonic, Rubidium nitride

H₃P Type of bond? Name?

Covalent,

Trihydrogen monophosphide

H₂O Type of bond? Name?

Covalent,

Dihydrogen monoxide

SF₆ Type of bond? Name?

Covalent,

Sulfur hexafluoride

Na₃N **Type of bond? Name?** lonic, Sodium nitride

How many valence electrons does **Phosphorous have?** 5 valence electrons

What charge will Phosphorous have when it forms and ion? What will its name be? 3-

Phosphide

NO5 Type of bond? Name?

Covalent,

Nitrogen pentoxide

CO **Type of bond? Name?** Covalent,

Carbon monoxide

NBr₃ Type of bond? Name?

Covalent,

Nitrogen tribromide

N₂Cl₇ Type of bond? Name?

Covalent,

dinitrogen heptachloride

SF₆ Type of bond? Name?

Covalent,

Sulfer hexafluoride

P4O10 Type of bond? Name?

Covalent,

Tetraphosphorous decoxide

Nal Type of bond? Name?

lonic, Sodium iodide

BN Type of bond? Name?

Covalent, Boron mononitride

NH4F Type of bond? Name?

Ionic, Ammonium fluoride

Al(OH)₃ Type of bond? Name?

Ionic, Aluminum hydroxide

SiO₂ Type of bond? Name?

Covalent, Silicon dioxide

How many valence electrons does Rubidium have?

1 valence electron

What charge will Rubidium have when it forms and ion? What will its name be?

Rubidium, 1+

MgCO₃ Type of bond? Name?

lonic,

Magnesium carbonate

AS4O₁₀ Type of bond? Name?

Covalent,

Tetrarsenic decoxide

LiNO₃ Type of bond? Name?

lonic, Lithium nitrate

HCI Type of bond? Name?

Covalent, Hydrogen monochloride

N₂S₅ Type of bond? Name?

Covalent,

Dinitrogen pentasulfide

ICI2 Type of bond? Name?

Covalent, Iodine dichloride

FeCl₃ Type of bond? Name?

lonic, Iron (III) Chloride

Na₂CO₃ Type of bond? Name?

Ionic, Sodium carbonate

CaSO₄ Type of bond? Name?

Ionic, Calcium sulfate

Fe₂**O**₃ Type of bond? Name?

lonic, Iron (III) Oxide

CO₃N₂ Type of bond? Name?

lonic, Cobalt (II) nitride