



# Types of Compounds

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Video Workbook with Dr. B

In order to correctly name chemical compounds you must first identify the type of compound.

To do this you much know which elements are metals and non-metals.

Hydrogen (H) is usually considered a non-metal.

Metals      Metalloids      Non-Metals

Transition Metals

## Essential Video: [Types of Compounds](#)

Below are the most common types of compounds you'll work with. Two key types are:

Ionic = Metal + Non-Metals(s)

Covalent (Molecular) = Non-Metal + Non-Metal

Type	Description	Examples
Ion	Element with a Charge	Sodium ion, Na <sup>+</sup> Chloride ion, Cl <sup>-</sup>
Polyatomic Ion	Group of Elements with a Charge	Carbonate ion, CO <sub>3</sub> <sup>2-</sup> Ammonium ion, NH <sub>4</sub> <sup>+</sup>
Binary Ionic	M + Single NM	Sodium chloride, NaCl Aluminum oxide, Al <sub>2</sub> O <sub>3</sub>
Ionic with Transition Metal	Transition M with NM or Polyatomic Ion	Iron (III) chloride, FeCl <sub>3</sub> Manganese (II) sulfate, MnSO <sub>4</sub>
Molecular (Covalent)	NM + NM	Dinitrogen pentoxide, N <sub>2</sub> O <sub>5</sub> Carbon monoxide, CO
Organic	Compounds consisting primarily of C and H.	Methane, CH <sub>4</sub> Ethane, C <sub>2</sub> H <sub>6</sub>



Practice: Identify the types of compounds.



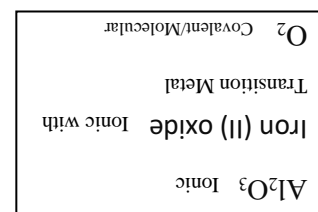
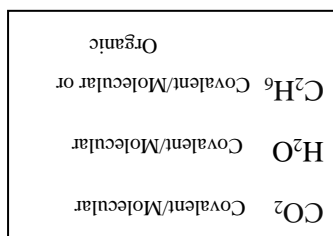
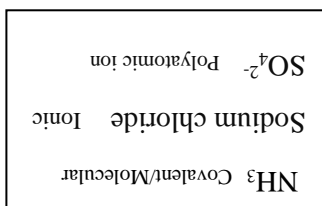
Sodium chloride



Iron (II) oxide



Answers



Report errors and suggestions to [DrB@breslyn.org](mailto:DrB@breslyn.org)



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