

Name : Date :

Comparing Ionic and Covalent Bonds Worksheet

Differentiate between covalent and ionic bonds in the form of a table.

Ionic Bonds	Covalent Bonds

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Ionic Bonds	Covalent Bonds
In an ionic bond, an atom transfers one (or more) of its electrons to another to achieve stability. This leads to the formation of an anion (a negatively charged ion) and a cation (a positively charged ion)	In a covalent bond, two (or more) atoms share their electrons to achieve stability.
Occurs between a metal and a non-metal	Occurs between two non-metals
No definite shape	Has a definite shape
High melting point	Low melting point
High boiling point	Low boiling point
High polarity	Low polarity
At room temperature, these compounds tend to be solid	At room temperature, these compounds tend to be gaseous or liquid
Highly soluble in water	Tends to have low solubility in water and other polar solventst
Tends to be great conductors of electricity and heat, especially in liquid or solution form	Tends to be poor conductors of heat and electricity and thus make great insulators
Examples: NaCl	Examples: HCl