

For each of the following statements, write "I" for ionic, "C" for covalent and "M" for metallic.

- _____ electrons are shared
- _____ electrons delocalized
- _____ electrons are transferred
- _____ crystal lattice
- _____ luster
- _____ nonconductors in the solid, molten, and dissolved state
- _____ malleable and ductile
- _____ high melting and boiling points
- _____ volatile liquids and gases
- _____ weaker forces between atoms
- _____ hard—difficult to crush

What is the difference between a cation and an anion?

In a polar covalent bond, the electrons are shared _____. In a nonpolar covalent bond, the electrons are shared _____.

What type of bond will form between the following pairs of atoms?

H and F

Na and O

Cl and Cl

Fe and S

Si and O

Mg and O