Physical Properties of Substances							
Type of substance	**Example**		**Physical State (at room T)**	**Melting Point**	**Mechanical Properties**	**Electrical Properties**	**Solubility in water (Y/N)**
IONIC (Ionic Network)	-Metallic oxides -Hydroxides -Binary salts -Oxysalts	-MgO -NaOH -Na_2S -$CaCO_3$	Solid	High	Brittle	Insulator Conductor when melt or dissolved in water	Yes
COVALENT MOLECULAR (Molecules)	-Nonmetallic oxides -Binary acids -Oxoacids	-CO_2 -HCl -H_2SO_4	Any state Solid / Liquid / Gas	Low	Soft	Insulator	Polar molecules only
COVALENT NETWORK STRUCTURES (Covalent Network)	-Diamond -Quartz		Solid	High	Hard	Insulator	No
METALLIC (Metallic Network)	-Metallic elements	-Fe	Solid	High	Malleable Ductile	Conductor	No