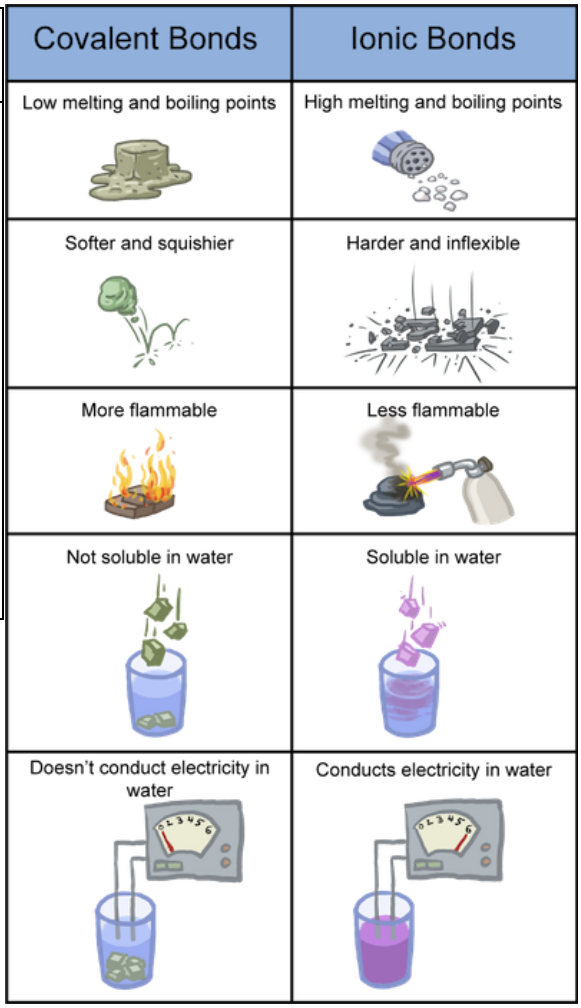
SNC1D6 Name:

Ionic vs. Covalent/Molecular Compounds

Covalent/Molecular Compounds	Ionic Compounds
- elements are joined by a covalent bond where electrons are shared between elements - bonding occurs between two non-metal atoms - compounds are typically liquid or gas at room temperature - low boiling point	- elements are joined by an ionic bond where electrons are transferred from one element to another - bonding mainly occurs between metal and non-metal atoms - compounds are solid at room temperature - high boiling point



Compound	State s/l/g	Solubility in Water Soluble/Insoluble	Conductivity Electrolyte/Non-Electrolyte	Hardness	Melting Point (°C)	Ionic or Molecular?
Table Salt	s	Solube	Electrolyte	Hard	801	Ionic
Sugar	s	Solube	Non-electrolyte	Hard	160	Molecular
Parafin Wax	s	Insoluble	Non-electrolyte	Hard	46	Molecular
Coconut Oil	l	Insolube	Non-electrolyte	Viscous*	24	Molecular
Mineral Oil	l	Insolube	Non-electrolyte	Viscous*	-4	Molecular
Bar soap	s	Soluble	Electrolyte	Hard	160	Molcular

*Viscous – ability of a substance to flow or pour readily (molasses is viscous whereas water is less viscous)