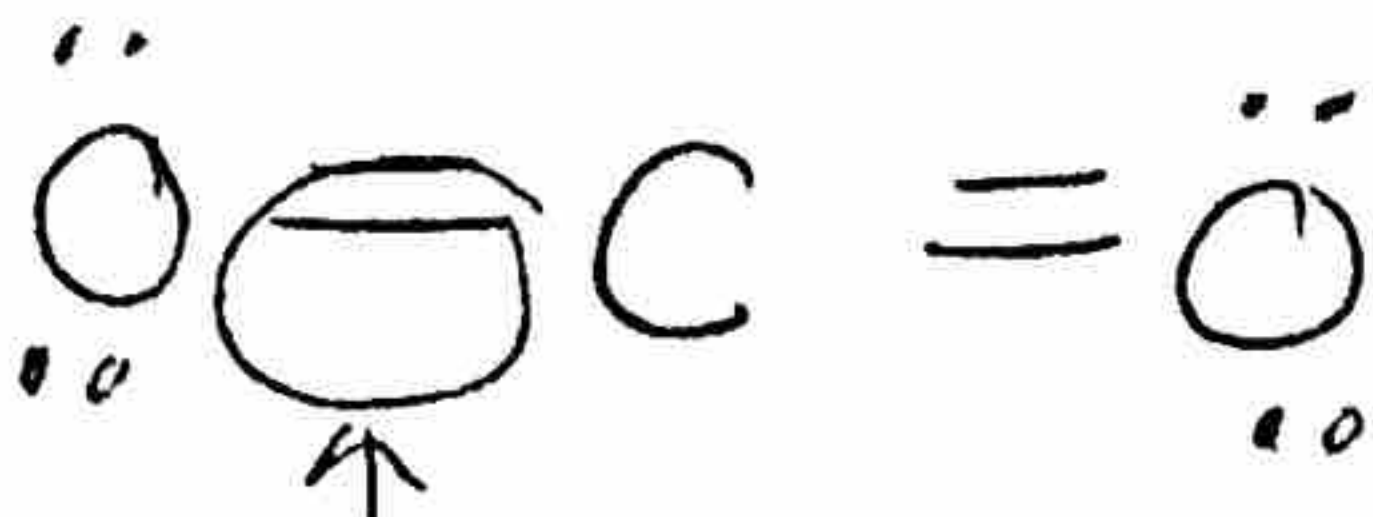
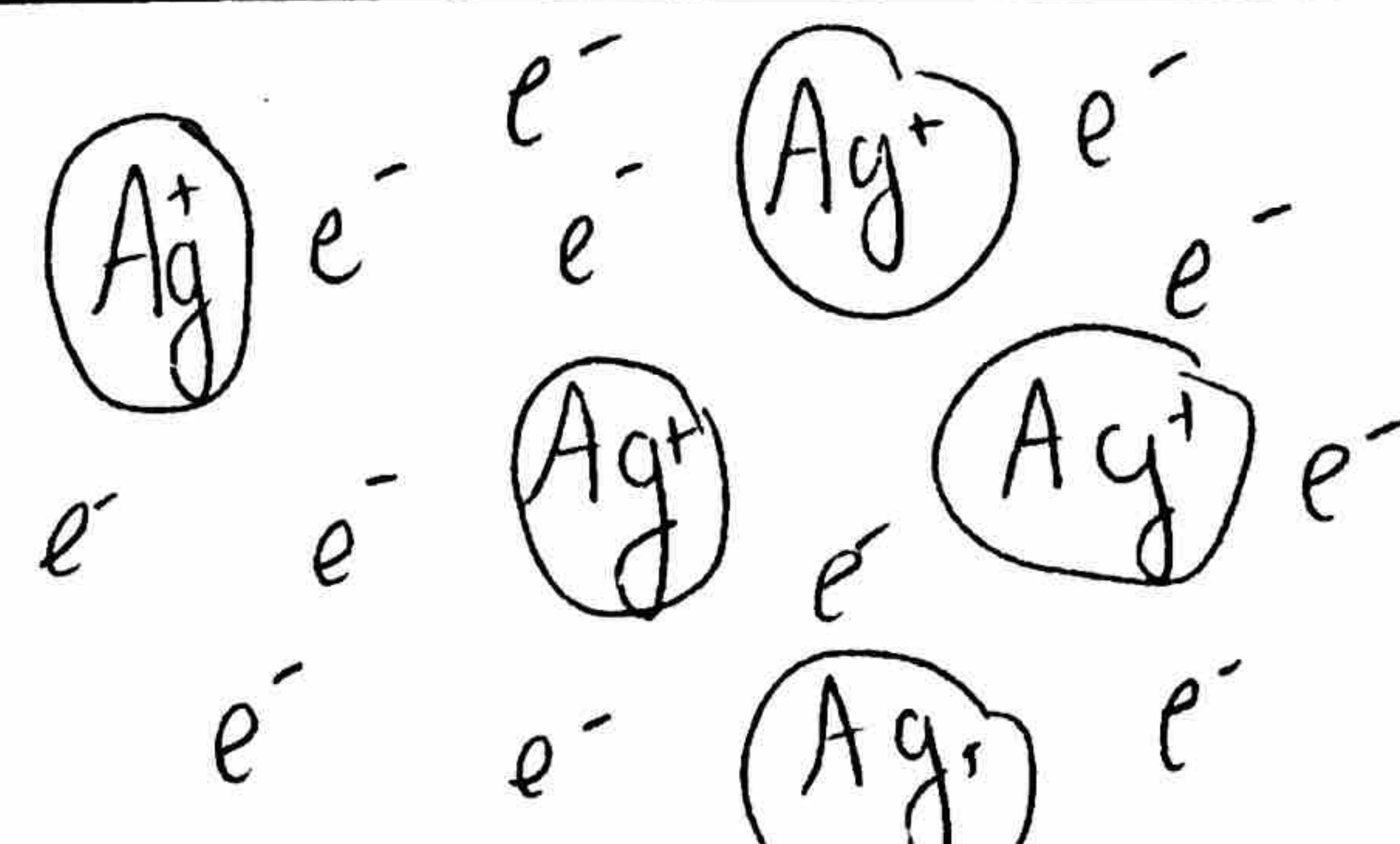


Key

DEFINITION	CHARACTERISTICS
the transfer of electron from cation to anion	- high melting points / boiling points - conducts electricity has liquid and when dissolved in water
EXAMPLES/MODELS	NON-EXAMPLES
NaCl KNO ₃ CuCl ₂	NO ₂ CH ₄
<p style="text-align: center;">$\text{Na} \cdot \rightarrow \cdot \overset{\text{v}}{\underset{\text{v}}{\text{Cl}}} \cdot \rightarrow [\text{Na}]^+ [\overset{\text{v}}{\underset{\text{v}}{\text{Cl}}} \cdot]^-$</p>	

DEFINITION	CHARACTERISTICS
<p>the sharing of electrons between two nonmetals</p>	<ul style="list-style-type: none"> - low melting and boiling points - does not conduct electricity
<p>EXAMPLES/MODELS</p>	<p>NON-EXAMPLES</p>
<p>NO₂ CH₄ XeF₂</p>	<p>NaBr CuCO₃</p>
<p style="text-align: center;">Covalent Bonding</p> <div style="text-align: center;">  <p>each bond is made up of two electrons, one from each atom</p> </div>	

DEFINITION	CHARACTERISTICS	
<p>the attraction between metal atoms</p>	<ul style="list-style-type: none"> - malleable - ductile - conducts electricity in all states of matter - not soluble 	
<p>Metallic Bonding</p>		
EXAMPLES/MODELS	NON-EXAMPLES	
<p>Ag Cu Na</p>	<p>NaCl HCl NO₂</p>	
 <p>The diagram illustrates metallic bonding with several silver ions (Ag⁺) represented as circles. Surrounding these ions are numerous electrons (e⁻), representing a delocalized electron sea. The ions and electrons are arranged in a roughly hexagonal pattern.</p>		