

## Electrons and Chemical Change

**Directions:** Complete this worksheet as you observe how **electrons** and **electricity** can cause chemical change.

1. Draw lines to match the following substances to the correct category:

<u>Substance:</u>	<u>Category:</u>
H <sub>2</sub> O	Metal element
Cl <sub>2</sub>	Non-metal element
Cu	Covalent Compound
CuCl <sub>2</sub>	Ionic Compound

2. Observe **images** (on slide) of the following 3 substances/mixtures. Describe what you see, as well as any other properties you *know* for these materials. Then create **particle diagrams**, including **electrons** (use your “Electron Glue” reading):

<u>Copper (Cu)</u>	<u>Copper Chloride (CuCl<sub>2</sub>)</u>	<u>Copper Chloride dissolved in water (CuCl<sub>2</sub> in H<sub>2</sub>O)</u>
<i>Description/properties:</i>	<i>Description/properties:</i>	<i>Description/properties:</i>
<i>Particle diagram, including electrons:</i>	<i>Particle diagram, including electrons:</i>	<i>Particle diagram, including electrons:</i>

3. You will be applying an *electrical current* to a solution of copper chloride. Draw a diagram of the experimental setup:

