Electrolytes: Weak and Strong

SCH3UE_07- 08

The following demonstration will allow us to examine the electrical conductivity of various pure liquids and aqueous solutions.
The conductivity will be tested using an electrical conductivity apparatus with a low resistance incandescent bulb.
Complete the following table during the demonstration.

Name of Chemical	**Formula**	**Brightness of Bulb**	**Inference**
Hydrochloric acid			
Acetic acid			
Sodium hydroxide			
Ammonia			
Copper (II) sulphate			
Sodium chloride			
Tap water			
sulphuric acid			
potassium hydroxide			
Cyclohexane			

Answer the following questions

1. What general conclusion can be made regarding the conductivity of the liquids and solutions?

2. What accounts for the conductivity of solutions of “electrolytes” ?

3. Account for the difference in the brightness of the light bulb observe.

4. What are weak and strong electrolytes ?

5. What are electrolytes and non-electrolytes?

6. What conditions are required for a substance to behave as an electrolyte ?

7. What is the difference between ‘ionization’ and ‘dissociation’ ?