Experiment 6 Worksheet: <u>Conductivity of Ionic Solution</u>

<u>Purpose:</u> (*A statement should be made here regarding what your experiment is designed to accomplish.*)

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<u>Procedure:</u> (*Describe here how you went about completing your experiment. Use enough detail that someone could repeat it, if necessary. Also reference any books or manuals you may have used to assist you.*)

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<u>Data:</u>

(*Complete the Table by calculating the volume of stock solution and water needed to make the series of solution of known concentration by serial dilution.*)

Concentration Needed	Volume of Stock Solution needed (mL)	Volume of Water Needed (mL)
0.00 M NaCl	0	50
0.025 M NaCl		
0.050 M NaCl		
0.075 M NaCl		
0.10 M NaCl	50	0

(*Complete the Table using experimental results*)

Sample	Conductivity Values (V)
0.0 M NaCl	
0.025 M NaCl	
0.050 M NaCl	
0.075 M NaCl	
0.10 M NaCl	

What is the overall trend in the conductivity of the solutions based on your observations? _____

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(*Complete the Table below***)**

Fruit or Vegetable	Conductivity Values (V)
Banana	
Orange	
Potato	

Which of the above fruits and vegetables has the greatest conductivity? _____

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Calculations: **(***Show at least one calculation of how you determined the volume of stock solution and water to be added to make your series of salt solutions.)*

Conclusions: (*Summarize your results here, report whether or not the concentrations marked on the unknowns were correct and discuss possible errors that may have occurred during the testing.*)