Experiment 8 Worksheet: Redox Reactions: Creation of a Potential Series

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

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**Procedure:** *(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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**Data:** *(Complete the Table using experimental results)*

<table>
<thead>
<tr>
<th>Metal Solution</th>
<th>Appearance</th>
<th>Potential Versus Mg(NO₃)₂</th>
<th>Potential Versus Fe(NO₃)₃</th>
<th>Potential Versus Cu(NO₃)₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mg(NO₃)₂</td>
<td>XXXXXXXXXX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fe(NO₃)₃</td>
<td></td>
<td>XXXXXXXXXX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cu(NO₃)₂</td>
<td></td>
<td></td>
<td>XXXXXXXXXX</td>
<td></td>
</tr>
</tbody>
</table>
Calculations:
Show the order of potentials for the three metals from most oxidizing to least oxidizing:

Show the order of potentials for the three metals from most reducing to least reducing:

Conclusions: (In your conclusion discuss the relationship between the weakest reducing metal and the strongest oxidizing metal. Summarize your results here and discuss possible errors that may have occurred during the testing.)