**5.11 HONORS CLASS WORKSHEET – GALVANIC CELLS**

1. **The Daniell cell**

A single Daniell cell can generate a voltage of 1.1 V

Answer the following questions about the Daniell cell:

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| What is the oxidation half-equation? |  |
| What is the reduction half-equation? |  |
| What is the net ionic equation? |  |
| What is the anode made of? Over time, what happens to this anode? |  |
| What is the cathode made of? Over time, what happens to this cathode? |  |
| In which direction do electrons move through the wire? |  |
| Which electrode is the positive terminal of the cell? |  |
| Which electrode is the negative terminal of the cell? |  |
| What do the sulfate ions do, and why? |  |

1. **General questions about cells**

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| How many Daniell cells will you need to create a 9 volt battery? |  |
| Why do all cells eventually stop producing energy? |  |
| What do you think happens when cells are re-charged? |  |
| Why are some cells non-rechargeable? |  |