

Data:

Metal 1	Metal 2	Voltage

4. Pick the pair of metals that produced the most charge. Design several experiments to see if you can improve the voltage in the pair. Describe clearly what you will do for each:

Experiment a:

Experiment b:

Experiment c:

Data: Voltages for

Experiment a: _____

Experiment b: _____

Experiment c: _____

Analysis:

1. Which combination of metals produced the most energy?
2. Write the balanced equation for the redox reaction that is occurring in the pair above.
3. Which combination of metals produced the least energy?
4. Write the balanced equation for the redox reaction that was occurring in this pair.
5. Why did we have to polish the metals with steel wool?
6. Why did occasionally get a negative charge and have to change the leads?
7. What experiment worked best in your class to increase the voltage?
8. In a car battery, a strong acid is used instead of salt water. What might that do to the strength of the battery?
9. Why might disposal of batteries be a problem?
10. What creates electricity?

Conclusion: 2 things you learned.