



1. Give the date of the penny: _____; the full diameter of the washer: _____; sketch the washer in the space at the right, including a tracing of the thickness.

2. Complete the table below, using the full name of each item, and the short name to use on the TI-73 (6 letters or less).

Long Name of Item to Test	Short Name

3. Voltage without the electrolyte (like the potato): _____

4. Which item produced the highest voltage? _____

5. Which item produced the lowest voltage? _____

6. As the experiment progressed, did you see any change in the condition of the washer or the penny? _____

7. Place the data you have collected in the table at the right.

8. How would you compare the items that were tested, from the information shown on the graph?

Item	Voltage



9. Sketch the graph in the space at the right.

10. Which of these graphs is most revealing? Why?



11. Sketch your best graph to date, if you have not done so yet, and label it. Explain why you like it best.



12. Which item made the best battery? Why do you believe this?

13. If you are collecting 100 data points every 99 seconds, how many hours, minutes, and seconds will this take?

_____ hours; _____ minutes; _____ seconds

14. What appears to be happening to the voltage as time goes on?

15. Explain the horizontal lines on the graph, if there are any.

16. At what time was the voltage first at its minimum? _____

17. How much did the voltage drop over the time observed? _____

18. When had the voltage dropped half that amount? _____

19. State the rule (equation) shown in Y1: _____



20. Complete the table.

Time (minutes)	Voltage
1	
30	
50	
77	
100	
	0.555
1000	
2000	

21. Check your values in the table above using the **Solver** option. Explain any disagreement.

22. What is the time that would need to pass so that the voltage is zero?
