



Emf, Terminal Voltage and Internal Resistance

Guide Questions

40% of the Written Report (Group Report) grade

1. What happens to the terminal voltage across the Daniell cell or the dry cell as the current through it increases?
2. From the voltage-current graphs you've drawn, what is the unit of the slope? What physical quantity does the slope represent? Is the slope of the voltage-current curve positive or negative?
3. From the voltage-current graphs you've drawn, what is the unit of the y-intercept? What physical quantity does the y-intercept represent?
4. If the current flowing through a battery is from negative to positive terminal, is the battery supplying or absorbing power to/from the circuit? Is the terminal voltage of the battery less than or greater than its emf?
5. If the current flowing through a battery is from positive to negative terminal, is the battery supplying or absorbing power to/from the circuit? Is the terminal voltage of the battery less than or greater than its emf?