Independent and Dependent Variables

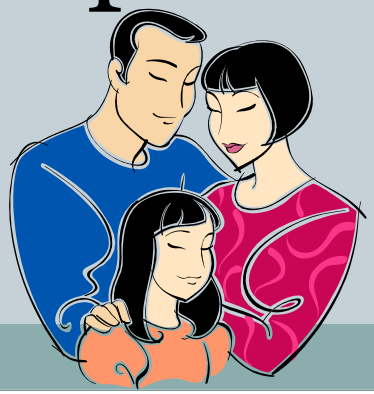
INDEPENDENT AND DEPENDENT VARIABLES ARE RELATED TO ONE ANOTHER.

Independent Variable

- The Independent part is what you, the experimenter, changes or enacts in order to do your experiment.

Dependent Variable

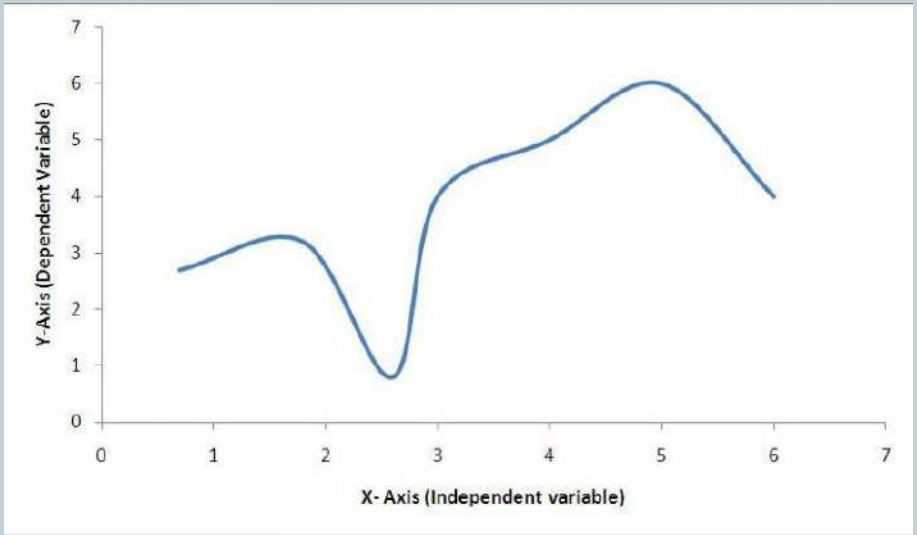
- The dependent variable is what changes when the independent variable changes - the dependent variable *depends* on the outcome of the independent variable.



- For instance: if you were measuring the growth rate of plants under full sunlight for 8 hours a day versus plants that only have 4 hours of full sunlight per day, the amount of time per day of full sunlight would be the independent variable - the variable that you control. The growth rate of the plants would be ***a*** dependent variable.

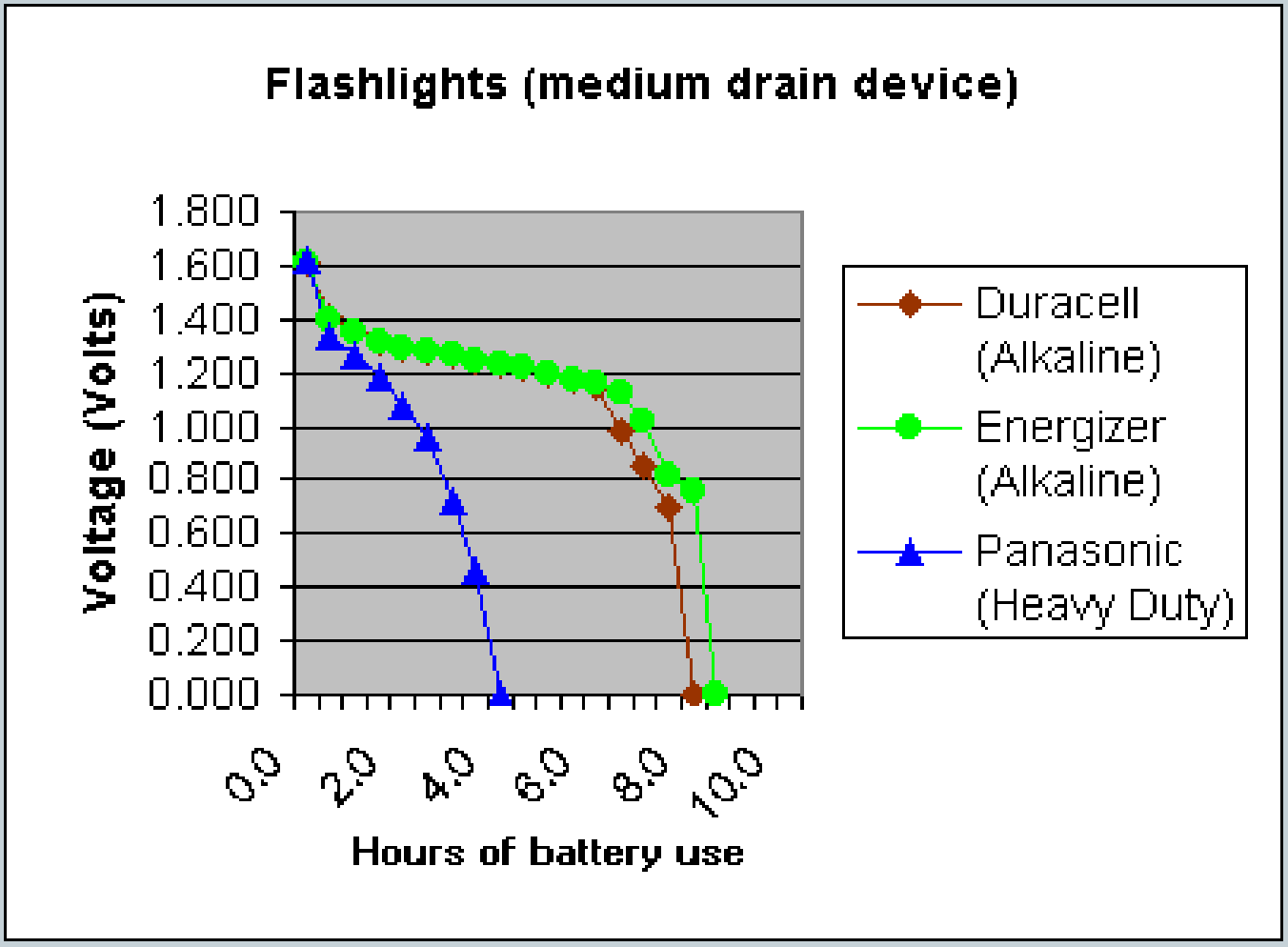
Independent	Dependent
Cause	Effect
Before	After
Input	Output
What you do	What happens

- Independent = input a.k.a. x-value
  Dependent = output a.k.a. y-value
- Dependent variables go on y axis. Independent variables go on x axis.



- Time is almost always independent and that is why it nearly always on x axis. Time doesn't depend on anything in most experiments. But many things depend on it. Those will go on the y axis.

Independent? Dependent?



Independent? Dependent?