

# Understanding Your Variables

## INDEPENDENT variable

X axis

Cause

Manipulated Variable

The thing you are  
messin' with

**VS**

## DEPENDENT variable

Y axis

Effect

Responding Variable

How the experiment's  
variable changes

**\* IF time is one of your variables it is almost ALWAYS the CAUSE (X axis).**

Ex: As time passes, hair gets longer.

As time passes, children get taller.

Amount of days in school, amount of pages read.

More examples of Manipulated vs Responding:

- amount of sunlight hours..... leaf size on plant
- amount of fertilizer..... thickness of stems
- amount of water..... height of plant