August 5th 2016

RIGHT NOW

- Please get out a pencil/pen your notebook, folder, and any signed forms.
- Before class begins write down what the focus of our work time today is as well as your homework.
- **WT:** Lab Safety and Scientific Method
- **HW:** Create a lab safety poster/meme/slogan to encourage proper safety protocols in a lab.

Warm Up

- What is the independent Variable?
- What is the dependent Variable?

I will be able to:

explain the process that scientific method uses as well as the safety protocols that are necessary to operating in a science lab.

Independent & Dependent Variables

AUGUST 5th 2016

Can you explain how the cartoon above relates to science?

Application: Give examples of each step of the Scientific Method from the cartoon.

Name _____ Aug 6th 2015

Directions: Finish filling in the variable chart below.

Independent Variable	Dependent Variable
Cause	
	After
Input	
What I did	
Manipulated Variable	Responding Variable

INDEPENDENT VARIABLE

What I CHANGE

DEPENDENT VARIABLE

What I OBSERVE

CONTROLLED VARIABLE

What I KEEP THE SAME

Independent

Dependent

Whether I make a good grade depends on how long I study!

Independent Variable = How much I study

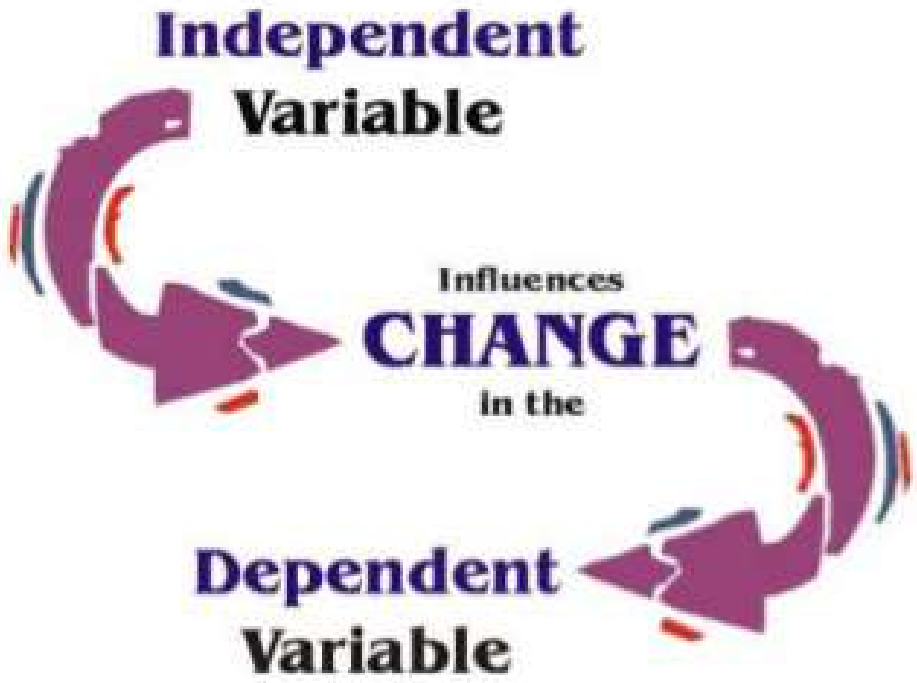
Dependent Variable = Good grade

Control Group = Normal study time

Experimental Group = Additional study time

Independent (X) vs. Dependent (Y) Variables

- **Independent variable *(X)*** = the 'cause.' Variable that influences.
- **Dependent variable (Y)** = the 'effect.' Variable that is *influenced by* the cause; it is *dependent* on the cause.
- ***INCA:*** the ***IN***dependent variable is the ***CA***use.



NOW we are going to apply the variables to a graph so that changes can be more easily observed.

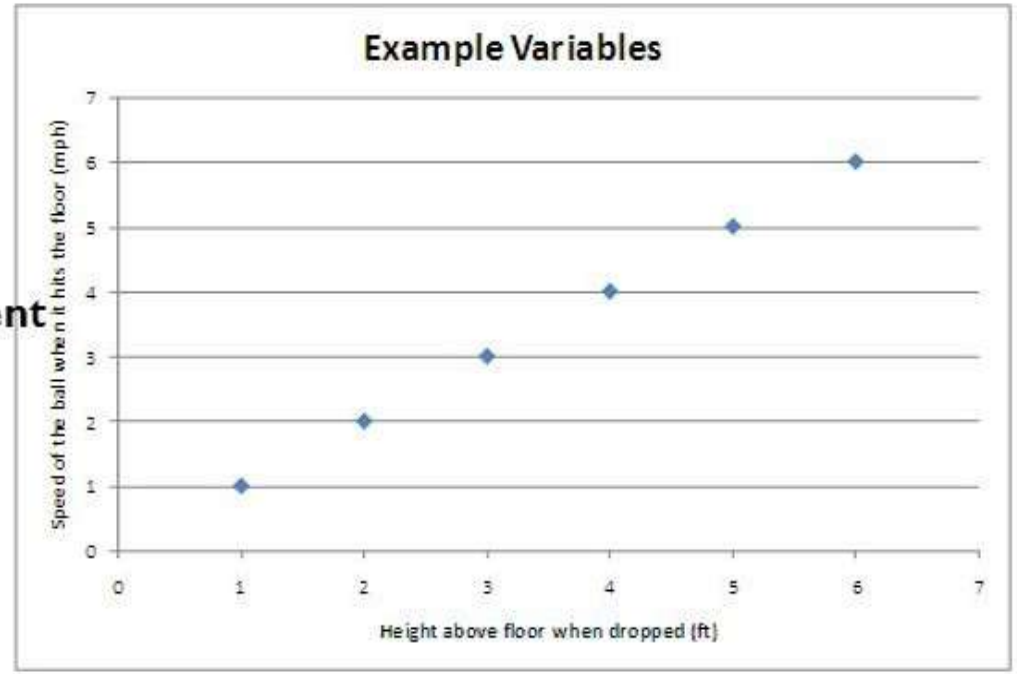
USE DRY/MIX to help set up your graph.

DRY MIX

Dependent variable

Responding

Y-Axis



Dependent Variable

Manipulated

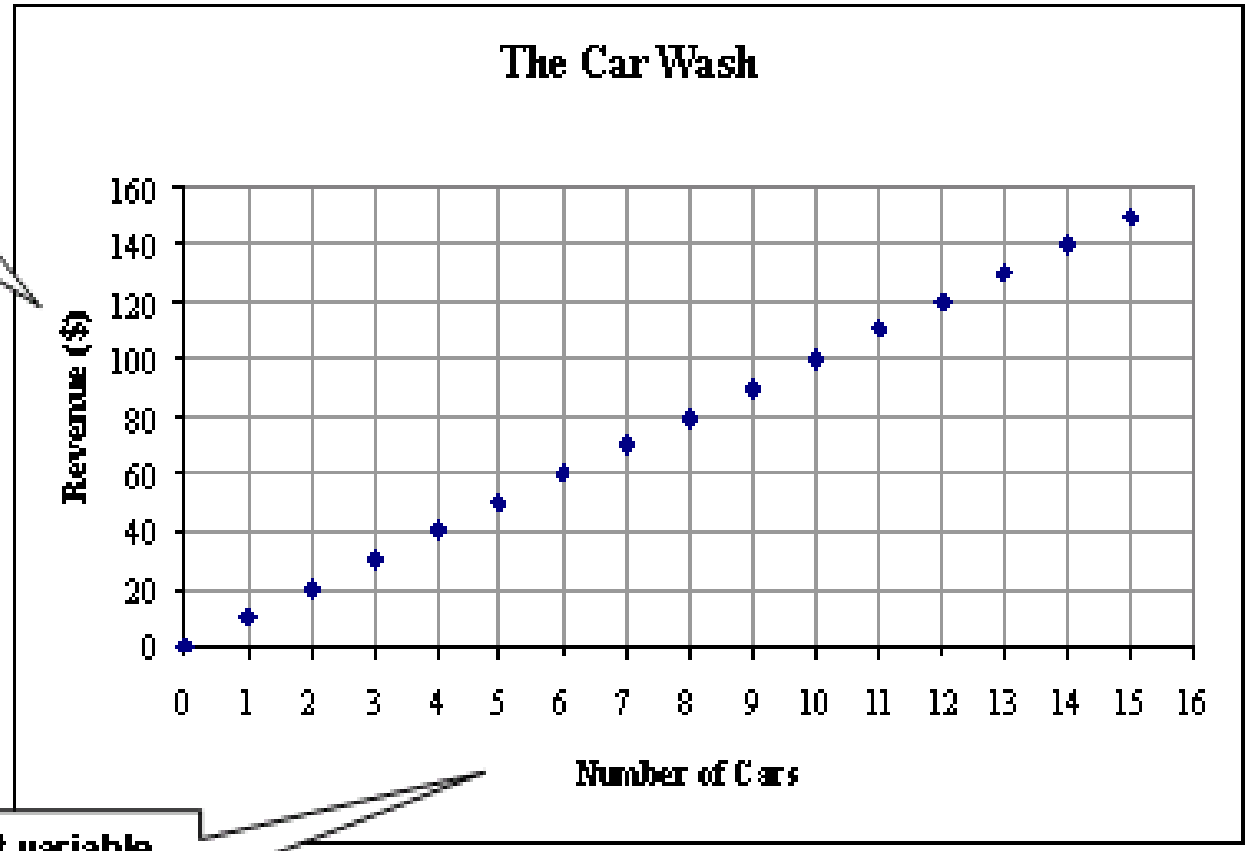
Independent variable

X-Axis

Independent Variable

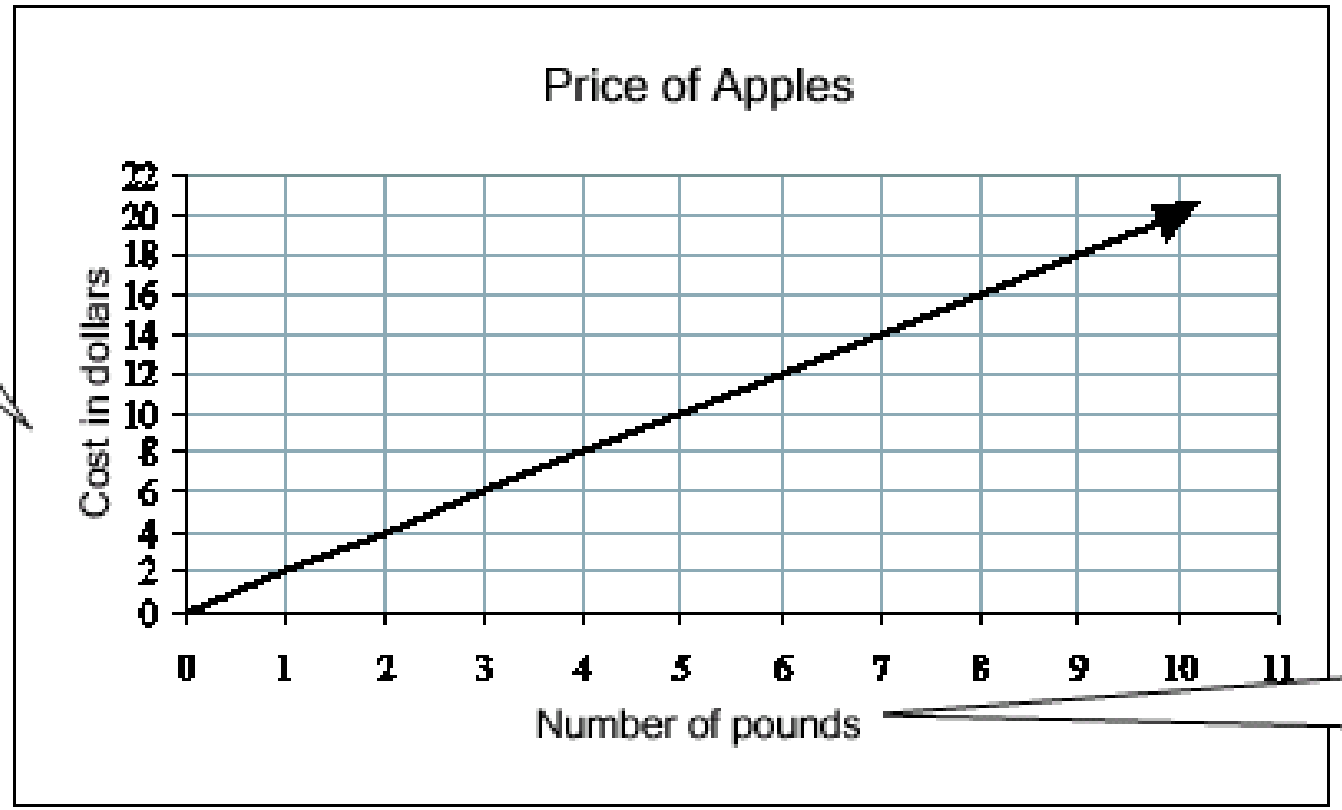
Example 1:

Dependent variable – The amount of money raised **depends** on the number of cars washed.



Independent variable - the number of cars washed

Example 2:



Dependent variable – The cost of the apples **depends** on the number of pounds of apples purchased.

Independent variable – the number of pounds purchased.