

ROBOT NOTES

Manipulated Variable (Independent Variable)-

The variable in an experiment that you are **CHANGING** or **MANIPULATING**. ex) Chew Time

Responding Variable (Dependent Variable)-

The variable in an experiment that you are **MEASURING** or that is the **OUTCOME** of the experiment. ex) Gum Mass

Control Variable-

The variable(s) that stay the same throughout the experiment. ex) Wrapper Mass

ROBOT NOTES

Control Group-

A group that does not receive the manipulated (independent) variable so it can be compared to the group that does.

Confounding Variable-

A variable that is not controlled in an experiment that can affect the results of the experiment.

How are we going to remember all this?

DRY MIX

D dependent
R responding
Y y-axis

M manipulated
I independent
X x-axis

"Basically the independent is what you are doing and what you are trying to figure out is the dependent."

Which type of graph should I make?

Bar- When the manipulated variable is qualitative data.

Plotted Points- When the manipulated variable is quantitative data.

When should I connect the points on a plotted point graph?

Continuous Data- Quantitative data that is being MEASURED.

(Space on the line between the points makes sense)

ex) Wheels & Distance graph

Discrete Data- Quantitative data that is being COUNTED.

(Space between the points doesn't makes sense)

ex) How many fish caught graph