

Variables in a Scientific

Independent Variable

An Independent Variable is the variable that you change in an experiment on purpose. It is the variable that is being tested. You can only change one thing per test.

Just like nothing happens unless a wizard casts a spell...
Nothing happens unless a scientist changes it from normal.

We ask: What does the scientist change?

Dependent Variable

A Dependent Variable is the variable that is changed because of the independent variable. This variable is what we measure and usually includes quantitative data.

Just like we use a ruler to measure objects...
We measure the results of an experiment.

We ask: What are we measuring?

Control Variables

A Control Variable is the variable that you keep the same in your investigation. Everything stays the same except the independent variable. This shows the results are caused by changing only the independent variable.

Just like twins look the same...
Some parts of your investigation look the same.

We say: Matchy, Matchy

