

Vocabulary



controlled variable factor that does not change in an experiment

Most experiments have several controlled variables. They must stay the same so that you can be certain which factor is causing the results that you see.

dependent variable factor that is measured in an experiment

The dependent variable depends on changes to the independent variable. For example, if you wanted to see how the mass of a bottle rocket affects how high it can fly, you would vary the mass of the bottle rocket (the independent variable). The height of the bottle rocket's flight however, would be the dependent variable, or the factor that was measured.

independent variable factor in an experiment that changes

By changing only one variable at a time, and keeping the others the same, you can be more sure which variable is causing your results. Often, scientists repeat experiments, doing each step exactly the same in each test. This helps them to check the accuracy of their results.

Newton's third law of motion For every action, there is an equal and opposite reaction.

When you jump on a trampoline, you push down on the trampoline. The trampoline pushes up on you, and you bounce into the air. Pushing down is the action. Bouncing up is the reaction.