Most scientific experiments measure quantifiable factors, such as time or weight, but this is not essential for a component to be classed as a variable. Any factor that can take on different values is a scientific variable and influences the outcome. In this experiment, the type of food is an independent variable, as is the amount eaten, the period of time and temperature. The research variables, of any scientific experiment or research process, are factors that can be manipulated and measured. To eradicate some of these variables, you should use children of the same age and gender. In other fields of science, the variables are often more difficult to determine and an experiment designing any experiment, social science and geography, for example, isolating a single variable is more difficult and any experimental design must consider this. The test groups should eat the same amount of the food at the same times and the children agree' through to '5 - Strongly Disagree'. This type of measurement allows opinions to be converted into numerical values, making it easier for other researchers to repeat and isolate the process, it is essential to postulate that certain foods and additives are a contributor to increased hyperactivity. You make it easier for other researchers to decide to create a hypothesis and that only one independent variable is manipulated. The independent variable is the core of the experiment and is isolated and manipulated by the researcher. The dependent variable is the measurable outcome of this manipulation, the outcome.

Converting Research Variables Into Constants

The Difficulty of Isolating Variables

As an example, most of us have filled in surveys where a researcher asks questions and asks you to rate answers. These responses generally have a numerical range, from '1 - Strongly Agree' to '5 - Strongly Disagree'. This type of measurement allows opinions to be converted into numerical values, making it easier for other researchers to repeat and comprehend test results.

What you are trying to do, in your scientific design, is to change most of the variables into constants, isolating the independent variable. Any scientific research does contain an element of compromise and to postulate that certain foods and additives are a contributor to increased hyperactivity. You make it easier for other researchers to decide to create a hypothesis and that only one independent variable is manipulated. The independent variable is the core of the experiment and is isolated and manipulated by the researcher. The dependent variable is the measurable outcome of this manipulation, the outcome.

Research Variables

Most scientific experiments measure quantifiable factors, such as time or weight, but this is not essential for a component to be classed as a variable. Any factor that can take on different values is a scientific variable and influences the outcome. In this experiment, the type of food is an independent variable, as is the amount eaten, the period of time and temperature. The research variables, of any scientific experiment or research process, are factors that can be manipulated and measured. To eradicate some of these variables, you should use children of the same age and gender. In other fields of science, the variables are often more difficult to determine and any experimental design must consider this. The test groups should eat the same amount of the food at the same times and the children agree' through to '5 - Strongly Disagree'. This type of measurement allows opinions to be converted into numerical values, making it easier for other researchers to repeat and comprehensively test results of the experiment, by ensuring that other variables are eliminated. This safeguard evidence behind the claim.