

Example Hypotheses

1. If I open the faucet, then it will increase the flow of water.
 - *faucet opening size is the independent variable*
 - *flow of water is the dependent variable*
2. Raising the temperature of a cup of water will increase the amount of sugar that dissolves.
 - *temperature is the independent variable*
 - *the amount of sugar is the dependent variable*
3. If a plant receives fertilizer, then it will grow to be bigger than a plant that does not receive fertilizer.
 - *having fertilizer is the independent variable*
 - *plant size is the dependent variable*
4. If I put fenders on a bicycle, then they will keep the rider dry when riding through puddles.
 - *having fenders is the independent variable*
 - *the dependent variable is how much water splashes on the rider*

Notice that in each of the examples it will be easy to measure the independent variables. This is another important characteristic of a good hypothesis. If we can readily measure the variables in the hypothesis, then we say that the hypothesis is testable.

Not every question can be answered by the scientific method. The hypothesis is the key. If you can state your question as a testable hypothesis, then you can use the scientific method to obtain an answer.