

# An Example of an Experiment Using the Scientific Method

## 1. Identify a Problem

*I want to study botany. I want to find out what things affect the growth of plants.*

*My Study Question is "What effect will prolonged periods of rock music have on the growth of plants?"*

## 2. Collect Information

*I collected information by talking to my neighbor who is a gardener, reading three books on plants, visiting a nursery, and reading two pamphlets that I got from the Farm Bureau. I also talked to the owner of the local music store, but he didn't have any information.*

## 3. Develop a Hypothesis

*I think that when I expose some plants to rock music they will grow less than similar plants that are not exposed to rock music.*

## 4. Conduct the Experiment

*Materials: bean seeds, potting soil, flowerpots, radio*

*Procedure: Using 10 flowerpots, I planted 2 bean seeds in each one. I put 5 pots on a window sill away from the radio. I put 5 pots on a window sill where they got the same amount of light as the first group of 5 but were close to the radio. I exposed the second set of pots to rock music for 2 hours each day. I kept a daily journal for each pot and was sure all plants got the same amount of light and water.*

## 5. Conclusion



*There was no difference between the plants that were exposed to rock music and the ones that weren't. Music is not one of the variables that affects plant growth. This means that when you place your plants in your house, you don't have to worry about whether they are close to the stereo. You can also put plants in a teenager's room.*