



# Scientific Method Example



## Does right/left handed mean right/left sided?

*The experiment can be done with a group of students or individually. However, the experiment should be done **without telling the participants** what the experiment is about as it could skew the results.*

**Question:** I wonder if people are right or left sided, not just right or left handed. Do people prefer their right eye, their right ear, and their right foot if they are right handed? Or their left side if they are left handed?

**Information or Research Needed:** I will need to determine a method to test for preferred use of eye, preferred use of foot, and preferred use of ear.

**Hypothesis:** *If people are right handed, then I think people also are right sided and prefer to use their right foot, their right eye, and their right ear. (Note: it doesn't matter if I'm right or wrong, what matters are the results.)*

**Experiment/Research:** I will need to have 10 –20 participants to do the experiments with. I will use a chart to record the responses. I should find both right and left handed people and both male and female participants.

**To determine eye dominance:** The participant will be asked to look through a cylinder (toilet paper roll), they will be asked to read something from a book with one eye, covering the other eye, they will be asked to look through a hole in a piece of paper.

**To determine ear dominance:** The participant will be asked if I can whisper something in their ear, they will turn toward their preferred ear, they will be asked to cover one ear as I softly play music, they will be asked to put their ear up to a wall to see what they can hear and they will be asked to listen to a sea-shell.

**To determine foot dominance:** The participant will be asked to kick a ball, the participant will be asked to hop on one foot, the participant will be asked to step up on a stool (or a bench, whatever is handy).

**To determine hand dominance:** I will ask the participant if they are right or left handed and which hand they write with.

To ensure I don't skew the results, I will make sure everything is centered and not positioned on one side or the other.

**Conclusion:** In order to determine my conclusion, I will need to analyze the results to see if my participants have the same preferred side as they do hand. My results may indicate a percentage do or my results may show that the results are inconclusive, that some do and some don't. However, I will have an answer after conducting my experiments and analyzing the data.