

Reaction Time

You will need to work with a partner during this activity in order to measure your reaction time. One of you will be the dropper and the other will be the catcher, then you will switch “jobs.”

1. The dropper should hold the meter stick vertically so that the end marked 0 is pointing downward. The catcher needs to have his/her fingers below the bottom of the meter stick, ready to catch it, but not touching it.
2. The dropper should drop the meter stick without giving the catcher any warning. Record the location on the meter stick in meters where the catcher grabbed it as it was falling. Calculate the catcher’s reaction time.
3. Try it again, but this time the dropper should give the catcher a “warning,” for example, by counting “3-2-1-drop” or using some other phrase that indicates that the meter stick is about to be dropped. Again, record the location on the meter stick in meters where the catcher grabbed it. Calculate the catcher’s reaction time.
4. Was there a difference in the two times? If yes, why, if not, why not?
5. Now switch “jobs” and repeat the activity. Which of you had a faster reaction time? What would account for any differences?