

## Reaction Time Lab

Question – Is there a relationship between handedness and reaction time? (Do right handed people have a shorter reaction time for their right hand than their left and do left handed people have a shorter reaction time for their left hand than their right?)

Rough Procedure Outline – Drop a ruler between your lab partner’s fingers(left and right hand) and measure the distance dropped. Have your lab partner drop a ruler through your fingers and measure the distance dropped. Use  $d = \frac{1}{2} a t^2$  to get the reaction time. For this lab use  $a = 9.80 \text{ m/s}^2$ . (Note: Sometimes the symbol “g” is used for the acceleration due to gravity so the equation looks like  $d = \frac{1}{2} g t^2$ .)

Share the data and try to comment on the question above.

### Write-up

Submit a *Results* section using the template below and a *Conclusions* section.

### Results

#### *Raw data*

Person’s name \_\_\_\_\_ then indicate dominant hand \_\_\_\_\_

Trial	Hand	Distance (cm)

#### *Calculated data*

Name	Hand	Average Distance (cm)	Reaction time (s)

### Sample calculation for reaction time

Show equation used and how you solve for time in the equation, then substitute a distance from your data (telling which data point it is) and solve for time. You do not show every calculation.

Bar graph of average reaction time vs. left and right hands for each person.