

Prac: Reaction Time

Name: _____

In this prac you'll see a ruler being dropped and have to catch it. The prac is about reaction time – how long it takes your body to see the ruler begin to move and close your hand. We will be comparing the reaction time when you use your left and right hands.

Aim: (C grade) _____

The aim needs to summarise what you want to learn from the prac. It starts with "To".

Equipment and Materials: (E grade)

This is a list of things you needed to do the experiment

Method: (C grade)

Write a numbered list of steps that were done in this prac

Results:

Table (D for recording, C for average and reaction time)

Use this formula to calculate reaction time:

$$t = \sqrt{\frac{d}{50g}}$$

where

d = distance ruler dropped in cm

g = acceleration due to gravity ($9.8m/s^2$)

t = reaction time in seconds

Trial number	Distance (left hand) (cm)	Distance (right hand) (cm)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Average		
Reaction time		

Discussion:

1. Which hand was faster? (D grade)

Which hand did you think would be faster? Why did you think that? (C grade)

2. Did other students get similar results? What was similar and what was different? (C grade)

3. Were the distances the ruler fell similar or different from one trial to the next? (B grade)

4. What body parts affected the reaction time? Do some research to find out how much time might have been used in each part. (A grade)

Conclusion (C grade):

Write one sentence that relates to the aim.
