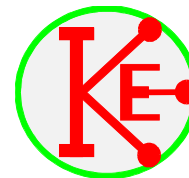


Reaction Timer.



This device enables you to measure a person's reaction time.

- 1). Complete the table below to show how far an object falls within each time, near to the surface of the earth.

Assume that the acceleration of gravity on Earth is 9.8m/s^2 .

Time (s)	Distance (cm) = $490 \times t^2$
0	
0.02	
0.04	
0.06	
0.08	
0.10	
0.12	
0.14	
0.16	
0.18	
0.20	
0.22	
0.24	

- 2). Extend the outer lines of the 'ruler strip' to the top and bottom of the page. Cut out the ruler strip, fold down the middle and then stick together to form a strip. The strip is marked every 2mm, with 1cm large marks.
- 3). Accurately mark onto the strip the times corresponding to the distances in the table above, starting with 0 at the bottom mark of the strip.
- 4). Secure a coin (2p) to the bottom (Time = 0) end of the strip using sticky tape to finish the Reaction Timer.

To use the reaction timer:-

- 1). Hold the reaction timer vertically and at the opposite end of the reaction timer to the 2p coin.
- 2). Arrange for your subject to hold their first finger and thumb opposite the 0 mark on the reaction timer, but not touching it.
- 3). When you release the reaction timer, the subject should try to stop the reaction timer by closing their first finger and thumb.
- 4). The time indicated on the reaction timer where their finger and thumb are represents their reaction time.

