O WOW! Moment— Reaction Time Action

Children's Museum Houston

Can you calculate your reaction time in seconds with just a meter stick?

MATERIALS

- Meter Stick
- Paper
- Pen
- Calculator

GET SET UP

1. You will need a partner—they help test your reaction time.
2. The tester—your partner—holds the meter stick in the air with the zero at the bottom.
3. You will hold your thumb and index finger just below the zero of the meter stick. You are NOT to touch the stick.
4. The tester will let go of the meter stick without warning.
5. You will grab the meter stick as quickly as possible.
6. Record the distance of the meter stick just above your index finger to the nearest tenth of a centimeter. For example—18.5cm.
7. Do the experiment twice more and record each distance. Then find the average of your three distances. You find the average by adding the three distances and dividing by three. Round this number to the nearest tenth.
8. To calculate your reaction time: Take your average distance in centimeters and divide by 490. Then take the square root of that answer. That is your reaction time in seconds!
9. Now trade spots so that you are the tester and your partner is the one being tested.
10. You can also try to mess with reaction time through distraction—dimming of lights, yelling, or whatever nefarious tricks you can come up with. But do this after you have both done your 3 normal tests.