



Reaction Time

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Take action to time your reaction!

Materials Needed

- ruler with centimeter marks
- table
- paper and pen for charting results
- a different colored sticker or pen for each person

Instructions

1. Has anyone ever said, "Think fast!" and then thrown something at you? How quickly or slowly you react is called your reaction time.
2. To measure your reaction time, ask a friend to help.
3. You will need the reaction time chart below.
4. Then draw a graph to record your results. Along the left side of the paper (the y axis) write the times from the reaction time chart in separate rows. Across the bottom of the paper (the x axis) write "Trial 1", "Trial 2", and "Trial 3" in three separate columns. You will record each other's reaction times on this graph to compare them when you finish testing.
5. Now, sit in a chair with your arm resting on a table so that your wrist hangs off the edge.
6. Your friend will hold the ruler so that it dangles above your hand. Make sure the end of the ruler is hanging between your thumb and finger.
7. When your friend lets go of the ruler, try to catch it between your thumb and finger as quickly as you can.
8. Compare the marking on the ruler where your fingers caught it to the reaction time chart. Your reaction time is how long it took for your eyes to tell your brain that the ruler was falling and then for your brain to tell your fingers to catch it.
9. Make a mark on your graph next to the matching reaction time over the Trial 1 column.
10. Try catching the ruler twice more, marking the results on your graph each time. Give your friend (or friends) a chance to test their reaction times.

Reaction Time Chart	
DISTANCE ON RULER	REACTION TIME
5 centimeters	.10 seconds
10 centimeters	.14 seconds
15 centimeters	.18 seconds
20 centimeters	.20 seconds
25 centimeters	.23 seconds
30 centimeters	.25 seconds

Who has the best reaction time? Do your reaction times improve with practice? Did your reaction times vary a lot or were they pretty much the same from trial to trial? Are older kids faster than younger kids? How about your parents? Come up with your own questions. Then test them out, and [send your results to ZOOM](#).