



Brain Processing of Senses Activity for Kids



Reaction Time DIY



Duration: **15–30 min**



Difficulty: **Easy**



Cost: **\$0–5**

Test how long it takes your nervous system to process and send signals!

Material List

- 1** Science notebook
- 1** Pencil
- 1** Ruler
- 1** A chart of reaction time vs. distance [download PDF here](#)

Instructions

- 1** Ask a friend to hold a ruler in front of you. They should hold it with 2 fingers at the top.
- 2** Pretend like you are going to pinch the bottom of the ruler.
- 3** Your friend should drop the ruler without warning and you should pinch it as fast as you can!
- 4** Write down how many centimeters passed your fingers before you caught it.
- 5** Look up the distance on the provided chart to find out your reaction time.
- 6** Repeat this a few more times, then switch with your friend.

How It Works

When the ruler is dropped, your eyes see it, but it takes time for the nervous system to send that information to your brain. Then your brain needs to process it and decide what to do. In this case—grab it! A signal is then sent to your hand, and the muscles contract, allowing you to catch the object. The amount of time this takes is called reaction time, and you can improve it with practice!

