

Get the Point(s) (This station requires two people)

Part 1: Experiment

- Partner 1: Have your partner hold out their arm towards you and look away. Roll up their sleeve if necessary.
- Partner 2: Hold one of the “pin blocks” in your hand. Lightly touch the inside of your partner's arm with one side of the “pin block.” (Each side should have either one or two pins in it.)
- Partner 1: Have your partner guess how many pin heads (one or two) are touching their skin.
- Partner 2: Now try the same thing but this time touch the pin heads to your partner's fingertips. (Partners switch jobs.)

Questions

- Where are you best able to tell how many pin heads are touching your skin?
- Which areas of the face have the most nerve endings? (Look at the illustration.)

Part 2: Design a device

You have a friend that can build any device you want. Brainstorm with your group and briefly describe a device that could test this phenomenon more accurately. Make a list of things you need to consider before testing. Try to be as complete as possible. How does your device relate to brain function?

Want more information? Here are some keyword suggestions you can use to find more information on this subject, use one of them when describing your test: Primary sensory cortex, cortical homunculus, thermoreceptor, brain topographic map