

## Cool Tool

### Part 1: Experiment

- Lightly touch different places on the back of your hand with a blunt pencil tip.
- What do you notice about the temperature of the pencil tip?

### Questions

- Why do you only notice the temperature of the pencil tip in certain places?
- Why did we ask you to test this on the out side of your wrist? Do results differ with location?
- List other factors that affect how the pencil might feel.
- What other sensations can your skin transmit? (Hint: there are 4)
- Sensory information from your entire body is represented in your brain by something called a topographic map. What do you think this means?

### Part 2: Experiment

With your groupmates, brainstorm a *testable* scientific question based on the information you have so far. Write out how you would test this question. Don't forget to consider scientific controls!

**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