

## Heads or Tails?

### Part 1: Experiment

- Ask your partner to place a penny – heads up or heads down – on your fingertip.
- Without looking, can you tell which side of the penny you are touching?
- Now let your partner move the penny across your fingertip. Does this make a difference?
- What happens when you move the penny across areas of your hand and arm?

### Questions

- When was it the easiest to identify heads and tails on the penny?
- There is one nickel mixed with the other coins in the pouch. Reach into the pouch without looking at the coins. How did you determine which one was the nickel?
- What does this experiment tell you about how your touch receptors work?

### 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, somatosensory system, brain topographic map