

# Do an Experiment

1. Choose a question that you can investigate by doing an experiment. You should have at least 8 subjects.
  - a. What is the population?
  - b. What is the response variable?
  - c. What are the treatments?
  - d. How will you divide subjects into groups?
2. Gather your data. What is the mean of each group? Without analyzing the results further, predict whether the treatment seems to have an effect.
3. Then analyze your data using simulations. How likely is it that the results happened by chance?
4. What are some possible sources of error in your experiment?
5. Do you think the treatment caused a response? What other information could you learn that would help you decide?

# Do an Experiment

1. What are some factors that might help someone concentrate? What are some factors that might distract someone?
2. Choose one of these factors to study with an experiment. You should have at least 8 subjects.
  - a. What is the population?
  - b. What is the response variable?
  - c. What are the treatments?
  - d. How will you divide subjects into groups?
3. Gather your data. What is the mean of each group? Without analyzing the results further, predict whether the treatment seems to have an effect.
4. Analyze your data using simulations. How likely is it that the results happened by chance?
5. What are some possible sources of error in your experiment?
6. Do you think the treatment caused a response? What other information could you learn that would help you decide?