Do an Experiment

Task Statement 1

1. Choose a question that you can investigate by conducting an experiment. You should include 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, note whether the treatment seems to have an effect.
3. Analyze your data, using simulations. How likely is it that the results happened by chance?
4. What are possible sources of error in your experiment?
5. Do you think the treatment caused a response? What additional information would help you decide?

Do an Experiment

Task Statement 2

1. What factors might help someone concentrate? What factors might distract someone?
2. Choose a question that you can investigate by conducting an experiment. You should include 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, note 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 possible sources of error in your experiment?
6. Do you think the treatment caused a response? What additional information would help you decide?