

Designing An Experiment

1. Ask a question

- Think about your interests. What do you wonder about? Does something in particular leave you wanting to know more? Think outside the box and find an idea for which you can design an experiment.

2. Research your topic

- Learn everything you can about your topic. Discover the what, why, and how of it. Consider the information you will need to explain your project to others.

3. Construct a hypothesis

- A hypothesis is a prediction or guess that can be measured and used to test your experiment. Think of it as an "if, then" or cause and effect statement. You can have more than one variation of your hypothesis.

4. Test the experiment

- Using your plan to test your hypothesis, run your experiment. Be sure to take notes during your experiment to refer back to later.

5. Analyze the data and draw conclusions

- Take a look at the results from your experiment. How does the information you have collected support or deny your hypothesis?

6. Communicate findings

- Think about how you can best clearly and accurately communicate your project and findings. What can be represented through graphics and what needs to be written out?

