Vernier

Experiment and Sample Data Library

To assist you as you move from the classroom or laboratory setting to online teaching, Vernier Software & Technology is offering the <u>Vernier Experiment and Sample Data Library</u>—a free library of over 300 experiments with sample data files covering many subjects that you can distribute to your students at home. Students won't actually conduct the experiment themselves, but they can follow along with the written procedure and access sample data. Students can then perform their own analysis of the sample data.

While we strongly advocate for hands-on science when possible, we understand that many schools are in a situation where it is not possible at this time. We hope you and your students find this option helpful.

Instructions for Teachers

- Browse the library and click on an experiment, book, or subject area. Note that most experiments consist of two or more files. These files include
 - Student handout

Each experiment has one Word file. This file includes the experiment instructions and is meant to be distributed to students. You can edit the instructions before sending the file to your students if you wish, or distribute as is.

Sample data files

Each experiment has one or more sample data files. To open and use these files, you and your students will need to install the appropriate app or software indicated in the library index and in the student instructions for the experiment.

 Download and send your students the files for the experiment(s) of your choice. Ask them to read the written instructions as if they were conducting the experiment themselves but complete the data analysis and questions using the sample data provided.

Tips for Teaching with Vernier Sample Data Files

Edit Experiments to Your Needs

The student handouts, as written, are designed for an in-person classroom or laboratory environment. We encourage you to read through the Word files prior to sending them to your students, as you may wish to edit to improve their online-learning experience.

Include All Sample Data Files for Experiments

Some experiments require multiple sample data files. The file-naming convention will make this clear (e.g., "PEP 23 Magnetic Field—Current Data" and "PEP 23 Magnetic Field—Distance Data"). If you choose to use one of these experiments, make sure to include all the files with the same experiment name.

Visualize the Experiments with Videos When Available

Over the years, we have created videos that might be useful to you or your students as they visualize an experiment. Some of these videos may show the experiment using older equipment or software but still may be useful, as they show the experimental setup. Direct links to these videos are available **in the library index**.

Need Help?

Answers to the analysis questions are not being provided in an effort to keep them from circulating freely and being found by students. If you need assistance with an answer, email support@vernier.com using your school email address so we can verify your identity.