# ****Vernier Experiments and Sample Data Library****

To assist you as you quickly move from the classroom or laboratory setting to online teaching, Vernier Software & Technology is offering the Vernier Experiments and Sample Data Library—a library of over 80 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 using our free Graphical Analysis™ 4 app and answer questions based on their results. More information about this free resource can be found at the [Free Sample Data Library](https://www.vernier.com/remote-learning/sample-data-library/). 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. Additional experiments will be made available soon.

## Instructions for Teachers

1. Download and peruse the library of available experiments. Note that each experiment consists 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. The file can be opened in Word or uploaded into Google Drive and converted to a Google Doc. 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 Graphical Analysis 4 files (file extension of .ambl). To open and use these files, you and your students will need to install our free data-collection and analysis app, Graphical Analysis 4, on your devices. [**Graphical Analysis 4**](http://www.vernier.com/ga4) is available for Windows, macOS, Chrome OS, iPadOS, iOS, and Android.
2. 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

* Note that 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.
* 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 the students are given access to all necessary files.
* The [Vernier Video Training Library](https://www.vernier.com/video/) has quite a few videos, some of which might be useful to you or your students to visualize how an experiment is set up or how a sensor works.
* 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.

## Click on the links below to download experiments and sample data files.

### Elementary and Middle School                               High School and College

[General Science](https://www.vernier.com/wp-content/uploads/2020/03/vernier-elementary-and-middle-school-science.zip?utm_campaign=remote-learning-library-gen-science&utm_source=landingpage&utm_medium=&utm_content=)                                   [Biology](https://www.vernier.com/wp-content/uploads/2020/03/vernier-biology.zip?utm_campaign=remote-learning-library-biology&utm_source=landingpage&utm_medium=&utm_content=)            [Chemistry](https://www.vernier.com/wp-content/uploads/2020/03/vernier-chemistry.zip?utm_campaign=remote-learning-library-chem&utm_source=landingpage&utm_medium=&utm_content=)          [Physics](https://www.vernier.com/wp-content/uploads/2020/03/vernier-physics.zip?utm_campaign=remote-learning-library-physics&utm_source=landingpage&utm_medium=&utm_content=)