Welcome to The Lab!

The Lab is a practice space designed to prepare you for the experience of being a teaching assistant in a chaotic lab class. In a real classroom, you’ll be working under time pressure, helping students debug complicated lab setups and responding to rapid-fire questions. But, as a teacher, you have a second mission: helping students make sense of their misconceptions and turning the lab into a learning experience. It sounds like a lot to balance, doesn’t it?

The Lab simulates the time pressure and physical equipment of a lab classroom, letting you develop your own strategies for prioritizing learning in the face of chaos and urgency. You’ll have the chance to play both as a teacher, hunting down misconceptions and providing helpful information, and as a student, running the experiment and trying to get through the lab as efficiently as possible. If time allows, it is highly recommended to experience both roles.

Before starting play, decide who will be the teacher and who will be the student, then distribute the materials below. In addition to the sheets and lab equipment provided, a timer will also be necessary. If this is your first time using the lab equipment for the game, it may be a good idea to spend a minute or two playing with the plugs and dials to familiarize yourself with the setup.

**Teacher**

* Teacher scenario sheet
* Misconception tracking sheet
* Apparatus diagram (teacher version)
* Lab protocol sheet (teacher version)
* Picture of final setup

**Student**

* Student scenario sheet
* Apparatus diagram (student version)
* Lab protocol sheet (student version)

If you’re a teacher, you’ll notice that you have a lot of sheets - this is part of the chaos of the lab! Once you have your sheets, read them carefully and resolve any points of confusion before starting play.

When you’re ready to start, get a pencil and begin! For added pressure, you can optionally include a time limit of ten minutes or fifteen minutes. Once the game starts, you can freely talk about the contents of your sheets, but don’t directly show the other player your sheets. The game ends when the student has completed the lab, i.e when the apparatus matches the picture of the final setup.

When you’re done, tally up your score marks on the debrief sheet and go through the suggested set of debrief questions. If you’d like to play again after reflection, be sure to use a different student profile.