

5 Top Tips for Organising your Lab

Having an organised science lab means more time spent on the good stuff - like conducting amazing experiments - and less time spent on searching for equipment or carrying items from one side of the lab to the other. An organised lab doesn't just mean keeping your benches clean and tidy. It also establishes healthy habits, sets practical rules for ordering materials and helps to improve workflow and productivity.

We sat down with Wendy Shearer, the President of SETA (Science Education Technicians Australia) to discuss the 5 best ways to get your lab into shape! The executive committee of SETA has around 100 years' experience between them as school science technicians, so they know their stuff! Here's what we uncovered.

TIP ONE Organise your lab with 'task stations'

Your students could spend a lot of time collecting equipment, chemicals and glassware. So, it's sound practice to organise your lab into task-oriented stations.

Have a weigh station near your chemical supply with a balance, weighing tray, spatulas, containers and marking pens.

For microbiology, near the autoclave you might have the agar, measuring cylinder, large beaker, stirring rod, balance, weighing trays and autoclave indicator tape.

In a class lab, have kits of apparatus and chemicals needed for a requested practical. These can be placed around the room or on a trolley for a student to retrieve. This is also good practice when it comes to safety as you don't want students walking all over the lab fetching and carrying glassware and chemicals.

TIP TWO Embrace flexible systems

Use a customisable storage system (such as Gratnells), with a non-fixed and lightweight storage trolley, to move things around and create a flexible lab. You could even use a Gratnells tray in a compactus and pick whichever tray you need and slide it into a trolley:

- Electronics - have a tray for each component i.e. leads, light globes and holders, switches, resistors, capacitors, LEDs, multimeters. Have the power packs on top of the trolley.
- Optics - have a tray for each component i.e. Hodson light supply, lenses (concave and convex), prisms (rectangular, triangular, semicircular), filters. Have the power packs on top of the trolley.
- Microscopy - trays with prepared slides, microscope slides, coverslips, lens tissue, beakers, droppers, forceps, clear nail polish. Microscopes on the top shelf.

For a splash of fun, buy trays in particular colours to enable quick identification. You might use blue trays for physics, red for chemistry, green for biology and yellow for earth science.

TIP THREE Labels and lists

Label drawers, shelves, compactus and cupboards with subject areas and/or with the equipment within. This enables items to be located faster and easier and it means that students, teachers or lab techs aren't opening and shutting cupboards looking for items.

Sets and trays of chemicals can be identified quickly with an easily read label.

Make reusable labels for experiment trays by laminating paper, then using a marker, label the practical details and wipe it clean when it's finished.

Some lists to consider making part of your healthy organised lab practice are these:

- A weekly lab prep list - so you know what you need to purchase or borrow.
- Lab equipment sign out list - if anyone borrows anything, they sign it out, so you know where it is and when it's due back.
- Laboratory cupboard checklist - stick an inventory list inside your cupboard with quantities of items included on each shelf. It also helps with student clean-up to know what goes where.

TIP FOUR Senior lab trays

For a senior lab, consider storing basic science resources such as pipettes, beakers, watch glasses, stirring rods, test tubes, plasticware and stopwatches in an easy to access place or in a tray. When students need these resources, they will know where to go first. It makes prepping for an experiment easier, as all the basic items are on hand, and the teacher may only need to put out the chemicals. It also makes it easy to restock supplies as you can easily see when equipment is running low.

TIP FIVE Safety and clean up

An organised lab should be stocked with essential safety and clean up equipment including gloves, safety glasses, soap, wipes and labelled waste containers to ensure students are both safe while participating and know the procedures for clean up after their class or experiment.

Have signage for the spill kit in an easily located place. Next to the spill kit sign, attach a flow chart which easily instructs teachers and students how to manage a spill.

Keep safety glasses in a holder that ensures it is easy to see if there are any missing.

Make gloves available by keeping them on a trolley. There are also wall racks which hold multiple boxes to accommodate a range of hand sizes.



Do you have any other tried and tested organisational tips for your science lab? Share a photo with us. Tag @modernteaching on Instagram.