

Guide to Acquiring Lab Materials for Your School

1) Ask whether now is the right time.

- Will the materials be used?
- Will the materials be well-cared for?
- Is there a place to store them?
- Is the lab secure from theft?
- Has the school shown a previous commitment to maintaining and supporting the lab?

2) Determine where the funds are coming from.

- Some private schools are able to find funds for lab supplies if they are a priority
- PTAs may be able to help raise money for lab supplies at public schools
- You may be able to hold a fundraiser or solicit support from businesses (especially in large towns)
- If you are doing a grant, determine what the community contribution will be
- Always leave extra money for shipping and/or transport

3) Decide what materials to order.

- Take inventory first. Do not buy things you already have. However, check carefully whether everything on your inventory is functional and make sure the chemicals are not spoiled.
- Prioritize. Begin by ordering materials that can be used for many experiments or that are critical for experiments on the WASSCE. Do not order expensive materials when local substitutes work fine.
- Do not order anything that will spoil quickly (like deliquescent chemicals). Always look for apparatus that will last a long time or be easy to repair.
- Think carefully when ordering apparatus that require electricity. If your school has 220 V electricity, do not order electronics that require 110 V. If your school does not have electricity, do not order anything that requires it.

4) Make sure your order is logical.

- Don't order half of what you need for an experiment but not the other half. For example, don't order burettes if you are not ready to also order stands and clamps.
- Make sure all items fit together correctly. For example, if
- Order spare parts. If you are buying multimeters that use 9V batteries and require screwdrivers to open, buy a screwdriver and a spare 9V battery. If you are buying burettes that use a hose and a glass tip, buy an extra roll of hose and some extra tips.

5) Decide how much to order.

- Order by number of groups, not number of students. For example, if you usually divide students into 8 or 9 groups, then order enough materials for 8 or 9 groups.
- Decide which materials students need to use themselves. Some materials can be ordered in small amounts for demonstrations only (like a centrifuge), while others should be ordered in larger quantities so students can use them (like glass blocks and burettes).

6) Decide where to buy materials

- Many materials are available at shops in Monrovia (see the list on the back of this sheet).
- Some materials are sold at local shops and markets.
- You can also order materials from America if you have a way to ship them. However, you will need to buy most chemicals in Liberia because of restrictions on shipping chemicals.

7) Take care of your materials

- Store items in cabinets, jars, or plastic bags to protect them from dust.
- Make sure there are no leaks in your lab ceiling, especially in the storage area
- Do not keep anything that can be destroyed by water on the ground.
- Keep the lab locked and keep track of who has the keys.
- Take inventory from time to time to check for loss or breakage of materials.

Sources of Lab Supplies

Monrovia:

- BKay Pharmacy – On Broad St in downtown Monrovia (between Center St and Gurley St). Sells lab apparatus and chemicals, as well as gloves, syringes, microscope slides, and various pharmaceuticals. Often has the best price in town. Call Dilip with questions (0776237123).
- Eagle Electronics – On Randall St in downtown Monrovia. Sells multimeters, wire, and other electronic supplies. The neighboring shop (also called Eagle) sells hardware and has goggles as well as many types of tools.
- Chemfair Scientific – In Paynesville. Sells lab apparatus and chemicals. Contact Raphael Ngumbu (0775764953, 0886610079, chemfairscientificiberia@yahoo.com). Often more expensive than BKay but may have supplies that they don't.
- Golden Torch – Sells fire extinguishers. Within a few blocks of Benson and Randall St in downtown Monrovia – ask around.

Elsewhere in Liberia:

- Hardware shops (building materials shops) – goggles, whitewash, multimeters, tape measures (called “tape rules”), various tools, sometimes spring scales and funnels
- Electronics shops – wire, multimeters
- Pharmacies – gloves, syringes, IV tubes, iodine, gentian violet, isopropyl alcohol
- Markets and general “business centers” – caustic soda, batteries, mirrors, string (often called thread or twine), baking soda, tape measures (tape rules)
- Car parts shops – battery acid (acid water), possibly distilled water
- Clinics – prepared slides (blood smear slides showing malaria parasite, possibly others)
- Around the community – ethanol (cane juice, palm wine), magnets (from old speakers and motorbike flywheels), empty jars and bottles (buy or beg mayonnaise jars from teashops, look for sellers of empty containers at markets)