

School Science Lab Setup Checklist — Glacier India

School Science Lab Setup Checklist Purpose: Quick procurement and setup guide for classroom-ready science labs (primary & secondary). Use to order essential equipment, ensure safety compliance, and plan a practical classroom layout.

Scope: Essentials for common school practical in chemistry, biology, and physics; PPE and safety; budget buckets; classroom layout; SKU mapping suggestions for ordering.

At-a-glance essentials (10 items)  Use these as first-order items for every classroom.

-  Beakers — 50 mL, 100 mL, 250 mL — mixing & heating
-  Conical flask (Erlenmeyer) — swirling, titration
-  Graduated cylinders — 10 mL, 50 mL, 100 mL — accurate measurements
-  Test tubes + rack — small reactions, heating
-  Pipettes / droppers + bulbs — aliquoting small volumes
-  Thermometer (digital or spirit) — temperature checks
-  Wash bottle (plastic) — rinsing and safe water supply
-  Safety goggles +  Lab coats (student sizes) — PPE for every student
-  First-aid kit + eyewash bottles — immediate incident response
-  Hot plate (classroom-safe) or spirit lamp — controlled heating

Categorized checklist (school-focused) 

Glassware (school-grade)

-  Beakers;  Conical flasks;  Graduated cylinders;  Volumetric flask (where precision required)

Plasticware & Consumables

-  Test tubes (glass/plastic for primary);  Test tube racks;  Droppers;  Wash bottles;  Funnels;  Filter paper;  Labels;  Permanent markers

Measurement & Precision

-  Thermometers;  Digital balances (where feasible);  pH paper / indicator kits

Heating & Mixing

-  Hot plates (preferred for schools without gas);  Magnetic stirrers (basic models);  Tripod stands;  Wire gauze;  Tongs

Biology basics

-  Student microscopes (100x–400x);  Slides & coverslips;  Petri dishes (classroom-safe);  Disposal guidance (sharps & bio-waste)

Safety & Storage

-  PPE sets (goggles, lab coats, disposable gloves);  Eyewash bottles or station;  Fire extinguisher (ABC type);  Lockable chemical storage;  Sharps containers;  Clear signage

Consumables (reorderable)

-  Filter paper;  pH strips;  Gloves;  Marker pens;  Cleaning supplies

Budget buckets — choose by school level

- Basic kit — Primary (low cost) Focus: durable plastic alternatives, basic measurement tools, PPE for demos. Minimise glassware for younger students.
- Standard kit — Secondary (medium) Focus: expanded glassware set, hot plates, student microscopes, full PPE, measurement instruments.
- Upgrade kit — College prep (higher) Focus: digital balances, better microscopes, magnetic stirrers, Class A burettes/volumetric pipettes.

Classroom layout & placement

- Workstations: 3–4 students per bench; ensure sink/wash bottle access and clear circulation.
- Safety zone: 1–2 m clear space near eyewash/first-aid and exit path; post evacuation SOPs.
- Storage: Flammables and acids in lockable cabinets; label all reagents clearly.
- Electrical: Keep hot plates away from edges; secure cables; ensure proper earthing and voltage compatibility.

Quick procurement mapping — order template

- Glassware → Category: Glassware — typical SKUs: Beakers (50/100/250 mL), Flasks, Cylinders
- Plasticware → Category: Plasticware — Test tubes (plastic sets), Wash bottles, Droppers
- Safety → Category: Safety — Safety goggles (student), Lab coats, Eyewash bottles
- Measurement → Category: Measurement — Thermometer (digital), pH strips, Student microscope

Safety quick checklist — mandatory before first practical

- PPE: Goggles and lab coats for every present student.
- Eyewash & first-aid: Accessible within 10 meters of benches.
- Fire safety: Extinguisher inspected and staff trained.
- Storage: Labelled, segregated chemical storage; incompatible chemicals separated.
- Waste: Clearly labelled bins for general, bio-waste, sharps.

- Supervision: Teacher present for all practical; student safety briefing each session.

Simple SOPs

- Pre-lab: Confirm PPE; verify reagent labels; test equipment.
- During lab: No eating/drinking; goggles on; single-person handling for heating/dispensing.
- Post-lab: Clean station; return consumables; store reagents; log incidents.

Delivery & ordering tips — practical checks

- Order consumables in 6–12-month bulk to reduce restocking frequency.
- For glassware, order +10–15% spares to cover breakage.
- Request classroom-grade models & warranties for microscopes/balances.
- Confirm voltage & safety certifications for electrical equipment (CE/ISI where applicable).

Onboarding & training — quick plan

- 1–2 hour teacher training: PPE use; equipment handling; emergency procedures; maintenance.
- Provide teachers: this one-page checklist + equipment log template.

One-line next steps

1. Select the budget bucket that matches your school level.
2. Use procurement mapping to build an SKU order list.
3. Confirm safety equipment & schedule teacher training.
4. Place order with Glacier India or local supplier; plan delivery & layout before first practical.

Contact / Support For procurement assistance, custom kits, or bulk pricing, contact Glacier India procurement team. Provide: school name, grades covered, budget band, desired delivery timeline, and attach this checklist for a faster quote.

Glacier India — Classroom-ready laboratory apparatus and procurement support. For the comprehensive 50-item master list and extended equipment guides, refer to “Common Laboratory Apparatus and Their Uses” at glacierindia.com.