# The Global Uplift Project

## Science Lab in a Box (SLaB)

## Quotable Bill of Materials (QBM)

Bukandula College

| | Quantity | Item Description |
|---|---|---|
| **Safety Equipment** | 1 | Safety glasses |
| | | Nitrile safety gloves |
| | 2 | laboratory coats |
| | | Eye wash bottles |
| | | Fire blanket |
| | | First aid kit |
| **General Lab Equipment** | 10 | Ring stand base with 70 cm vertical rod |
| | | 20 cm ring stand extension rods |
| | | Ring stand clamp |
| | | 4" C clamp |
| | 1 | 200 gram electronic balance +/- 0.01 g accuracy |
| | | Bunsen Burner (liquid propane or natural gas) |
| | | Propane tank 20 L |
| | | Propane tank regulator |
| | | Electric hot plate (alternative to Bunsen burners and gas) |
| | | Rulers (30 cm) |
| | | Protractors |
| | | Scientific calculators |
| | 50 | Wooden meter stick (100 cm rule) |
| | | 5 meter measuing tape |
| | 50 | Alcohol thermometers (- 20 deg C to 120 deg C) |
| | 50 | Glass stir rods |
| | | 25 ml Borosilicate beaker |
| | | 100 ml Borosilicate beaker |
| | | 250 ml glass beaker |
| | | 250 ml plastic beaker |
| | | 1000 ml Borosilicate beaker |
| | | 125 ml Borosilicate Erlenmeyer flask |
| | 48 | 250 ml Borosilicate Erlenmeyer flask |
| | | 10 ml Borosilicate Graduated cylinder |
| | | 25 ml Borosilicate Graduated cylinder |
| | | 50 ml plastic cylinder |
| | 40 | burette with clip |

| | | |
|---|---|---|
| | | 250 ml Borosilicate Graduated cylinder |
| | 50 | 70 mm Polyethylene Utility Funnel |
| | | 108 mm Polyethylene Utility Funnel |
| | 4 | 20 ml, 16 mm x 150 mm Borosilicate test tube |
| | 4 | 55 ml, 25 mm x 150 mm Borosilicate test tube |
| | | Evaporating dish |
| | | Wash Bottle |
| | 25 | Pipettes |
| | | Serological pipettes filler |
| | 50 | Droppers |
| | 50 | Spatula |
| | 2 | Litmus paper red and blue (pack of 10 for each) |
| | 20 | Mortar and Pestle |
| | | Chromatography paper |
| **Biology** | 3 | Student microscope |
| | 2 | Microscope glass slides (1 pkg = 72 slides) |
| | 2 | Microscope slide glass cover slips (1 pkg = 200 slips) |
| | 10 | Prepared Onion root tip - cell cycle microscope slides |
| | | Bromthymol blue stain 500 ml |
| | 2 | Iodine solution |
| | | Isopropyl Alcohol 99% 4 L |
| | | NaCl 500g |
| | | soft boards |
| | | Owl pellets |
| | | 50 mm x 15 mm Petri dish (1 pkg = 20 dishes) |
| | | 90 mm x 15 mm Petri dish (1 pkg = 20 dishes) |
| | | Inoculating loop |
| | | Filter cloth (1 pkg = 4 sq yrds) |
| | | Plankton net |
| | 1 | Modeling clay |
| | | Wall Chart - Digestive system |
| | | Wall Chart - Eye |
| | | Wall Chart - Brains |
| | | Wall Chart - Circulatory system |
| | | Wall Chart - Reproductive system |
| | 1 | Wall Chart - Periodic table |
| **Chemistry** | | Copper density rods |
| | | Aluminum density rods |
| | | Zinc density rods |
| | 2 | Sodium Carbonate 500g |

| | |
|---|---|
| | Calcium Chloride 500 g |
| 5 | sodium thio sulphate penta |
| 10 | Filter Paper whatman |
| | HCl solution Alitre |
| 5 | Sodium hydroxide |
| | Phenolphthalein indicator 25g |
| 5 | Magnesium Ribbon 25 g |
| | Ammonium Chloride 500g |
| | Water quality testing kit |
| | Metal Crucibles |
| | Propane torch |
| | Propane tanks |
| | conductivity meter |
| | Ammonium Carbonate 500g |
| | Methanol 95% |
| 4 | Ethanol 95% |
| | Barium nitrate |
| | |
| | Bromine water |
| 1 | Sulfuric acid 2.5 litres |
| 1 | Nitric acid a 2.5 litres |
| 2 | Hydrochloric acid 2.5 litres |
| | Ethanoic acid 2.5 litres |
| | Maleic acid 500g |
| | Rubber stoppers for test tubes |
| | Calorimeter |
| | Molecular model kit |
| | potassium permangate 500g |

**Physics**

| | |
|---|---|
| | AC DC 0-24V Power Supply |
| | Multimeters |
| 60 | Single cell holders |
| | Circuit breadboards |
| 30 | 1 Ohm resistors |
| | Rheostats 200 ohm |
| | Rheostats 50 0hm |
| 40 | 3 Ohm resistors |
| 30 | 5 Ohm resistors |
| | 10 Ohm resistors |
| | Voltmeter |
| | |
| | 750 microfarrad capacitors (1 pkg = 15 capacitors) |
| | Plane mirrors |
| 50 | convex lenses f.10 CM |

| | |
|---|---|
| 50 | concave lense  f. 10cm |
| | 100 lines/mm diffraction grating |
| 50 | measuring cylinder plastic 10ml |
| | 300 lines/mm diffraction grating |
| | 600 lines/mm diffraction grating |
| | 1000 lines/mm diffraction grating |
| | Diode laser - red,  5mWatts |
| | Diode laser - blue,  5mWatts |
| | Diode laser - green,  5mWatts |
| | neodimium magnets (cylindrical 2cm diameter, 2cm heigh |
| 50 | Stop watch |
| | Nylon string 100 meters |
| 30 | Ideal spring sets (spring constants 2.5N |
| | Mass set 100g |
| 15 | Mass set 50g |
| | Projectile launcher, spring loaded with protractor |
| | Force table |
| | Pulley with clamp |
| | Digital force sensor |
| | Digital motion sensor |
| | Dynamics carts |
| | Electroscope |