



RECOMMENDED MINIMUM CORE INVENTORY TO SUPPORT STANDARDS-BASED INSTRUCTION

HIGH SCHOOL GRADES SCIENCES

High School Biology

Quantity per lab group	Quantity per classroom/ adjacent work area	Description
SAFETY EQUIPMENT		
	1	Acid cabinet
	classroom set	Aprons
	1	Chemical spill kit
	1	Eye wash station
	1	Fire blanket
	1	Fire extinguisher
	1	First aid kit
	1	Flammables cabinet
	1	Goggles sanitizer (holds 36 pairs of goggles)
1/student		Safety goggles
COMPUTER ASSISTED LEARNING		
	1	Television or digital projector
	1	VGA Adapters for various digital devices
WORKROOM EQUIPMENT		
	1	Autoclave or pressure cooker
1		Balances (accurate to 0.1g or better)
2		Beaker tongs
2		Beakers, 50 mL or 100 mL
2		Beakers, 250 mL
1		Beakers, 400 or 600 mL
	2	Beakers, 1000 mL
	1	Blender
	1	Centrifuge
1		Dissecting scopes (or hand lenses)
2		Dissection kit (scalpel, scissors, forceps, probes, tray, ruler)
	100	Dropping bottles, plastic (reusable)
	1 box of 100	Droppers (glass or disposable transfer pipettes)



Quantity per lab group	Quantity per classroom/ adjacent work area	Description
2		Erlenmeyer flasks, 250 mL
	2	Erlenmeyer flasks, 1000 mL
2		Fermentation chamber (for anaerobic respiration)
2		Forceps
2		Funnels, small, long-stem
1		Gel electrophoresis chamber
	2	Glove, heat-proof (resistant from extreme heat to 399° C)
2		Graduated cylinder - 10 mL
2		Graduated cylinder - 100 mL
	1	Graduated cylinder - 1000 mL
1		Hot plates and/or Bunsen burners
	1	Incubator
	1	Magnetic stirrers
2		Meter sticks
2		Metric rulers
2		Microscopes (compound)
	20	Onion root tip slides
	1	Periodic table
	50	Petri dishes (100 mm x 15 mm, glass or plastic)
	1	Refrigerator (specimen)
2		Respirometer (measuring CO ₂ production)
2		Ring stands w/ rings
2		Rubber stoppers, 2-hole; for 250 mL flasks
2		Scissors
2		Stirring rods
2		Stop watches
	1/sink	Test tube brushes
2		Test tube holders
2		Test tube racks
	200	Test tubes (standard size, about 16 mm x 150 mm)
2		Thermometers (alcohol; -10° to 110° C)
	4 boxes of 100	Vinyl or latex-free gloves
	1/sink	Washing bottles, plastic
	1	Water bath, 2.5 liter
CONSUMABLES		
	500 grams	Agar



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Quantity per lab group	Quantity per classroom/ adjacent work area	Description
	1 liter	Alcohol, 95% methanol or isopropyl
	500 grams	Amylase
	3-500 mL bottles	Benedict's solution
	1 roll	Chromatography paper
	10 grams	Congo Red
	1 roll	Dialysis tubing
	3 boxes	Filter paper, discs
	1 bottle	Glucose (Karo syrup)
	500 grams	Lipase
1 vial		Litmus paper (neutral)
	5 boxes of 100	Microscope cover slips
	3 boxes of 100	Microscope slides
	500 grams	Peptidase
1 vial		pH paper (0-14)
	3	Phenolphthalein solution (500 mL bottles)
	3	Potassium iodide solution (500 mL bottles)
1 vial		PTC paper
1 vial		Sodium benzoate paper strips
	500 grams	Sodium bicarbonate
	500 grams	Starch
		Sucrose
1 vial		Thiourea paper strips

FACILITIES

A source of water and access to waste disposal (i.e., lab stations/sinks) are essential for classrooms in which biology is taught.