

BIOTECHNOLOGY

This recommended list is based upon a classroom size of 25 students. All costs are estimated and should be adjusted and verified with current quotes. No specific equipment vendor or brand names are endorsed due to various possibilities, and school districts should consult with stakeholders to ensure industry-recognized equipment and software are purchased. The intent of this list is to provide school districts with guidance on the equipment needed to cover the state standards for a Biotechnology program.

CLASSROOM EQUIPMENT**TOTAL: \$16,480**

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Workstations w/chairs	\$400	\$10,000
1	Teacher Workstation w/chair	\$400	\$400
1	Teacher Computer	\$900	\$900
1	Presentation Equipment (e.g., interactive whiteboard (IWB), or other interactive display system with software and accessories)	\$3,000	\$3,000
1	Networkable Laser Printer (black/white or color)	\$400	\$400
1	Vertical File Cabinet (lockable)	\$330	\$330
2	Storage Cabinets (36" x 12" x 72") (lockable)	\$300	\$600
2	Bookcases (36" x 12" x 42")	\$115	\$230
2	White Boards (4' x 8')	\$110	\$220
1	Eyewash Station	\$300	\$300
1	Sink with Soap Dispenser	\$100	\$100

PROGRAM EQUIPMENT**TOTAL: \$37,175**

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Computers	\$1,000	\$25,000
1	Technology Storage/Charging System (optional)	\$2,000	\$2,000
1	Polymerase Chain Reaction (PCR) Workstation (32" wide)	\$6,000	\$6,000
1	UV Transilluminator Light Box (for DNA gels)	\$950	\$950
1	Storage Cabinet for Sanitized Eye Protection Equipment	\$800	\$800
1	PCR Thermal Cycler	\$775	\$775
1	Electronic Balance (120g capacity, 0.001g readability)	\$650	\$650
1	Microcentrifuge	\$500	\$500
1	Lab Incubation Oven (incubator)	\$500	\$500

NEVADA CTE RECOMMENDED EQUIPMENT LIST

2020

INSTRUCTIONAL MATERIALS

TOTAL:

\$5,125

QTY	ITEM DESCRIPTION	UNIT	TOTAL
25	Student Textbooks (Approved by NDE)	\$100	\$2,500
1	Teacher Textbook Edition and Resources	\$500	\$500
1	Curriculum Software Package	\$250	\$250
25	Biotechnology Laboratory Manuals	\$75	\$1,875

INSTRUCTIONAL SUPPLIES

TOTAL:

\$15,465

QTY	ITEM DESCRIPTION	UNIT	TOTAL
1	Stirring Hot Plate	\$485	\$485
8	Power Supplies, 300 Volt (for gel electrophoresis)	\$365	\$2,920
8	Horizontal (DNA) Electrophoresis Gel Boxes (6 or 10 well)	\$250	\$2,000
2	Water Baths	\$250	\$500
1	Micropipette 5 - 40 Microliters and Tips	\$200	\$200
1	Micropipette 0.5 - 10 Microliters and Tips	\$200	\$200
1	Orbital Shaker	\$200	\$200
8	Tabletop Electronic Balances	\$190	\$1,520
1	Cell Division Model	\$100	\$100
1	Soil Testing Kit	\$100	\$100
1	Microcentrifuge Test Tubes	\$60	\$60
1	Weighing Boats	\$40	\$40
12	Laboratory Aprons	\$20	\$240
6	Autoclavable Polypropylene Micro Test Tube Racks	\$20	\$120
25	Safety Goggles	\$10	\$250
3	Disposable Gloves (various sizes/small, medium, and large)	\$10	\$30
Varies	Biotech/Science Lab Materials (nutrient agar, antibiotic disks, cheese making kit, agarose gel electrophoresis kit, etc.)	\$1,500	\$1,500
Varies	Animal System Models	\$1,500	\$1,500
Varies	Botany Resources for Identification	\$1,000	\$1,000
Varies	Animal Industry and Breed Resources	\$500	\$500
Varies	Floral Supplies (flowers, mechanical tools, design products, etc.)	\$500	\$500
Varies	Grading Resources for Meats, Vegetables, and Grains	\$500	\$500
Varies	Plant Propagation Supplies (soil, pots, tools, seeds, etc.)	\$500	\$500
Varies	Computer Accessories (covers, cases, etc.) (optional)	\$500	\$500

OTHER

TOTAL:

\$300

QTY	ITEM DESCRIPTION	UNIT	TOTAL
1	Occupational Safety and Health Administration (OSHA) Instructor Training	\$300	\$300

CATEGORY TOTALS:

CLASSROOM EQUIPMENT	\$16,480
PROGRAM EQUIPMENT	\$37,175
INSTRUCTIONAL MATERIALS	\$5,125
INSTRUCTIONAL SUPPLIES	\$15,465
OTHER	\$300
ESTIMATED PROGRAM TOTAL	\$74,545