

# STEM/CTE

Fisher Science Education  
2021 Product Catalog

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CORNING



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# STEM/CTE

Preparing today's students to be the innovators of tomorrow isn't always easy, but finding the right teaching tools can be. From basic lab supplies to state-of-the-art classroom technology, the Fisher Science Education team has everything you need to create a 21st century STEM learning environment. Visit [fisheredu.com](https://www.fisheredu.com) to get started.

## Want to customize aspects of your curriculum?

Explore custom kits to meet the unique demands of your classroom. Visit [fisheredu.com/customkitting](https://www.fisheredu.com/customkitting) to learn more.

## Concerned about shipping and handling fees?

We offer \$12 flat-rate shipping on most orders and our hazardous material fee is just \$15 — the lowest in the country.

## Looking for Something Else?

Check out our other 2021 catalogs:

- Chemicals
- Equipment and furniture
- Lab supplies and consumables
- Life sciences
- Physical science
- Safety



Circuit boards hold and connect the small electronic components that bring our devices to life.

Visit [fisheredu.com/headlinediscoveries](https://www.fisheredu.com/headlinediscoveries) for more science facts.

**STEM (Science, Technology, Engineering, and Math)** is an interdisciplinary approach to teaching that encourages problem-solving skills and emphasizes the application of knowledge to real-world situations. This initiative aims to make the U.S. globally competitive by increasing the number of students who enter and succeed in STEM-related fields.

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# ADVANCING MEDICAL SIMULATION

3B Scientific provides the most reliable and lifelike task trainers to prepare medical students for real live situations.



## > EMERGENCY TRAINING

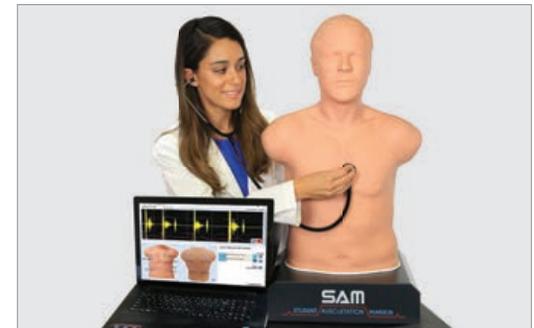
### Hemorrhage Control Arm Trainer

Improve pre-hospital patient care training with instructional and hands-on training of hemorrhage control with wound packing and tourniquet application. Suitable for Tactical Combat Casualty Care and Civilian Casualty Care training. **S04752**

## > CPR

### BASICBilly+

This award-winning high-quality and economical AHA compliant BLS manikin is a complete solution to train, monitor, analyze and debrief CPR performances. Easily connect with the app via Bluetooth – no need to set up a wireless network. **S27924**



## > AUSCULTATION

### SAM 3G™ - Student Auscultation Manikin

SAM™ 3G is the ideal training solution for advanced auscultation skills. The manikin can be used with any stethoscope and offers the largest library of heart, arrhythmia, lung, bowel, and bruit sounds as well as a COVID-19 sound. **S27953**



### Build in the Classroom

Learn and have fun simultaneously with a variety of models for different skill levels.

Description	Cat. No.	Price
K'NEX™ Intermediate 60 Model Building Set	S81361	\$30.00
K'NEX Classic Constructions 70 Model Building Set	S81362	\$37.25
K'NEX Beginner 40 Model Building Set	S81358	\$19.50



### Create Your Own Robot

3D print, design, engineer, and program a robot with students in grades 4 through 12.

Description	Cat. No.	Price
PicoEducators Hexapod LV1 STEM Module, 1 Full Class	S81181	\$2,530.00



### Complete Your Tool Kit

Find useful tools for a variety of crafts.

Description	Cat. No.	Price
Wall Lenk Corporation 18-Watt Transfer Tool	S81428	\$24.00
Wall Lenk Corporation Professional Engraving Tool	S81440	\$21.75
Wall Lenk Corporation Creative 5-in-1 Tool Kit	S81430	\$43.00



### Discover the Investigative Process

Guide students through the work of a blood spatter detective.

Description	Cat. No.	Price
Kemtec™ Designing Investigation in Blood Spatter Kit	S27540	\$146.00



### Brush the Right Way

Demonstrate the proper technique for brushing teeth and gums.

Description	Cat. No.	Price
United Scientific Oral Hygiene Model	S81076	\$41.25

## STEM Lab &amp; Makerspace

## 3D Printing

## PicoSolutions Delta WASP 2040 Pro and 2040 Industrial (4.0) 3D Printers and Printer Packages



Delta WASP 2040 PRO delivers accurate and reliable results on all materials with pieces up to 40 x 20cm (15.75 x 7.75 in.).

- Non-deformable belts loaded in steel
- Accurate and reliable with all materials
- Equipped with an autocalibration system and a rectified print surface which guarantees the best performance over time.
- Printer driver is suspended, Bowden Suspended (cc), to make printing faster and minimize weight on the mobile crew.
- Contains all the WASP systems for printing recovery such as the Resurrection System (cc) , Free Zeta System (cc) and end of the material system.
- Suspended Bowden, Resurrection System, Free Zeta System
- Print volume: 200 x 400 mm
- Layer height: 50 microns min
- Print speed: 500 mm/s max
- Travel speed: 800 mm/s max
- Acceleration: 15 mm/s<sup>2</sup>
- Filament: 1.75 mm
- PLA PETG ABS PA Carbon

3D Printer package S81243 includes WASP 2040 Pro 3D Printer and complete 101 Tech Support (3 hours). LDM add-on S81244 allows users to print with ceramic/LDM materials. Includes 3 hours of tech support.

### Delta WASP 2040 Industrial (4.0) 3D Printer

- Hot and cold technology for printing with technical materials.
- Use with Spitfire, Zen or Flex extruder.
- Connect to network to manage directly from phone or view onboard camera
- Professional delta printer made of metal, with non-deformable belts loaded in steel, insulated for thermal and noise insulation.
- Innovative system of controlled chamber up to 80° and cooling of the Hot and Cold Technology mechanism, allows the optimal printing of technical materials.
- Technological advancement of WASP has made it possible to configure the printer according to user needs.
- Switching from a single Red Spitfire Extruder for fast prints to a Zen Extruder double extruder for multi-material prints to Flex Extruder to print soft materials (up to shore 50 A) takes a few minutes.
- Can be connected to the network and therefore manage the printer directly via mobile phone, tablet or computer.
- Camera has been inserted inside the printer to monitor printing even if located elsewhere.

- Suspended Bowden, Resurrection System, Free Zeta System
- WIFI to monitor and control remotely
- NEW GUI new graphical interface with TFT screen
- On board camera for monitoring and timelapse
- Aluminum frame and cover, painted steel, polycarbonate, PU.
- Metal casing, eliminates machine vibrations, ensures greater printing precision.
- Print Floor: Aluminum adjusted
- Movements: Nylon wheels on anodized aluminum profiles
- Straps: Delrin with
- Remote assistance for WASP technicians
- Printer volume: 200 x 400 mm
- Layer height: 50 microns min
- Print speed: 500 mm/s max
- Travel speed: 800 mm/s max
- Acceleration: 15,000 mm/s<sup>2</sup>
- Filament: 1.75 mm
- ASA ABS High-Impact-PS PETG TPU TPE
- Polypropylene Polycarbonate PC+ABS
- PPS PMMA PVA PA PA Carbon PLA



### Complete Industrial 2040 4.0 packages

- Include printer and 3 hr. of tech support
- Choose Spitfire or Zen packages
- LT Zen cartridge - PLA PETG Flex
- HT Zen cartridge - ABS PA PC Hips PA + C ASA PMMA PP

Cat. No.	Description	Price
S81200	Delta WASP 2040 Pro 3D Printer	3540.00/Ea
S81243	Delta WASP 2040 Pro 3D Printer Package	4140.00/Ea
S81244	Delta WASP LDM Add-on	5110.00/Ea
S81201	Delta WASP 2040 Industrial (4.0) 3D Printer	5050.00/Ea
S81245	Delta WASP 2040 Industrial 4.0 3D Printer Spitfire Package	5690.00/Ea
S81246	Delta WASP 2040 Industrial 4.0 3D Printer Zen Package Package	6210.00/Ea

## PicoSolutions Delta WASP 2040 Clay Printer

Clay 3D printer is open and accessible on three sides to interact during the prints. Accurate and fast using all ceramic materials.

- Professional, compact 3D printer for pieces with 20 cm (7.87 in.) base and up to a height of 40 cm (15.75 in.).
- Features a closed chamber, hot pad and suspended Bowden.
- Accurate, fast and reliable.
- WASP (LDM) Low-Density Material Extruder is able to extrude any low-density materials without large particles inside of it.
- Included with the machine comes a sample of white porcelain to get started.
- Load any paste material that can be made soft enough to be pushed through the extruder with 4 to 6 bar of pressure, and there are no particles that will block the 1 mm nozzle.
- Resurrection system
- Free Z System
- Screw controlled dosing extruder
- Integrated air pressure control on the printer
- Rolling block carriages to ensure excellent stability
- Dedicated firmware connection for air tube integrated into the printer
- Print Volume: 200 mm diameter x 400 mm height
- Nozzle diameter: 1.2 mm/ 2 mm max
- Layer resolution: 0.5 mm
- Max speed: 150 mm/s
- Max displacement speed: 150 mm/s
- Acceleration: 500 mm/s<sup>2</sup>

### 2040 LDM/Clay Package

- Compact professional printer- accurate and fast using all ceramic/LDM materials.
- 1x 2040 Clay



- 1x basic tech support (3 hours)
- Spare LDM screw and 25 lb. porcelain

Cat. No.	Description	Price
<b>S81198</b>	Delta WASP 2040 Clay Printer	4300.00/Ea
<b>S81239</b>	2040 LDM/Clay Package	5050.00/Ea

## PicoSolutions Delta WASP 4070 Industrial 3D Printer and Printer Packages and 4.0

Print big volumes with technical materials using hot and cold technology. Use with Spitfire, Zen or Flex extruder. Connect to network to manage directly from phone or view onboard camera.

- Popular features such as the Spitfire extruder, resurrection system, and filament detection are still there, but the Delta Wasp 4070 Industrial 4.0 now boasts upgrades including a touchscreen, Wifi connectivity, and a fully-enclosed heated build chamber.
- Suspended Bowden, Resurrection System, Free Zeta System
- Hot and cold technology
- WIFI to monitor and control remotely
- New GUI new graphical interface with TFT screen
- On board camera for monitoring and timelapse
- Remote assistance for WASP technicians
- Printer volume: 400 x 700 mm
- Layer Height: 100 microns min
- Print speed: 150 mm/s max
- Travel speed: 200 mm/s max
- Acceleration: 15 mm/s<sup>2</sup>
- Bed temp: 120°C max
- Heated chamber: 80°C
- Filament spitfire: 1.75 mm
- ASA ABS High-impact-PS PETG TPU TPE
- Polypropylene polycarbonate PC+ABS
- PPS PMMA PVA PA PAcarbon PLA

### Delta WASP 4070 packages.

- Choose SP or Zen package
- Accurate and reliable with pieces up to 70 cm (27 in.) H and 40 cm (15.75 in.) XY.
- Includes printer and 3 hr. of tech support.
- Powerful and versatile printer
- Boasts upgrades including a touchscreen, WiFi connectivity, and a fully-enclosed heated build chamber
- Thermal and acoustic insulation
- Controlled actively heated print chamber - temperature up to 70°C
- Heated bed up to 135°C
- Compatible with Spitfire, Zen and Flex extruders
- WiFi connectivity
- Camera inside print chamber
- Touch interface with in-built video tutorials
- Remote diagnostics
- Extruder recognition
- USB thumb drive
- Resurrection System
- Free-Z System
- Door open/closed sensor



Cat. No.	Description	Price
<b>S81202</b>	Delta WASP 4070 Industrial 4.0 3D Printer	15150.00/Ea
<b>S81247</b>	Delta WASP 4070 Industrial 4.0 - SP Package	17880.00/Ea
<b>S81248</b>	Delta WASP 4070 Industrial 4.0 - Zen Package	18390.00/Ea

## PicoSolutions Delta WASP 40100 Clay 3D Printer with XL LDM



Accurate and fast using all-ceramic materials. Open and accessible on three sides to interact during printing.

- No stop print: With each printed piece, move the printer and continue production.
- Mold directly on the ground or with an intermediate shelf.
- Extruder with controlled dosage by screw.
- Air pressure control integrated on the printer.
- Trolleys with roller runners to ensure excellent stability.
- Dedicated firmware.

### Tech Specs:

- Printing volume:
- Metric: Ø(XY) 400 mm x Z 1000 mm
- Standard: XY 15.75 in. x Z 39.37 in
- Minimum layer height: 50 micron
- Maximum printing speed: 150 mm/s
- Maximum travel speed: 150 mm/s
- Acceleration: 500 mm/s<sup>2</sup>
- Operating Systems: Windows, Mac,
- Linux Slicing software
- Interface: SD Card - LCD display
- Physical Dimensions: 85 x 77 x 195 cm (34 x 30 x 77 in.)
- Weight: 80 kg/177 lb.
- Power: Input: 110V 50/60 Hz; Absorbed power: 200 W
- Temperature: Use: 20 to 30°C; Warehouse: 0 to 30°C
- Frame and cover: Aluminium, Steel
- Platform: Steel
- Movements: Nylon wheels on aluminum slides

### 40100 XL LDM/Clay 3D Printer Package

- Accurate and fast using all LDM materials.
- 1 x 40100 Clay
- 1 x Basic+ Tech Support (8 hr.)
- Spare XL LDM screw
- Standard smaller nozzle extruder and 50 lb. porcelain
- Prints up to 100 cm in height and 40 cm XY. (1 x 40100 Clay, 1 x Basic+ Tech Support (8 hours))
- Spare XL LDM screw
- Standard smaller nozzle extruder, and 50 lb. of porcelain.



Cat. No.	Description	Price
<b>S81199</b>	Delta WASP 40100 Clay with XL LDM	11110.00/Ea
<b>S81240</b>	40100 XL LDM/Clay 3D Printer Package	13630.00/Ea



## Engage Your Students Wherever They Are

Keep your students safe and engaged with a selection of remote learning tools and materials.

You'll find:

- Products for real-time instruction
- Activities for independent learning
- Physical distancing aids
- And more

Visit [fisheredu.com/remoteteaching](https://fisheredu.com/remoteteaching) to learn more.



## PicoSolutions Delta WASP 3MT (4.0) Industrial 3D Printer – Pellet

Create large, robust pieces with the speed and precision of an industrial printer. Connect to network to manage remotely and view onboard camera. Thermal and noise insulated with Hot and Cold technology for technical prints in pellet.

- Insulated for thermal and noise insulation.
- Create pieces with the precision typical of smaller printers thanks to the Spitfire Extruder extruder that works with traditional filament or to create large and robust pieces in a short time with the use of Pellet Extruder starting directly from plastic in industrial pellets.
- Can be connected to the network and therefore manage the printer directly via mobile phone, tablet or computer.
- Camera inserted inside the printer to monitor printing even if located elsewhere.
- Substantial closed work area and multi-tool system
- Heated nozzle for direct extrusion of polymeric filaments.
- Pellet extruder is for fast and strong prints using plastic pellets.
- WIFI connect to network for monitoring and control
- New GUI new touch interface with bigger TFT display
- Camera on board for monitoring and timelapse
- Remote intervention/support
- Print volume: 1000 x 900 mm
- Layer height: 1200 mm max
- Layer resolution: 0.5 mm
- Print speed: 200 mm/s max
- Travel speed: 300 mm/s max

### 3MT Industrial 4.0 Package

- Print both filament and pellet in large scales.
- Includes printer, 16 hr. tech support, installation and training
- Made of metal, with non-deformable belts loaded in steel, insulated for thermal and noise insulation.
- Create pieces with the precision typical of smaller printers thanks to the Spitfire Extruder that works with traditional filament or to create large and robust pieces in a short time with the use of Pellet Extruder starting directly from plastic in industrial pellets.
- Can be connected to the network and therefore manage the printer directly via mobile phone, tablet or computer.
- Camera has been inserted inside the printer to monitor printing even if located elsewhere.
- Substantial closed work area and the multi-tool system
- Heated nozzle for direct extrusion of polymeric filaments
- Pellet extruder is for fast and strong prints using plastic pellets.
- Maximum Cylindrical Print Area:  $\varnothing$  1000 to 900 mm
- Maximum height: 1200 mm
- Layer resolution: 0.5 mm
- Filament used:  $\varnothing$  1.75 mm

- Maximum Print Speed: 200 mm/s
- Maximum Travel Speed: 300 mm/s
- WASP Spitfire Extruder: Steel nozzle  $\varnothing$  3, 5 mm
- Materials: PLA Pellets  $\varnothing$  2 to 6 mm
- Closed chamber, mechanics mount tools up to 10 kg, one-minute tool exchange.
- Operating Systems: Windows, Mac, Linux
- Software Slicing: Cura, SLic3r, Simplify 3D
- File Type: .stl ,.obj , .gcode
- Interface: SD Card, LCD Screen
- Machine Dimensions: 215 x 235 x 305 cm (84.65 x 95.52 x 120.01 in.)
- Machine Weight: 250 kg (551.16 lb.)
- Power Requirements:
- Input: 110 V
- Extruder: 600 W max / 150 W mi
- Drivers: 200 W max
- Heated Platform: 2 kW max
- Frame and Cover: Aluminium, Coated Iron, Polycarbonate, PU
- Printing Bed: Aluminium, tempered glass
- Movements: industrial guides on aluminum slides DELTA WASP 3MT 4.0 INDUSTRIAL (Frame and Pellet Pneumatic Continuous Feeding and Extrusion System XL for Delta WASP 3MT)



### 3MT LDM/Clay 3D Printer Package

Large format (1M by 1M build volume) Includes: 3MT LDM 4.0, Standard Tech support (16 hours), 2 x XL spare screws, 100 lb. porcelain, Installation, training and shipping. Optional additional training

- Fast and specifically designed for LDM printing.
- Versatile
- Custom-made

Cat. No.	Description	Price
<b>S81203</b>	Delta WASP 3MT (4.0) Industrial - Pellet	40400.00/Ea
<b>S81249</b>	3MT Industrial 4.0 Package	53450.00/Ea
<b>S81241</b>	3MT LDM/Clay 3D Printer Package	56300.00/Ea



# 3D Print in Clay and Other Materials

Accurate and reliable with all materials, the Delta WASP 2040 PRO 3D printer is made of aluminum and PMMA, with non-deformable belts loaded in steel. The machine is equipped with an autocalibration system and a rectified print surface that guarantees the best performance over time.

The printer driver is suspended to make printing faster and minimize weight on the mobile crew. The machine also contains all the WASP systems for printing recovery, including the resurrection system, free zeta system, and end of the material system.



WASP Project Delta WASP 2040 Pro

Cat. No. S81200 – \$3,540.00



**PicoEducators Basic Tech Support Package**  
Cat. No. S81235  
\$505.00



**WASP Project Screw for LDM Clay Extrusion System**  
Cat. No. S81224  
\$50.50



**WASP Project LDM Clay Kit Extrusion System**  
Cat. No. S81222  
\$909.00

Visit [fisheredu.com](http://fisheredu.com) to learn more.



## PicoMaker Piconaut S2 3D Printer Kit

Piconaut S2 3D Printer is designed for Science Educators.

- Users can build their own 3D printer
- 200 x 200 build volume
- Auto Bed Leveling
- E3D V6 Lite Extruder Includes Piconaut Module Curriculum
- Print volume: 200 x 180 mm (7.8 x 7 in.)



Cat. No.	Description	Price
S81177	Piconaut S2 3D Printer Kit	606.00/Ea

**FISHER SCIENCE EDUCATION**  
MAKING SCIENCE MATTER

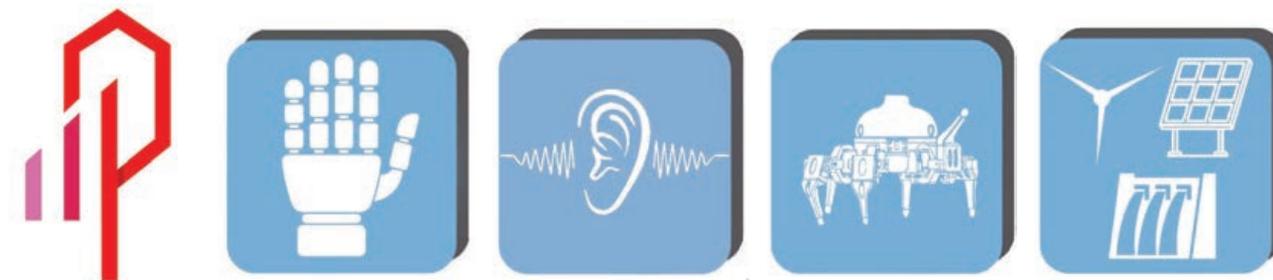
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A HEAD START ON STEM CAREERS

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## PicoEducators PicoOnline Training Packages

Excellent assets for STEM educators and beyond.



**SLA 3D Printer Makerspace VTM Package (S81250).** Includes two SLA 3D printers, materials for 1-2 semesters and 18 hours of Virtual Teacher mentorship covering Open Source STEM curriculum.

**PicoNaut 3D Printer Makerspace Basic Virtual Package (S81252).** Includes one PicoNaut 3D printer, E3D V6 Lite extruder, all materials needed for 1 to 2 semesters course work and 16 hours of Virtual Teacher Mentorship covering Open Source STEM Curriculum. Printer features auto-bed leveling and produces classroom-appropriate volume.

**PicoNaut 3D Printer Makerspace Plus Virtual Package (S81253).** Includes three PicoNaut 3D printers, E3D V6 Lite extruder, all materials needed for 1 to 2 semesters course work and 16 hours of Virtual Teacher Mentorship covering Open Source STEM Curriculum. Printer features auto-bed leveling and produces classroom-appropriate volume.

**Sound Visualization Training Package (S81256).** Students will learn how sound travels through the air, how audio engineers use their knowledge of sound wave to manipulate sound and learn the anatomy of the ear. S81256 includes 2 days of Teacher Training, 10 sets of hardware and all materials needed for 1 to 2 semesters course work. Full Class LV1 module S81180

**Bionics Online Training Package (S81255).** Teaches students the difficulties of missing limbs and how to create a bionic hand to solve these issues. Comes with two days of Teacher Training to customize usage of Open Source STEM Curriculum, 10 sets of classroom hardware, and all materials needed for 1 to 2 semesters course work. No 3D plastic parts are included. All printed parts are open source. All adaptors and hardware included.

**Hexapod Online Training Package (S81257).** Students 3D print, design, engineer and program a robot. Includes two days of Teacher Training to customize usage of Open Source STEM Curriculum, 8 sets of classroom hardware, and all materials needed for 1 to 2 semesters course work.

**Wind Turbine Online Training Package (S81258).** Students will study energy, how wind is formed and used for energy harvesting, how wind turbines are built and how those parts work together to generate electricity. Complete package comes with two days of Teacher Training to customize usage of Open Source STEM Curriculum, 8 sets of classroom hardware, and all materials needed for 1 to 2 semesters course work.

**Alternative Energy Online Training Package (S81259).** Students explore energy, how it is captured and used. Covers wind turbines, solar power and hydro power. Includes Two days of Teacher Professional Development, all materials for 1 to 2 semesters course work, 6 Alternative Energy+ Kits (Wind Vertical and Horizontal, Solar and Hydro) and curriculum.

**PicoPreneurs Online Training Package (S81254).** Teaches students all about how to start, develop, and grow their own business utilizing emerging technologies.

**PicoPreneurs Annual Program (S81178).** Annual entrepreneurship competition. Enrollment required. Contact your Fisher Science Education representative for details.

Cat. No.	Description	Price
S81250	SLA 3D Printer Makerspace VTM Package	3300.00/Ea
S81252	Piconaut 3D Makerspace Basic VTM Package	2820.00/Ea
S81253	Piconaut Makerspace Plus VTM Package	4420.00/Ea
S81256	Sound Visualization Online Training Package	1009.00/Ea
S81180	Sound Visualization LV1 Full Class Module	1009.00/Ea
S81255	Bionics Online Training Package	1009.00/Ea
S81179	Bionics LV1 Full Class Module	1009.00/Ea
S81257	Hexapod Online Training Package	2530.00/Ea
S81258	Wind Turbine Online Training Package	504.00/Ea
S81259	Alternative Energy Online Training Package	1009.00/Ea
S81254	PicoPreneurs Online Training Package — Business Development	1009.00/Ea
S81178	PicoPreneurs Annual Program	1009.00/Ea

## Robo 3D Education 3D Printers with WiFi

Ideal for classroom instruction and activities.

- Compatible with Google Chromebook and iPad
- Full enclosures are designed for safety and include HEPA filter

Every Robo E3 comes with an extended 2 year warranty, spare parts pack, 2 hours of online training, and a starter plan to MyStemKits K-12 curriculum. One additional hour of online training is available separately (S72786).

### Robo E3 Education 3D Printer with WiFi (S72787)

Includes Robo C2 Printer, Power Cable, Spool of Filament, Quick Start Guide, USB with 3D Models, 1-year Autodesk Fusion 360, Tool Kit

### Robo E3 ProSmart Professional Grade 3D Printer with WiFi

9.8 x 11 x 11.8 in. build volume. Includes over 300 STEM-driven lessons and design challenges.



Cat. No.	Description	Price
S81379	Robo E3 Pro Smart Professional Grade 3D Printer with WiFi	2527.00/Ea
S72787	Robo E3 Education 3D Printer with WiFi	1239.00/Ea

## Robo 3D MyStemKits

Deliver STEM education to students in an interactive and engaging manner. Uses 3D printing to create more than 180 manipulatives.

Hands-on learning for grades K-12.

**Classroom Plan** — One-year, single-user unlimited plan.

**E3 Classroom Bundle** — One-year subscription to the Classroom Plan (one teacher user account), 2 Robo C2 3D Printers, 10 x 500g rolls of filament and 2 hours of online training.

**School Plan** — One-year, multi-user unlimited plan.

**E3 School Bundle** — One-year subscription to the Classroom Plan (8 teacher user accounts), 2 Robo C2 3D Printers, 10 x 500g rolls of filament and 2 hours of online training.

Optional one hour of online training is available (S72786).

Cat. No.	Description	Price
S72788	Classroom Plan	715.00/Ea
S72790	Classroom - Robo C2 Bundle	3723.00/Ea
S72789	School Plan	2822.00/Ea
S72791	School - Robo C2 Bundle	5881.00/Ea



## PLA Filament

PLA filament is easy-to-use, non-toxic, odorless and biodegradable. Ideal for making a wide range of durable prints with Robo 3D printers.

Cat. No.	Description	Price
S72792	Robo 3D Filament 10-Pack	254.00/Ea



Robotics & Engineering

# Squishy Circuits™ Conductivity Kits



Allow for the exploration of electrical circuits with conductive and insulative dough.

- **Deluxe Kit** - The most complete kit that includes a deluxe battery holder, which has a knob that allows your lights to blink and buzzers to beep at different speeds
- Contents: 1 x Deluxe Battery Holder, 1 x Piezoelectric Buzzer, 1 x Motor with Fan, 1 x Mechanical Buzzer, 1 x Switch, 40 x LEDs (5 each or Red, Green, White, Yellow, Blue, Purple, Orange, and Color Changing), 1 x Set of Dough Sculpting Tools, 1 x Rolling Pin, 1 x 7 oz. Container of White Insulating Dough, 7 x 7 oz. Containers of Conductive Dough (in Red, Blue, and Green, Yellow, Orange, Purple, and Black)
- **Dough Kit** - Designed to make play dough science projects fun through an array of different colors
- Contents: 7 containers of conductive dough and 1 container of white insulating dough
- Each container holds 7 ounces
- The dough is safe, non-toxic, and does contain gluten
- The conductive dough dries out if left out of the container
- The insulating dough does not dry out
- **Group Kit** - Ideal for classroom groups of up to 30 peoples
- Contents: 10 x Battery Holders (40 AA Batteries not Included), 10 x Piezoelectric Buzzers, 10 x Motors with Fan Blades, 10 x Switches, 80 x LEDs (10 each in Red, Green, White, Yellow, Orange, Purple, Blue, and Color Changing)
- Kit does not come with dough
- **Lite Kit** - Basic kit that is ideal for classrooms and events where every participant needs their own battery pack
- Contents: 1 x Battery Holder, 15 x LEDs (5 each or Red, Green, Blue), 1 x 7 oz. Container of Conductive Dough (colors vary)



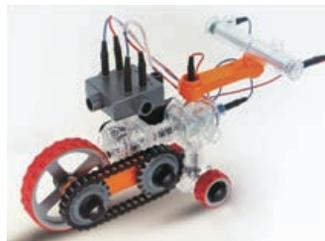
- **Standard Kit** - Includes everything needed to get started with more advanced projects
- Contents: 1 x Battery Holder, 1 x Piezoelectric Buzzer, 25 x LEDs (5 each or Red, Green, White, Yellow, Blue), 1 x 3.5 oz. Container of Insulating Dough, 3 x 3.5 oz. Containers of Conductive Dough (in Red, Green, and Blue)

Cat. No.	Description	Price
S29668	Deluxe Kit	75.00/Ea
S29670	Dough Kit	20.00/Ea
S29669	Group Kit	275.00/Ea
S29666	Lite Kit	15.00/Ea
S29667	Standard Kit	35.00/Ea

## IQ KEY Perfect 600 Robotic STEM Kit

For students to learn about engineering and its applications.

Stimulates right brain creativity by encouraging students to design and build machines of their own.



- With plans to build twenty different machines
- Identify different simple machines working together to transfer and transform energy
- Used to teach with Common Core, National Next Generation Science Standards, also encourages STEM education
- Requires 2 x AA batteries, not included
- Includes teacher's guide

**CERTIFICATIONS:**

CE

Cat. No.	Description	Price
S13168	IQ KEY Perfect 600 Robotic Stem Kit	84.75/Ea

## Snap Circuits Sets

Create exciting experiments.

Enjoy hours of educational fun while building projects such as AM radios, burglar alarms, flashlights, doorbells and electronic games. Project components feature easy-snap assembly with no tools required.



- Snap Circuits offers more than 300 project options; requires four AA batteries (not included)
- Snap Circuits Jr. offers over 100 project options; requires two AA batteries (not included)

**INCLUDES:**

Instruction manuals

Cat. No.	Description	Price
S66934A	Snap Circuits™ Jr.™ 100 Experiment	49.25/Ea
S66934	Snap Circuits™ 300 Experiment	96.00/Ea

## Elementary Snap Circuits Kit

Great introduction to the world of electricity and electronics.



- More than 30 parts easily snap together
- Build over 100 experiments without any additional tools
- Full-color manual includes information about resistors, capacitors, transistors, motors, batteries, series/parallel circuits and more

**INCLUDES:**

Storage case

**REQUIRES:**

Two AA batteries (S43921)

Cat. No.	Description	Price
S68214	Elementary Snap Circuits Kit	68.70/Ea

## United Scientific™ Create-a-Circuit

Handy kit makes it easy to create a circuit.



**ORDERING INFORMATION:**

Dimensions: 7 x 4 x 2 in. (17.8 x 10.2 x 5.1 cm); shipping weight: 4.6 oz. (130.4g). D-cell battery not included.

**INCLUDES:**

One D-cell battery holder, one knife switch, two miniature light bulbs, two lamp holders, four connector cords, activity guide

Cat. No.	Description	Price
S05820	Create-A-Circuit Kit	22.25/Ea

## Intermediate Snap Circuits Kit

Puts the excitement into electricity and electronics.



More than 60 modular parts to build over 300 experiments.

- Full-color manual relates information about resistors, capacitors, transistors, motors, various types of circuits and more
- Parts are stored in a lightweight, durable case with custom foam inserts

**REQUIRES:**

Four AA batteries (S43921)

Cat. No.	Description	Price
S68213	Snap Circuits Educational Series 300	148.50/Ea

## Eisco Series and Parallel Circuit Demonstration Board

Helps student to distinguish between series and parallel circuits.



- Helps student come up with conceptual and mathematical understanding of how voltage, current, and resistance behave in series or parallel circuit
- Depending on the configuration, luminosity of lightbulbs vary to show how parallel and series circuits differ
- Connects to power source (such as battery) using spade terminal connections (battery and connectors not included)

**INCLUDES:**

Sturdy base, (5) 1.5V lightbulbs, 8 detachable metal bars, 10 thumb screws, Instructions

Cat. No.	Description	Price
S13003	Series and Parallel Circuit Demonstration Board	63.50/Ea



## Lux STEAM Accelerator Sets

Explore physical models of structures and explore concepts in disciplines including biology, chemistry, math, physics, engineering and more. Lux Blox STEAM Accelerator brings STEAM concepts to life.

- Unlimited opportunities for creativity and imagination
- Excellent manipulatives for younger students
- All sets include laminated starter guide and extensive teacher's primer
- Durable plastic storage unit
- Made in USA

### Introductory Set, Primary Color Palette (S72523)

- 300 Lux Squares - 100 each of Red, Royal Blue and Yellow
- 100 Lux Trigons in White
- 10 Large Lux Multi-Wheels, Which Also Function as Gears and Pulleys
- 10 Small Lux Multi-Wheels, Which Also Function as Gears and Pulleys
- 10 Large Lux Axles
- 10 Medium Lux Axles
- 10 Small Lux Axles
- 10 Giant 7 in. Rubber Bands

### Deluxe Classroom Set, Bright Color Palette (S72520)

- 800 Lux Squares - 100 each of Neon Green, Neon Orange, Neon Pink, Purple, Red, Royal Blue, Teal Blue, and Yellow
- 300 Lux Trigons - 100 each of Black, Olive and White



- 40 Large Lux Multi-Wheels, Which Also Function as Gears and Pulleys
- 40 Small Lux Multi-Wheels, Which Also Function as Gears and Pulleys
- 40 Large Lux Axles
- 40 Medium Lux Axles
- 40 Small Lux Axles
- 40 Giant 7 in. Rubber Bands

- 40 Large Lux Multi-Wheels, Which Also Function as Gears and Pulleys
- 40 Small Lux Multi-Wheels, Which Also Function as Gears and Pulleys
- 40 Large Lux Axles
- 40 Medium Lux Axles
- 40 Small Lux Axles
- 40 Giant 7 in. Rubber Bands

### Deluxe Classroom Set, Neutral Color Palette (S72519)

- 800 Lux Squares - 200 each of Black, Gray, Olive and White
- 300 Lux Trigons - 100 each of Black, Olive and White

Cat. No.	Description	Price
S72523	Intro Set, Primary Color	200.00/Ea
S72520	Deluxe Set, Bright Color	400.00/Ea
S72519	Deluxe Set, Neutral Color	400.00/Ea

## K'NEXosaurus Rex Building Set

K'NEXosaurus Rex Building Set offers parents and children a chance to experience the amazing world of dinosaurs by creating their own.



- Offers you and your children a chance to experience the amazing world of dinosaurs by creating your own
- Build a K'NEXosaurus Rex with the 255 vibrant parts and pieces included in this set
- All parts are well-constructed plastic
- Package also includes iconic rods and connectors that snap together to make customizable figures
- Includes an additional model for a Megasaurus dinosaur, and a battery-powered motor to operate the structures
- This building set has downloadable step-by-step instructions for two motorized builds
- Each STEAM toy kids can make is designed for a more exciting playtime
- Promote your kids' development of STEAM (science, technology, engineering, arts, and math) concepts by igniting their natural curiosity and creativity
- Building with K'NEX puts children on the path to a fundamental understanding of STEAM subjects
- Let them design, construct, and customize their own K'NEX structures and enjoy hours of fun playing with them



Cat. No.	Description	Price
S81360	K'NEXosaurus Rex Building Set	26.25/Ea

## K'NEX™ 6 ft. Ferris Wheel

The ultimate K'NEX™ building challenge recommended for builders age 16 and up.

- With 8,548 colorful parts and easy-to-follow instructions, you can build this towering ferris wheel one piece at a time, for hours of building fun
- Switch on the powerful, plug-in motor to bring the hulking ride to life
- Requires 2 x AA batteries, not included
- The 6-Foot Ferris Wheel is recommended for expert builders ages 16 and up
- Product ships in 2 separate boxes



Cat. No.	Description	Price
S81364	K'NEX Ferris Wheel	463.00/Ea

## K'NEX Education™ Introduction to Simple Machines Building Sets

Bring STEM concepts to life as your students build fully functioning replicas of real-world machines, one at a time.

- Each set includes instructions to build seven or more replicas of real-world machines, one model at a time
- Sets include K'NEX™ parts, building instructions, key facts and photos of actual machines
- Packs of four
- Grades 3 to 5

### Key Concepts Include:

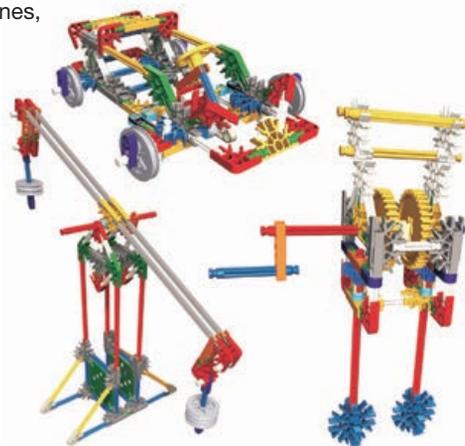
- Making Work Easier
- $W=Fd$  (Work equals force times distance)
- Changing the Direction of Force
- Ideal Mechanical Advantage
- Actual Mechanical Advantage
- Wedge Screw
- Gear Ratios
- Mechanical Systems
- Gear Types
- Lever Classes
- Pulley Systems

### Gears Set Includes:

- 198 K'NEX pieces per set
- Building instructions for seven replicas of real-world machines
- Demonstrates gear configurations, including spur and crown gears, mechanical advantage, gear ratios, how gears are used to change the amount of applied force to an object and more

### Levers and Pulleys Set Includes:

- 178 K'NEX pieces per set
- Building instructions for eight replicas of real-world machines
- Demonstrates lever classes and pulley systems, showing how and why simple machines make work easier



### Wheels/Axles and Inclined Planes Set Includes:

- 221 K'NEX pieces per set
- Building instructions for seven replicas of real-world machines
- Explore examples of wheels and axles and identify the differences between an inclined plane, wedge and screw

Cat. No.	Description	Price
S67347	Gears 7-model set	43.25/Ea
S67348	Levers and pulleys 8-model set	43.25/Ea
S67349	Wheel and axle 7 model set	43.25/Ea

**K'NEX™ STEM Explorations Building Sets**

- Accommodate 1-2 students, working as a team
- Ideal solution for home-school families
- Easy-to-follow, step-by-step building instructions included
- Building with K'NEX™ puts children on a path towards a fundamental understanding of STEAM/STEM subjects
- K'NEX™ Education sets come with lesson plans and experiment guides written by educators that feature hands-on, inquiry-based projects
- All teacher guides and experiment guides are aligned to national standards, including ITEEA, NSES, NCTM, NGSS and Common Core
- K'NEX™ Education sets let students build replicas of real-world machines to gain an understanding of the principles that make them work

**Gears Building Set** introduces students to concepts like gear configurations, gear ratios, rotational speed, mechanical advantage, and more.

- 143 parts to build unique, fully-functioning replicas of real-world gear models: a crank fan, an egg beater, and a car window
- Includes 3 after-build experiments that teach your child about STEM concepts like gear ratios, rotational speed and more

**Levers and Pulleys Building Set** allows parents and teachers to guide children in learning about lever classes, pulley systems, resistance, effort, and mechanical advantage.

- 139 parts to build unique, fully-functioning replicas of real-world models: a balance, a wheelbarrow, and a sailboat
- Includes 3 after-build experiments that teach your child about STEM concepts like lever classes, pulley systems, effort and more

**Vehicles Building Set**

Build up to seven vehicle models with different power sources, such as push power, rubber band power, wind power, and a spring motor.

- 131 parts that build seven vehicle models with different power sources: push power, rubber band, wind, and a spring motor
- Includes 5 after-build experiments that teach your child about STEM concepts like potential and kinetic energy, velocity and more

Cat. No.	Description	Price
S81355	Gears Building Set	14.00/Ea
S81356	Levers and Pulleys Building Set	14.00/Ea
S81357	Vehicles Building Set	23.25/Ea

# HEADLINE Discoveries

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## PicoBotics PicoBots Assorted Packs



PicoBots Assorted Packs allow users to build a PicoBot in your the or classroom to teach basic engineering, motors, circuits, and physics concepts (i.e. balance principles).

- A PicoBot is a small robot made by inserting a vibrating pager motor into a 3D printed animal body. The vibrations from the motor travel down the bristle legs and cause the PicoBot to move and spin on flat surfaces.
- Adjust movement patterns by bending, twisting, and angling the pipe cleaners into different positions.
- Build time: 3 to 10 minutes.
- Suitable for ages 5+
- Kit contains an assorted classroom set of Picobot animals.
- Ideal for camps, scout troops, homeschool, libraries, after-school, STEM/STEAM groups, birthday party, and classroom activities.
- Race or battle them against each other
- Kit includes: Assorted Characters, Vibrating DC Motor (1.5 V), Batteries (1.5 V), Pipe Cleaners, Google Eyes



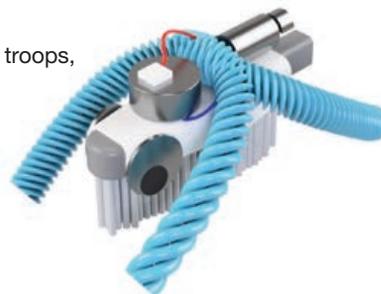
Cat. No.	Description	Price
S81172	Pico Bots, 4 Pack	20.15/Ea
S81173	Pico Bots, 25 Pack	101.00/Ea

## PicoBotics Bristlebots

Build a Bristlebot in the home or classroom to teach basic engineering, motors, circuits, and physics concepts (i.e. balance principles)

- A Bristlebot is a small robot made by combining a toothbrush head and a vibrating pager motor.
- Vibrations from the motor travel down the bristles and cause the brush to move and spin on flat surfaces.
- Adjust different parts by bending, twisting, and angling the chenille stems into different positions and see how it affects the movement and direction of the Bristlebot.
- Build time: 3 to 10 minutes.

- Suitable for ages 5+.
- Ideal for camps, scout troops, homeschool, libraries, after-school, STEM/STEAM groups, birthday party, and classroom activities.
- Race or battle them against each other



Cat. No.	Description	Price
S81174	Bristlebots , 25 Pack	101.00/Ea

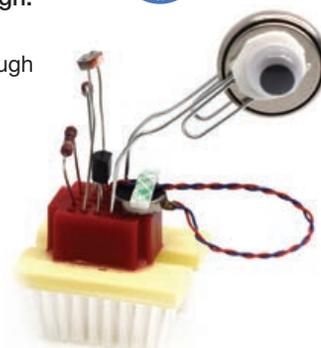
## Eisco Light-Sensitive Bristlebot Kit

Explore a simple feedback circuit analog of bacteria. The Light Sensitive Bristlebot Kit includes components for building a simple light-based bacteria model based on the bristlebot design.

- Explore a simple feedback circuit analog of bacteria.
- The bot moves randomly when there isn't enough light. When it wanders into a region with enough light it slows down and stops.

### Kit includes:

- (2) toothbrush heads
- (1) 25 pin micro breadboard
- (1) 2N3904 NPN bipolar transistor,
- (1) CR2032 3V Lithium coin cell battery
- (1) Micro 3V DC vibration motor
- (1) 5539 photoresistor
- Mounting tape
- Single-use superglue
- (4) googly eyes
- (2) bare metal paperclips
- Detailed, illustrative instructions, and pedagogical materials
- Scissors required, not included
- Team up multiple bots to explore group behavior
- Exploration of the kit takes about an hour, including assembly



Cat. No.	Description	Price
S30767	Light Sensitive Bristlebot Kit	23.25/Ea



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## Makerspace Supplies

## Vacuum Forming Makerspace with PicoOnline VTM Package

**NEW**

Vacuum Forming Makerspace PicoOnline VTM Package is an excellent asset for STEM educators and beyond.

### Package Includes:

- 16 hours of Virtual Teacher Mentorship to customize usage of Open Source STEM Curriculum
- 3 Vacuum formers
- All materials needed for 1 to 2 semesters course work



Cat. No.	Description	Price
S81251	Vacuum Forming Makerspace PicoOnline VTM Package	4770.00/Ea

## Eisco magiClass™ Remote Clicker

Simpler, faster, smarter response and voting system.

magiClass closes gaps in the classroom by ensuring that the needs of all students are taken into account, no matter how quiet or shy.

### magiClass Results

- Improved comprehension
- Increased interest, motivation and involvement Higher levels of student attentiveness
- Greater output of learning materials
- Improved student performance
- More effective learning experience



### Ultimate remote clicker (S01012A)

This remote clicker combines intuitive operation and ease of use with all the features of an advanced response system.

- User-friendly intuitive operation
- Students can answer multiple-choice, yes/no and true/false questions
- Students can request help
- LED indicators display immediate individual feedback of right or wrong answers
- Instructors receive real-time feedback from students

Cat. No.	Description	Price
S01012A	Ultimate Remote Clicker	125.00/Ea

## Practical Soldering Project Kit

Practice good soldering techniques.

- Working with printed circuit boards is in the future of every electronic technician
- Helps achieve good soldering techniques
- Allows familiarity with a variety of electronic components
- Provides dynamic results

### REQUIRES:

9V battery



Cat. No.	Description	Price
S65260	Practical Soldering Project Kit	14.14/Ea

## PermoPlast™ Modeling Clay

Non-hardening, stainless modeling clay.

- Nontoxic, antiseptic and harmless
- Retains plasticity for repeated usage time and time again
- Can be squeezed, pushed, pulled
- Four assorted colors: gray, green, red, brown
- 1 lb. (0.45kg) carton
- Pack of 4



Cat. No.	Description	Price
S17307	Modeling Clay	12.48/PK

## PicoTurbine 200 Wind Copper Coils



Pack of 4 open core 22 gauge copper wire coils.



- Consists of 220 turns of enamel coated magnet wire
- 2 x 1 in. by 1/4 in. thick
- Weighs about 1 oz. (28 g)
- Resistance of approximately 8 ohms.
- Turn options 200, 300, 400

Cat. No.	Description	Price
S81195	Turbine Copper Coils	15.14/Ea

## Primary Science Sensory Tubes

Clear tubes nurture sensory development and science exploration.



- Set of four tubes
- Two easy-twist, solid lids hold liquid securely inside
- Four vented lids allow smell or live creature exploration
- Measure 12 x 2.5 in.
- Grades K+

Cat. No.	Description	Price
S04656	Sensory Tubes	35.10/Ea

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MAKING SCIENCE MATTER

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# Products to Complete Your Makerspace

Stock up on the products you need to continue making, learning, and exploring in your classroom.



Description	Cat. No.	Quantity	Price
<b>Cups</b>			
Cups, Foam, 8 oz.	S04196	1,000/Pack	\$78.00
Cups, Clear Plastic, 7 oz.	S04202	100/Pack	\$32.25
Cups, Clear Plastic, 9 oz.	S394201CC	12/Pack	\$2.55
Cups, Clear Plastic, 9 oz.	S042015BO	100/Pack	\$18.50
Cups, Clear Plastic, 10 oz.	S395584GJ	Each	\$0.30
Cups, Paper, 3 oz.	S396335WW	200/Pack	\$14.50
Cups, Paper, 8 oz.	S04200	100/Pack	\$16.75
<b>Plates, Pans, and Trays</b>			
Pans, Square, Aluminum, 8 x 8 x 1.3 in.	S395544GJ	Each	\$0.55
Plates, Foam, Dessert Size	S394561SS	Each	\$0.30
Plates, Paper, Dinner Size	S052084TT	100/Pack	\$3.80
Shoe Boxes, Plastic	S394421MW	Each	\$3.75
Trays, Plastic, 15 x 9 x 2.5 in., Black	S39366KCC	Each	\$4.45
<b>Pencils</b>			
Colored Pencils, Assorted Colors	S04194	12/Pack	\$4.40
<b>Utensils</b>			
Spoons, Metal, L: 6 in.	S045864RR	Each	\$0.45
Spoons, Plastic	S04175MKC	100/Pack	\$3.80
<b>Miscellaneous</b>			
Bags, Brown Paper, 5 x 3.125 x 9.75 in.	S395924TT	Each	\$0.20
Bags, Resealable, Clear Plastic, 6 x 6 in.	S04588	100/Pack	\$11.50
Bags, Resealable, Clear Plastic, 1 qt., 6 x 8 in	S395604GJ	Each	\$0.25
Balls, Steel, Dia.: 1 in.	S396365WW	Each	\$1.60
Balls, Styrofoam, White, Dia.: 1 in.	S04571	12/Pack	\$11.50

Visit [fisheredu.com](http://fisheredu.com) or contact your Fisher Science Education sales representative to access our full selection of products.

# Products to Complete Your Makerspace



Description	Cat. No.	Quantity	Price
<b>Miscellaneous</b>			
Birch Branches, 36 to 48 in., 25/Bundle	S39371KCC	Each	\$38.50
Cardboard, 12 x 12 in.	S394311CC	Each	\$1.60
Cards, Index, Lined, 3 x 5 in.	S04186MKC	100/Pack	\$1.05
Cards, Index, Lined	S395123EW	Each	\$1.85
Clay, Modeling, 4 Colors, 1 lb.	S04179MKC	Each	\$2.90
Coffee Filters	S041853MM	200/Pack	\$6.35
Craft Sticks, Wood	S394591SS	500/Pack	\$23.75
Food Coloring, Liquid, Set of 4 Colors	S05189MKC	Each	\$6.00
Fur, Fake, 6 x 6 in., Assorted Colors	S394241CC	Each	\$4.65
Gravel, 0.5 in. Pieces, 5 lb.	S394571SS	Each	\$7.65
Head, Styrofoam, Flat Face	S20614	Each	\$18.75
Hooks, Suction Cups, Dia.: 1 in.	S394291CC	Each	\$0.60
Pipe Cleaners, L: 12 in., Assorted Colors	S39665MKC	100/Pack	\$6.10
Pom Poms, Dia.: 1 in.	S394872BE	Each	\$0.20
Potting Soil, 6 Cups	S394632WAW	Each	\$2.60
Potting Soil, 8 Cups	S042858	Each	\$10.50
Sand, Fine, 50 lb.	S39678MKC	Each	\$11.00
Tablecloth, Plastic, 54 x 108 in., Assorted Colors	S395624GJ	Each	\$3.00
Tape, Duct, 10 yd.	S39660MKC	Each	\$1.75
Toothpicks, Wood, Round	S04180MKC	800/Pack	\$2.10
Towels, Paper, White, 70 Sheets/Roll	S04573MKC	Each	\$2.55
Toy Cars, Diecast, Assorted Styles	S04578MKC	Each	\$2.80
Washers, Flat, Metal, I.D. x O.D.: 0.31 x 0.75 in.	S04584KPP	Each	\$0.15
Yarn, Acrylic, 150 yd., Red	S396465BIOB	Each	\$7.30

Visit [fisheredu.com](http://fisheredu.com) or contact your Fisher Science Education sales representative to access our full selection of products.



# Flexible, Fast, and Simple



The NeuLog™ system combines tiny computer-like sensors with a datalogger and flash memory for an easy and fun classroom experience.

- Compatible with smartphones, tablets, and PC or Mac computers
- Designed to work with future technologies without the need for upgrades
- Adaptable probes and sensors, ideal for any experiment or age level
- Multiple connection options, including Wi-Fi, USB, and stand-alone
- Cost effective, doesn't require expensive hubs or additional software
- Modular plug and play allows connection of sensors in any order with instant readings, minimal time, and no calibration



Visit [fisheredu.com/neulog](http://fisheredu.com/neulog) to learn more.

## How to Get Started



### 1. Sensors

Select the type of sensor you need to collect data for your experiments and demonstrations — over 40 sensors are available.

See page 23 or visit [fisheredu.com/neulog](http://fisheredu.com/neulog) for our full sensor listing.



### 2. Hardware

Determine the type of hardware to be used in your classroom and the devices your students will most commonly use, such as PCs, tablets, etc.

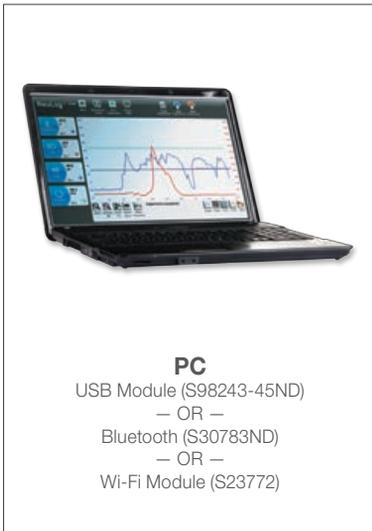


### 3. Connection

How do you want your sensors to send data to your hardware?

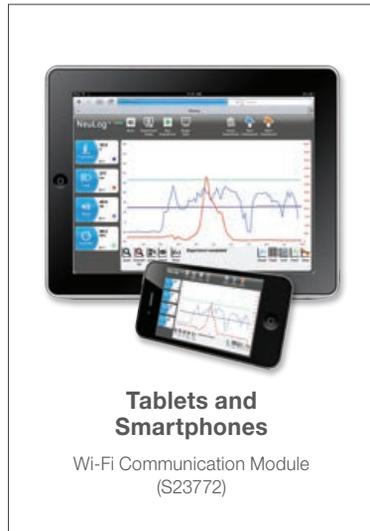
See page 21 for details.

## Options



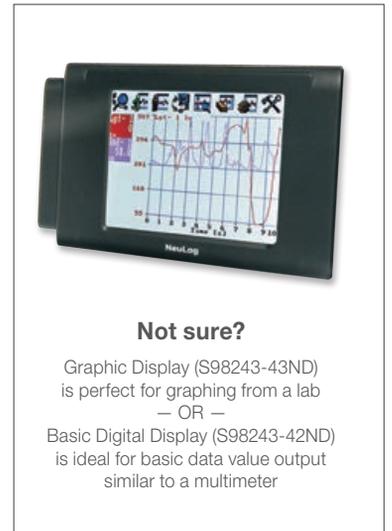
### PC

- USB Module (S98243-45ND)
- OR —
- Bluetooth (S30783ND)
- OR —
- Wi-Fi Module (S23772)



### Tablets and Smartphones

Wi-Fi Communication Module (S23772)

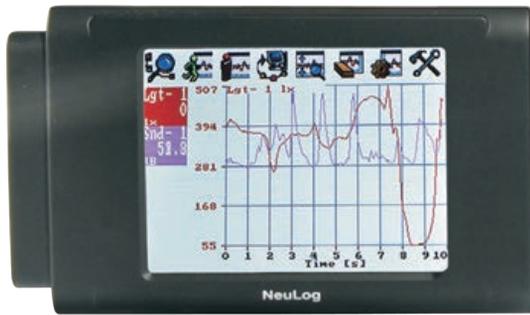


### Not sure?

- Graphic Display (S98243-43ND) is perfect for graphing from a lab
- OR —
- Basic Digital Display (S98243-42ND) is ideal for basic data value output similar to a multimeter



All options require a **Battery Unit (S39112)**



Choose from over 45  
NeuLog sensors.

### NeuLog Modules and Displays

Description	Cat. No.	Price
Wi-Fi Module	S23772	\$156.00
Basic Digital Display	S98243-42ND	\$58.50
Digital Graphic Display	S98243-43ND	\$161.00

Description	Cat. No.	Price
USB Module	S98243-45ND	\$49.50
Battery Unit	S39112	\$41.25
Bluetooth	S30783ND	\$107.00

### NeuLog Sensors

Description	Cat. No.	Price
Blood Pressure Logger Sensor	S98243-2ND	\$134.00
Charge Logger Sensor	S98243-60ND	\$154.00
CO <sub>2</sub> Logger Sensor	S98243-3ND	\$288.00
Conductivity Logger Sensor	S98243-5ND	\$83.00
Dew Point Logger Sensor	S98243-59ND	\$97.00
EKG Logger Sensor	S98243-10ND	\$178.00
Drop Counter Logger Sensor	S98243-52ND	\$105.00
Flowrate Logger Sensor	S98243-11ND	\$156.00
Force Logger Sensor	S98243-9ND	\$144.00
Force Plate Logger Sensor	S98243-12ND	\$282.00
Hand Dynamometer Logger Sensor	S98243-14ND	\$145.00
Galvanic Skin Response (GSR) Logger Sensor	S98243-51ND	\$140.00
Geiger Counter Logger Sensor	S23714	\$741.00
Heart Rate and Pulse Logger Sensor	S98243-15ND	\$65.00
High-Temperature Logger Sensor	S98243-34ND	\$80.00
Humidity Logger Sensor	S98243-27ND	\$85.00
Light Logger Sensor	S98243-20ND	\$61.00
Motion Logger Sensor	S98243-23ND	\$111.00

Description	Cat. No.	Price
Oxygen Logger Sensor	S98243-8ND	\$263.00
Panda Multi-Sensor	S13941	\$326.00
Panda Wi-Fi Module	S13942	\$167.00
pH Logger Sensor	S98243-24ND	\$108.00
Photogate Logger Sensor	S98243-25ND	\$74.75
Pressure Logger Sensor	S98243-13ND	\$105.00
Respiration Monitor Belt Logger Sensor	S98243-55ND	\$160.00
Rotary Motion Logger Sensor	S98243-53ND	\$201.00
Salinity Logger Sensor	S98243-29ND	\$111.00
Soil Moisture Logger Sensor	S98243-30ND	\$87.00
Sound Logger Sensor	S98243-22ND	\$94.00
Spirometer Logger Sensor	S98243-28ND	\$111.00
Surface Temperature Logger Sensor	S98243-33ND	\$35.75
Temperature Logger Sensor	S98243-31ND	\$43.00
Turbidity Logger Sensor	S98243-35ND	\$139.00
UVA Logger Sensor	S98243-36ND	\$112.00
UVB Logger Sensor	S98243-37ND	\$112.00
Voltage Logger Sensor	S98243-7ND	\$54.25

Visit [fisheredu.com/neulog](http://fisheredu.com/neulog) to learn more.

# Advantages of Using Vernier Technology



Frees class time



Easy to use



Builds student interest



Creates a deeper understanding



Supports standards



Backed by support



## Vernier Lab Books

Enhance your curriculum with Vernier's award-winning lab books, which are available as e-books or in traditional print format. Each lab book includes common experiments that incorporate the use of Vernier sensors and software.

All experiments are ready to use or can be customized to match your teaching preferences. Also included is essential instructor information such as teaching tips, instructions for preparing solutions, suggested answers, and sample data.

\*AP and Advanced Placement Program are registered trademarks of the College Entrance Examination Board, which was not involved in the production of and does not endorse this product.

Lab Book	Cat. No.	Price
<i>Chemistry with Vernier</i>	S16047ND	\$48.75
<i>Biology with Vernier</i>	S16045ND	\$48.75
<i>Physics with Vernier</i>	S16046ND	\$48.75
<i>Middle School Science with Vernier</i>	S15962ND	\$48.75
<i>Vernier Chemistry Investigations for Use with AP* Chemistry</i>	S16079ND	\$48.75
<i>Advanced Biology with Vernier</i>	S16096ND	\$49.00
<i>Investigating Environmental Science through Inquiry</i>	S16049ND	\$48.75
<i>Advanced Chemistry with Vernier</i>	S16119ND	\$48.75
<i>Physics Explorations and Projects</i>	S29802	\$48.75
<i>Elementary Science with Vernier</i>	S15989ND	\$48.75
<i>Human Physiology Experiments</i>	S16036ND	\$48.75

Visit [fisheredu.com](http://fisheredu.com) for a full list of lab books.

## Getting Started with Go Direct Sensors

### Why Choose Go Direct Sensors?

With over 40 sensors to choose from, the Vernier™ Go Direct™ family of sensors offers an affordable solution that includes free software. Go Direct sensors are easy to use—just connect and start collecting data with your device.

### What You Need to Get Started

**A Go Direct Sensor**

These versatile sensors connect to your device via Bluetooth™ wireless technology or USB.

**B Device**

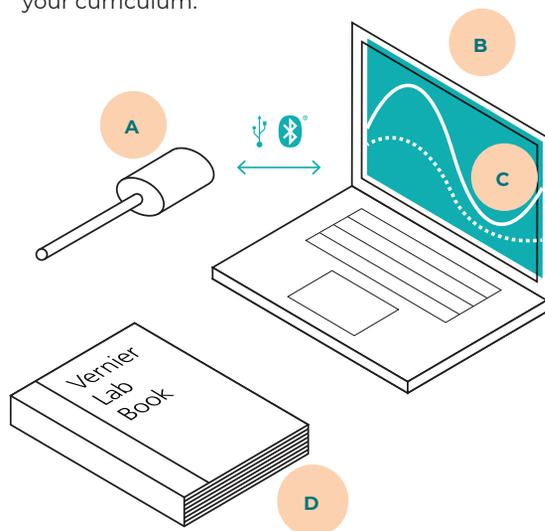
Go Direct sensors connect to a wide variety of devices, including Chromebooks, computers, and mobile devices.

**C Vernier Graphical Analysis™ App**

Our free data-collection app facilitates student understanding with real-time graphs of experimental data. To learn more, visit [vernier.com/ga4](http://vernier.com/ga4)

**D Lab Book**

Step-by-step instructions at your fingertips save valuable time when integrating probeware into your curriculum.



Go Direct Sensors	Cat. No.	Price
Go Direct Temperature	S39731	\$71.50
Go Direct Force and Acceleration	S39711	\$103.00
Go Direct Motion	S39717	\$103.00
Go Direct pH	S39725	\$93.00
Go Direct CO <sub>2</sub> Gas	S39703	\$199.00
Go Direct SpectroVis™ Plus	S16260ND	\$400.00
Go Direct Gas Pressure	S39713	\$93.00
Go Direct Conductivity	S39705	\$103.00
Go Direct O <sub>2</sub> Gas	S39722	\$196.00

Visit [fisheredu.com](http://fisheredu.com) for a full list of sensors.



Go Direct CO<sub>2</sub> Gas



Go Direct Force and Acceleration



Go Direct O<sub>2</sub> Gas



Go Direct Motion



Go Direct Gas Pressure



Go Direct Photogate



Go Direct Conductivity



Go Direct pH



Go Direct SpectroVis™ Plus



Go Direct Temperature

## Vernier Interface Data Logging

### Why Choose LabQuest 3?



LabQuest™ 3 is a powerful, easy-to-use, and versatile data-logging solution for STEM students. A full-featured data-collection platform, LabQuest 3 is an excellent choice for laboratories, classrooms, or in-the-field investigations.

#### A LabQuest 3

A large screen and advanced touchscreen abilities make it easier for students to collect, graph, and analyze data wherever they are—the classroom, at home, or in the field.

#### B Sensors

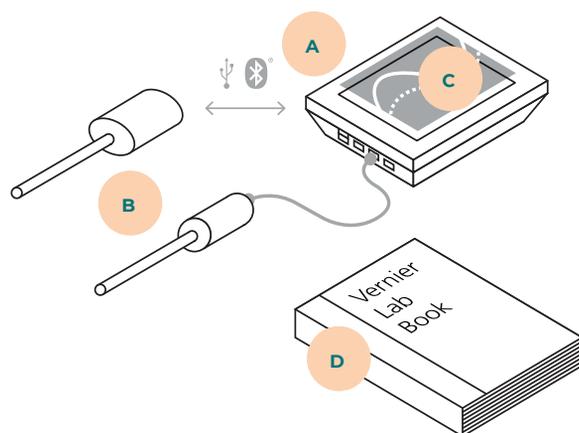
Compatible with all Vernier sensors, LabQuest 3 connects wirelessly to Go Direct™ and LabQuest sensors.

#### C Software

LabQuest 3 has built-in software, LabQuest App, that gives your students real-time graphing and analysis capabilities in one handheld device.

#### D Lab Book

Looking for even more lab ideas? Our popular, award-winning lab books provide hundreds of well-tested, customizable experiments.

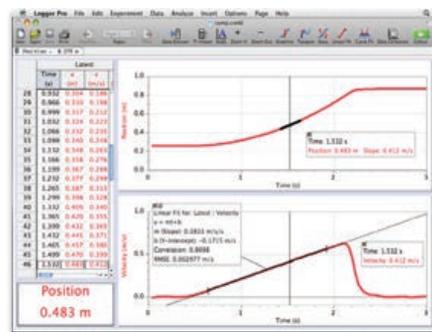


LabQuest Sensors	Cat. No.	Price
Stainless Steel Temperature Probe	S16268ND	\$36.75
pH Sensor	S16238ND	\$90.00
Gas Pressure Sensor	S16052ND	\$89.00
Dual-Range Force Sensor	S16050ND	\$112.00
Motion Detector	S405904	\$92.00
Current Probe	S16059ND	\$39.75
Vernier Photogate	S16279ND	\$49.00
Differential Voltage Probe	S16060ND	\$39.75
CO <sub>2</sub> Gas Sensor	S16055ND	\$272.00
O <sub>2</sub> Gas Sensor	S16069ND	\$204.00
Voltage Probe	S16072ND	\$12.00

Interfaces	Cat. No.	Price
LabQuest 3	S1724327	\$330.00
LabQuest Stream	S39801	\$230.00
LabQuest Mini	S16035ND	\$173.00
Go! Link Interface	S16161ND	\$69.00

Software	Cat. No.	Price
Logger Pro	S16053ND	\$252.00

Visit [fisheredu.com](http://fisheredu.com) for a full list of sensors.



### Logger Pro 3

Logger Pro is the award-winning data-collection and analysis software for Windows and macOS from Vernier. With the complete suite of data-collection and analysis tools, Logger Pro is suitable for all students, beginning to advanced.

## Wind Experiment Kits

**Strengthen your students' critical thinking skills by introducing them to alternative energy solutions to real-world problems.**

The KidWind Project and Vernier have teamed up to provide the technology, resources, and support you need for your students to investigate renewable energy.

- Engage your students as they watch power output and energy production data develop in real time
- Inspire creativity as your students build and test prototypes, test solutions to engineering problems, and optimize designs
- Measure voltage and current and calculate power with the Go Direct Energy sensor
- Set up activities quickly and easily, providing more time for instruction and exploration

Product	Cat. No.	Price
KidWind Basic Wind Experiment Kit	S04807ND	\$133.00
KidWind Advanced Wind Experiment Kit	S04798ND	\$165.00
KidWind Mini Wind Turbine with Blade Design	S04818ND	\$70.00
Solar Energy Exploration Kit	S40815	\$79.00
SimpleGEN	S04824ND	\$63.00
2V/400mA Solar Panel	S04828ND	\$21.50
Go Direct Energy Sensor	S39721	\$93.00



## Coding and Robotics

**Technology-based solutions enhance STEM education, increase learning, and build students' critical thinking skills.**

Coding in the classroom has become an important way to introduce problem solving, nurture creativity, increase critical thinking, and build confidence, all while learning a new language. Colorful and modularized drag-and-drop graphical blocks make it easy for beginning programmers to learn to code.

Included with your purchase of mBot is our comprehensive STEM e-book, *Coding with mBot: Self-Driving Vehicles*. Each activity is aligned to CSTA K-12 Computer Science Standards and includes in-depth, easy to understand student and instructor notes.

Makeblock Product	Cat. No.	Price
mBot (Blue) Robot by Makeblock	S39804	\$79.00
mBot (Pink) Robot by Makeblock	S29803	\$79.00
Codey Rocky™ by Makeblock	S40804	\$158.00
mBot Ranger by Makeblock	S40801	\$150.00
mBot 3.7V LiPo Battery	S29805	\$10.50
mBot Interactive Light and Sound Add-On Pack	S29806	\$29.00
Me LED Matrix 8 × 6	S39810	\$13.75
mBot Servo Pack	S39807	\$29.00



## Math

## Calculators

## Texas Instruments™ TI-30Xa Calculator

Performs 54 commonly used scientific/statistical functions. Find common/natural logarithms, antilogarithms, reciprocals, powers, roots, factorials and trigonometric calculations.

- Algebraic Operating System (AOS) makes calculating easy
- Recalls a number, even after being shut off
- LCD displays floating decimal or scientific notation
- Shows eight digits or five digits and a two-digit exponent

### INCLUDES:

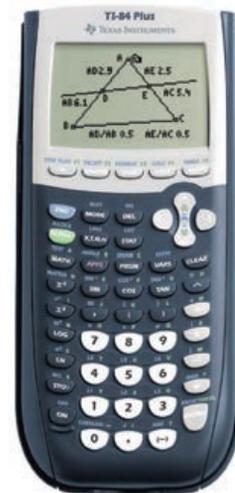
Hard cover case and quick reference card



## Texas Instruments™ TI-84 Plus Calculators

Preloaded with interactive geometry software and more. Extensive graphing and functions like parameter, polar, sequence, choice of graph formats, logic operations, interactive equation solver, matrices and more.

- Data analysis includes scatter plots and statistics
- Share data with the TI-83 Plus
- Mini USB cable enables instant computer connectivity
- Connect to ViewScreen™ panel or TI-Presenter™ projection devices
- Powered by four AAA batteries with lithium battery backup
- Automatic Power Down™ (APD) capabilities



### Specifications

- 64 × 96 pixel display with split screen
- 24K available memory Flash ROM: 480K for Plus; 1.5MB for Plus Silver
- Clock
- I/O and USB ports

### WARRANTY:

One year limited

Cat. No.	Description	Price
S40649	TI30Xa Calculator	17.75/Ea

Cat. No.	Description	Price
S68601	TI-84 Plus Graphing Calculator	127.00/Ea

## Texas Instruments™ TI-30X IIS Calculator

Combine basic scientific and trigonometric functions.

- Two-line display shows entries on top line and results on bottom line
- 11-character display on top line can be scrolled left or right — up to 88 characters
- 10-character display on bottom line can include a two-digit exponent, fraction display capabilities, operation with mixed fractions and numbers, fraction/decimal conversion, and degrees/radians conversion
- Can be powered by solar and battery

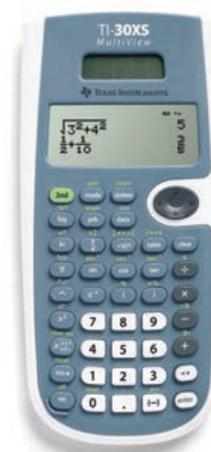


## Texas Instruments™ TI-30XS MultiView™ Scientific Calculator

Appropriate for general math, pre-algebra, algebra I and II, geometry, trigonometry, statistics, general science and biology.

Offers a four-line display to view multiple calculations and answers simultaneously. Easily scroll, review and edit current or previous entries.

- MultiView™ display
- Toggle key
- Scrolling and editing
- Stacked fractions
- Standard mathematical notation
- Scientific notation input and output
- Vertical menus
- Data/list editor



Cat. No.	Description	Price
S65241	TI-30X IIS Scientific Calculator	22.50/Ea
S65241TP	TI-30X IIS Scientific calculator	227.00/Pk

Cat. No.	Description	Price
S96892	TI-30XS MultiView Scientific Calculator	25.50/Ea

## Texas Instruments™ TI-1706SV Calculator

Economical, compact ANYLITE™ solar-powered memory calculator features four-function, slightly contoured keys for maximum speed and comfort.

- Extra-large plus and minus keys
- Operates even in dim light; never needs batteries
- Attractive sliding case



Cat. No.	Description	Price
S65245	TI-1706 SV Calculator	11.75/Ea

## Calc-U-Store™ Pocket Chart

Holds up to 35 student calculators in clear pockets.



Easy-access storage chart uses numbered pockets.

- Made of tough, red nylon
- Fitted with reinforced grommets for hanging
- Overall: 29 × 36 in. (72.5 × 90cm)
- Pocket: 3.75 × 4 in. (9.38 × 10cm)

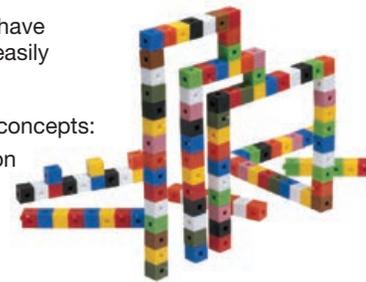
Cat. No.	Description	Price
S40690	Calc-U-Store Storage Chart	18.00/Ea

### Measurement

## Interlocking Cube Grams

Each cube measures one cubic centimeter and weighs one gram.

Ten brightly colored cubes have receptacles and fittings to easily chain together.



Demonstrate the following concepts:

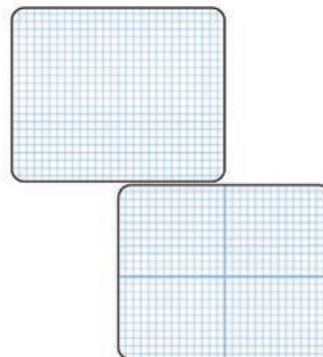
- Determining conservation of mass
- Factoring
- Squaring fractions
- Pythagorean Theorem
- Commutative and associative properties
- Pack of 100

Cat. No.	Description	Price
S94316	Interlocking Cube Grams, 100/Pk.	7.70/Pk

## Write 'N Wipe Boards

Double-sided for free drawing or graphing.

- No-tear plastic construction
- Use with dry wipe markers
- Blank on one side; available with 1cm grid for mechanical drawing or X/Y axis for graphing on the other
- 1 cm grid
- Pack of 30



Cat. No.	Description	Price
S94341	Write 'N Wipe Boards	45.25/Pk

## 12-Inch Rulers

Made of shatter-resistant material.

- English and metric calibrations
- Clear ruler is shatterproof
- Flexible and clearview rulers are shatter-resistant; available in packs of 12 with two each of red, green, blue, orange, yellow and purple



Cat. No.	Description	Price
S90532A	Clearview Ruler	8.48/Pk
S90532B	Flexible Ruler	16.38/Pk
S90532C	Clear Ruler	0.94/Ea

## Solid Hard Maple Meter Sticks

Premium quality, solid North American Maple.

- Lacquered finish for optimum durability
- Won't dent or warp
- Scaled in millimeters on one side and inches in 0.125 in. increments on the other
- Dimensions: 1.125W × 0.31 in. thick (2.85 × 0.8cm)



Cat. No.	Description	Price
S32051	Plain End Meter Stick	6.90/Ea
S32052	Meter Stick with Metal End and Hanging Hole	11.25/Ea

## Teacher's Four-Sided Meter Stick

For demonstrating usage.



- Each surface is calibrated in sequence in decimeters, centimeters and millimeters
- Dimensions: 0.78 in. (2cm) square

Cat. No.	Description	Price
S94307	Teacher's 4-Sided Meter Stick	15.86/Ea

## English/Metric Meter Sticks

Available with plain or metal ends.



- Front is ruled in metric units with millimeter increments on both edges
- Back is ruled in inches with 0.125 in. increments
- Made of pine with a multiple-coat clear lacquer finish for increased durability
- Dimensions: 1W × 0.25 in. thick (2.54 × 0.63cm)

Cat. No.	Description	Price
S40625	English/Metric Meter Stick	7.95/Ea

## Trundle Wheel with Counter

Now it's easy to measure long distances using metrics.

- Each click indicates 1m; counter clicks each meter so students can see and hear the measurement
- Counter measures up to 99,999 meters
- Easy-grip handle adjusts for various student and teacher heights
- Nonslip rubber tire for accurate reading
- Grades 1+



Cat. No.	Description	Price
S94235	Trundle Wheel with Counter	45.60/Ea

## Eisco Vernier Calliper

Plated steel, columbus type calliper enables the user to read either inside, outside or depth measurements.



- Dual scale 0 to 12.5cm x 0.1mm
- Imperial scale graduated to 5 x 0.0078 in. provided with thumb wheel for easy motion of jaws, in plastic case

Cat. No.	Description	Price
S99340	Vernier Calliper	6.95/Ea

## fisherbrand Traceable™ Digital Carbon Fiber Calipers

Switch between inches and millimeters easily.



- For measuring outside or inside diameter
- Zero button instantly resets unit at any position
- Greater-than or less-than results without calculations
- Ergonomically designed
- No lubrication is ever required on the ultra-smooth slide bar
- Runs on the supplied battery for 10,000 hours
- Made of strong composite carbon fiber
- Resolution: 0.01 in. and 0.1mm
- Accuracy: ±0.01 in. and ±0.2mm
- Large digital display: 0.3 in.H (7.6mm)

### 4 in. (10.2cm) Caliper

- Range: 0 to 4 in. (0 to 100mm)
- Dimensions: 7 × 2.5 in. (17.7 × 6.4cm)
- Weight: 1 oz. (28g)

### 6 in. (15.2cm) Caliper

- Range: 0 to 6 in. (0 to 150mm)
- Dimensions: 9.5 × 3 in. (24.1 × 7.6cm)
- Weight: 2 oz. (57g)

### CERTIFICATIONS:

Individually serial-numbered Traceable Certificate is provided from an ISO 17025 calibration laboratory accredited by A2LA. It indicates traceability to standards provided by NIST.

Cat. No.	Description	Price
S90187B	4 in. Caliper	44.25/Ea
S90187A	6 in. Caliper	33.50/Ea

## Liter Set

Teaches students the relationship between volume, mass and shape.

- Set of six graduated, clear containers
- May be filled with liquids or solids
- All are 4.35 in. (11cm) tall
- Hold 0.25 to 1L
- Grades 3 to 12



Cat. No.	Description	Price
S94243	Liter Set	23.99/Ea

## Eisco Polypropylene Cup and Scoop Measurement Set



Polypropylene Cup and Scoop Measurement Set is ideal for classroom and laboratory use



- 5 clear polypropylene cups
- 25 mL capacity
- 5 ml graduations
- 5 natural polypropylene scoops
- 2.5 mL capacity
- Scoops can be used to scoop solid materials as well
- Perfect for introductory measurement lessons

Cat. No.	Description	Price
S80688	Polypropylene Cup and Scoop	7.15/Ea

## Forensics

### Evidence Collection

## Sirchie™ “Crime Scene Do Not Cross” Barrier Tape

Helps secure the integrity of a crime scene.

- Eye-catching black lettering printed on brilliant yellow polyethylene.
- Simply tie one end of the tape around a fixed item, walk around the scene’s perimeter and tie it off where desired
- Warning repeats every 31 in. (78.7cm)
- W x L: 3 in. x 1000 ft. (7.5cm x 300m)



### INCLUDES:

Dispenser box is furnished with each roll.

Cat. No.	Description	Price
S69003A	Crime Scene Barrier Tape	30.05/Ea

## Blood Typing Anti-Sera

Use for blood typing of real human blood.

- Five milliliter vial contains enough antisera for 75 students
- Sample will keep over one year with proper refrigeration
- Materials from human-derived cell lines were found to be negative in tests for Hepatitis B, HIV and EBV
- Includes Anti-A & Anti-B, Anti Rh and Anti-H Lectin Anti-sera



### DOT: Non regulated

### DISCLAIMERS:

For educational use only. Not FDA approved for clinical use.

Cat. No.	Description	Price
S06626	Blood Typing Anti-Sera Type A, B and Rh	63.75/Ea



**HEADLINE DISCOVERIES**  
SCIENCE HAPPENS

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## Sirchie™ Fingerprinting Supplies

Great for the classroom — clear and accurate fingerprints for forensics projects.

### Long-handle Brush

- Selected, high-quality camel hair for latent powder applications only
- Fine hair eliminates scratching ridge details
- Handle is balanced for easy use
- Supplied with a protective container and cap
- L × dia.: 9 × 0.5 in. (22.9 × 1.3cm)

### Kit-Sized Fiberglass Brush

- Specially selected fiberglass filaments are excellent for developing latent fingerprints
- Retains powder and eliminates the constant powder replenishment
- Balanced, machine-knurled, black anodized-aluminum handle in special length to serve as kit replacement
- Supplied in a protective container and cap
- Dia. × L: 0.25 × 2.75 in. (0.6 × 7.0cm)

### Black Marabou Feather Duster

- Ideally suited for primary and secondary latent print development with any type of powder
- Each brush comes with a transparent tube and cap for storage
- Handle and ferrule L: 4.63 in. (12cm); feather L: 4.5 in. (11cm)

### Cleaner Towelettes

- Individual, napkin-size disposable-ink-cleaning towels for field or classroom
- Special formulation removes fingerprint ink and grime; mildly fragrant, sanitary
- Pack of 100 in hermetically sealed packages

### Search™ Fingerprint Ink

- Free-flowing, densely black ink
- Easily rolled and dries quickly on paper, but remains soft and usable on a slab for days
- Not adversely affected by extreme temperature changes
- Available in 2 oz. (59mL) or 4 oz. (118mL) quantities

### Supremink™ Fingerprint Ink

- Easy to dispense, roll out and clean up
- Use just a few drops to roll a thin, even layer of ink
- Produces fingerprints with excellent ridge detail
- Won't dry on ink slab surface; dries immediately on contact with fingerprint card
- Available in 2 oz. (59mL) or 4 oz. (118mL) quantities

### Flawless Fingerprint Ink Pad

- Stain-free
- Provides thousands of single impressions
- Remove by rubbing fingers together or use a dry paper towel
- Dia. × H: 0.38 × 1.63 in. (4.1 × 0.9cm)

### 4 in. (10cm) Fingerprint Ink Roller

- Effective and economical
- One-piece design ensures the integrity of the complete roller assembly
- Design prevents the roller from touching the inking table when not in use
- Rugged, aluminum handle and rubber grip area for operator comfort and control
- Medium-soft, high-density rubber roller element withstands repeated cleaning with solvents



### Fingerprint Record Cards (No Imprint)

- 8 × 8 in. (20.3 × 20.3cm) applicant cards printed in process blue ink on 110 lb. index card stock Do not include imprint

### “Hi Fi” Silk Black Powder

- Latent print powder offers high sensitivity, adherence and reproduction
- Packaged with desiccant capsules to protect against moisture contamination for over 12 months
- Quantity: 2 oz. (59mL); Net Wt. 0.7 oz. (21g)

### Redescent™ Fluorescent Powder

- Works especially well on dark or multicolored surfaces — greatly enhancing ridge details when illuminated
- Ultraviolet or blue frequencies (254 to 525nm) excite fluorescence
- Quantity: 2 oz. (59mL); Net Wt. 0.8 oz. (24g)

### Fingerprint Pattern Wall Chart

- Illustrates nine of the most common fingerprint patterns
- Useful reference and teaching aid

Cat. No.	Description	Price
S99530	Long-Handled Brush	26.80/Ea
S99528	Kit-Sized Brush	19.44/Ea
S99529	Feather Duster	21.25/Ea
S99524	Cleaner Towelettes	23.00/Ea
S69000C	Search™ Fingerprint Ink	15.15/Ea
S69000E	Supremink™ Fingerprint Ink	15.15/Ea
S69000A	Ink Pad	13.38/Ea
S69000F	Fingerprint Ink Roller	28.30/Ea
S99521	Fingerprint Record Card	37.35/Pk
S99527	Fluorescent Print Powder	18.94/Ea
S99526	Latent Print Powder	11.62/Ea
S99522	Fingerprint Pattern Wall Chart	29.55/Ea

## Sirchie™ PrintMatic™ Flawless Ink Pad

Revolutionary new concept for recording fingerprints.

- Specially designed microporous membrane features a pore size of 7 to 10 microns for a higher degree of detail in the fingerprint impression
- Produces over 10,000 rolled and plain impressions
- Capillary action provides just the right amount of ink on its surface
- Less pressure is needed when fingers are rolled across the pad, resulting in clearer, less distorted impressions
- Unique multi-mount, injection-molded, copolymer polypropylene case equipped with a positive, snap-lock lid to protect ink surface from airborne contaminants
- Dimensions: 15.8 × 7.6 × 1.2cm



Cat. No.	Description	Price
S99191	Sirchie Flawless Ink Pad	32.00/Ea

## Sirchie™ Magnetic Powder Applicator

Ideal for precision dusting of small to medium surface areas.

- Durable, injection-molded applicator features a narrow magnet to fit any size powder container
- Use for processing paper, finished and unfinished wood, nonferrous metals, plastic, glass, vinyl, etc.



Cat. No.	Description	Price
S99534	Magnetic Powder Applicator	31.60/Ea

## Transparent Lifting Tape

Conforms to most surfaces.

- Pressure wound, heat treated and “fish-eye” free
- After lifting powdered prints, tape easily mounts on rigid vinyl or coated paper backing sheets
- Supplied in a dust-free polystyrene jar
- Roll size: 2 in. × 30 ft. (5cm × 9.1m)
- Wound on standard 1 in. core to fit lifting tape dispensers



Cat. No.	Description	Price
S99535	Transparent Lifting Tape	11.21/Ea

## Shake-N-Cast™ Impression Kit

Self-contained and pre-measured to eliminate all the mess and guesswork.

- Mixture is always the right consistency
- Simply apply pressure to break the water capsule, shake and knead the pouch for up to two minutes, cut off a corner and pour into impression



### ORDERING INFORMATION:

One kit is sufficient for casting a full-sized adult shoe print.

### INCLUDES:

2 lb. (0.9kg) dental stone and 14 oz. (414mL) liquefier, factory-sealed in a heavy-duty plastic pouch

Cat. No.	Description	Price
S99541	Impression Kit	19.75/Ea

## Tex Magnetic Fingerprint Powder Applicator

Powerful applicator.

Designed to prevent contamination from surface to surface.

- Comes with two disposable sleeves
- Allows for easy replacements and protects the wand during use



Sleeves also allow the powder ball to be released when finished

Cat. No.	Description	Price
S69009A	Fingerprint Powder Applicator	10.75/Ea



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MAKING SCIENCE MATTER

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**CAREER TECHNICAL EDUCATION**  
A HEAD START ON STEM CAREERS

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## Activity Kits

## Forensic Case Study: Murder At Eagle Nest Harbor

A murder in a quiet house boat community sets the stage for students to test their forensic knowledge. Students will take on the role of a forensic technician as they analyze hair, fiber, fingerprint, blood, and hand writing evidence to help pin point the killer.



- Kit provides a unique and complex set of evidence for students to analyze
- Includes enough evidence and reagents for 15 groups to perform an analysis as well as teacher and student guide master copies
- Aligned to the Next Generation Science Standards (NGSS)
- Disciplinary Core Ideas: PS1.A; PS1.B
- Performance Expectations: MS- PS1-2
- Cross Cutting Concepts: Structure and Function
- Engineering Practices: Developing and Using Models

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Cat. No.	Description	Price
S40780	Forensic Case Study: Murder at Eagle Nest Harbor	63.75/Ea

## Kemtec™ Robbery at Anytown Mall

Students solve the case of a robbery of a designer linen suit as a CSI would.

- Scientific methods employed by students for analysis are: observation, experimentation and interpretation
- Both evidence and personal profiles are used to crack case using deductive reasoning
- Grades 7-12
- Class size: 24 students (six groups of four)

### Eight lab activities included are:

- Fabric Analysis
- Fingerprint
- Fiber Analysis
- Hair Analysis
- Handwriting
- Analysis Blood Typing
- Personal Information
- Questions and Comments

### INCLUDES:

Cloth (simulated silk, cotton, linen, polyester, simulated wool), cat hair, human hair, dog hair, police envelope, suspect envelope, signature cards, hand lens, cover slips, microscope slides, wooden sticks, red litmus paper, tweezers, toothpicks, A and B hema blood tag, Rh hema blood tag, mounting media,



anti-A blood simulated, anti-B blood simulated, anti-Rh blood simulated, type B simulated blood, type A simulated blood, type O simulated blood, type AB simulated blood, instructor manual, student manuals, MSDS, student data charts, special needs materials

Cat. No.	Description	Price
S06743	Robbery at Anytown Mall Kit	205.00/Ea

### REQUIRES:

Microscopes, water bath, and test tubes with stoppers (not included)



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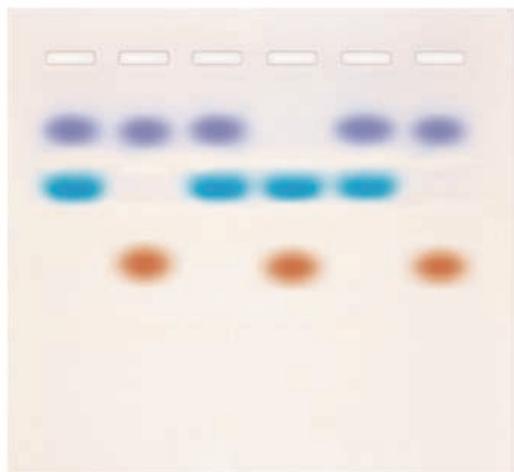
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## Whose DNA Was Left Behind? Experiment Kit

Students simulate DNA fingerprinting and use evidence to narrow down a list of criminal suspects.



Introduces the basics of DNA fingerprinting and agarose gel electrophoresis.

- Introductory-level exercise with hands-on experimentation
- Illustrates how DNA sequences can be isolated in trace evidence such as blood cells or hair
- Dye simulations function as DNA samples for analysis
- Class size: 10 groups

### ORDERING INFORMATION:

Results must be analyzed upon completion and cannot be stored overnight.

### INCLUDES:

Instructions, Ready-to-Load QuickStrip™ Dye Samples, UltraSpec-Agarose™, Electrophoresis Buffer (50X), Practice Gel Loading Solution, Disposable Pipets

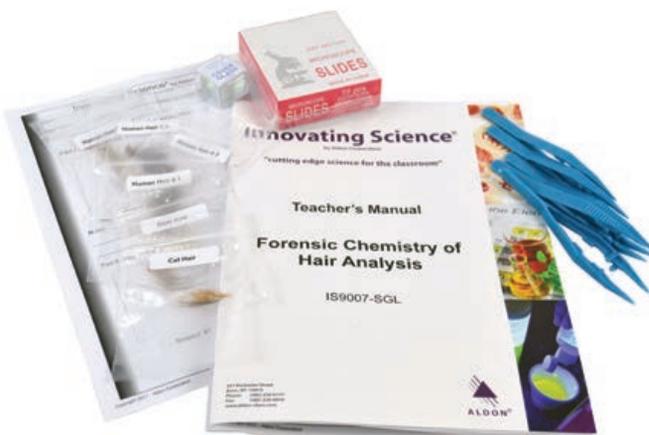
### REQUIRES:

Electrophoresis apparatus, DC power source, microwave, hotplate or burner, beakers (250mL), beaker tongs or hot gloves, distilled water, balance (not included)

Cat. No.	Description	Price
<b>S94591</b>	Whose DNA Was Left Behind? Kit	72.00/Ea

## Small Group Learning: Forensics Of Hair Analysis

Discover the differences between human and animal hair, differences among different types of human hair, and the ways forensic scientists use hair to assist in solving crimes.



- In the second part of the activity, students will try to determine the origin of a hair sample from a crime scene in relation to hair samples from four known suspects
- Activity includes a Teachers Manual and Student Guide and Analysis copy-masters
- Material for 5 groups
- Aligned to the Next Generation Science Standards™ (NGSS)
- Disciplinary Core Ideas: LS1.A; LS1.C
- Performance Expectations: HS-LS1-1; HS-LS1-6
- Cross Cutting Concepts: Energy and Matter; Structure and Function
- Engineering Practices: Constructing Explanations and Designing Solutions

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Cat. No.	Description	Price
<b>S40749</b>	Small Group Learning: Forensics of Hair Analysis	22.75/Ea

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## Lyle and Louise: Strands of Evidence™ Hair and Fiber Analysis

Provides introduction to evidence handling and comparison as performed at a murder scene.

A large amount of trace evidence was collected in a cabin during the investigation, and recently additional trace evidence has arrived from a truck discovered in New Mexico. Students process and analyze samples in their quest to solve the mystery.

- Hair and fiber trace evidence collected on tape are recovered by dissolving the adhesive and filtering out the samples
- Students use microscopy to characterize the evidence and match to hair and fibers collected from the truck
- Each student produces at least one microscope slide from the evidence provided
- Class size: six groups of up to five students per group

### INCLUDES:

Hair and fiber collections from crime scenes, hair collections from suspects and victims, six bottles of mounting media, collection record sheets, microscope slides with coverslips, teaching manual

### REQUIRES:

Light-transmitting microscope and tweezers (not included)



Cat. No.	Description	Price
S94586	Strands of Evidence Hair and Fiber Analysis	143.90/Ea

## Kemtec™ Dusting for Fingerprints Kit

Kemtec™ Dusting for Fingerprints Kit features advanced techniques using carbon, aluminum, magnetic, and fluorescent powders, magnetic applicators, fiberglass brushes, and camel fingerprinting brushes.



- Teacher-developed three station design is efficient and cost effective.
- Students perfect their techniques as they prepare fingerprint evidence.
- Students use an inquiry approach to determine the best methodologies to stabilize, dust, lift, and develop prints from light, dark, smooth, textured, porous, and non-porous plastics, metals, wood, and vinyl surfaces.
- Students use what they have learned to analyze and compare the minutia of print evidence to solve a crime at the Museum of the Modern Detective.
- Allow 4 to 6 hours of lab time to complete all five experiments.
- Includes supplies for 24 students working in teams, complete instruction manual, reproducible student procedures, and assessment materials.
- Hood, UV light source, and goggles required.
- Meets National Standards for Grade Levels 7 to 12.



Cat. No.	Description	Price
S27539	Dusting for Fingerprints Kit	275.00/Ea

### DISCLAIMERS:

Requires a special permit for international shipping.



## Kemtec™ Dustless Fingerprints Kit

Kemtec™ Dustless Fingerprints Kit teaches students how to characterize and investigate different types of prints

- Includes four experiments
- Learn to characterize fingerprints
- Investigate direct, latent, and plastic prints
- Use Lugol's iodine method
- Experience Cyanoacrylate fuming
- Make fingerprint casts and clay impressions
- Learn how to ink and identify fingerprints

**⚠ ALERTS:**  
**Warning: Cyanoacrylate fuming requires a chemical fume hood**



Cat. No.	Description	Price
S30807	Dustless Fingerprints Kit	117.00/Ea

## Finger Print Classification STEM Kit



Finger Print Classification STEM Kit allows students to learn about the history of fingerprinting as a tool for identification.



- Analyze data using the system that is used worldwide for classification
- Analyze fingerprints for common characteristics and create a classification system using those characteristics
- This kit includes an optional activity where students can practice lifting a fingerprint and comparing it to a crime scene print
- Kit contains enough materials for 15 groups
- Teacher's guide and Student Guide copymasters are included

**⚠ ALERTS:**  
**WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer.**

Cat. No.	Description	Price
S29559*	Finger Print Classification STEM Kit	59.75/Ea



\* California - WARNING: Cancer [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 \*\* California - WARNING: Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 \*\*\* California - WARNING: Cancer and Reproductive Harm -[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Understanding Blood Type Interactions Through Simulated Blood Typing Kit

Use for deeper understanding of the importance of antigen/antibody interactions.



Use simulated blood to determine the ABO/Rh blood type of four individuals, one in need of transfusion. The result determines which of three potential donors would provide the best match for the patient in need.

- Provides simulation of blood typing procedure
- No toothpicks, stirring or waiting for results
- Hands-on activities
- Kit contains materials for 10 groups

Kit uses simulated blood only.

### INCLUDES:

- Four simulated blood samples
- One bottle each anti-A, anti-B and anti-Rh serum
- 40 blood typing trays

Cat. No.	Description	Price
S96790R	Simulated Blood Typing Refill	24.75/Ea
S96790	Refill Kit	51.25/Ea

## Blood Typing Kits with Simulated Blood

Determine the ABO or ABO/Rh blood type of four unknown samples.



Use hands-on activities to understand the nature and importance of antigen-antibody reactions.

- Provide accurate simulation of the blood typing procedure
- No toothpicks, stirring or waiting for results
- Kit contains materials for 10 groups

Kits use simulated blood only.

### ORDERING INFORMATION:

Kit refills do not include blood typing trays.

### INCLUDES:

- Four simulated blood samples
- One bottle each of simulated anti-A and anti-B serum
- 40 blood typing trays
- ABO/Rh kit also includes one bottle of simulated anti-Rh serum
- Teacher's manual and student study guide copymasters

Cat. No.	Description	Price
S96793	Simulated ABO Blood Type Kit	43.00/Ea
S96792	Simulated ABO/RH Blood Type Kit	51.25/Ea
S96792R	ABO/RH Kit Refill	32.25/Ea

## Genetics of Blood Types Using Simulated Blood Kit

Learn how genetics determine blood type and possible inheritance patterns.



Students use simulated blood to determine the blood type of four unknown samples and then use their results to assist in the resolution of a fictional paternity dispute.

- Provides the most accurate simulation of the actual blood typing procedure
- No toothpicks, stirring or waiting for results
- Hands-on activities
- Kit contains materials for 10 groups

Uses only simulated blood. These activities do not use real blood.

### INCLUDES:

- Four simulated blood samples
- One bottle each anti-A and anti-B serum
- 40 blood typing trays

Cat. No.	Description	Price
S96791	Blood Typing Genetics Kit	48.00/Ea

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## Blood Spatter Kits

For crime scene investigation and criminal identification based on bloodstains.

### Simulated Blood Spatter Kit

- Not corn syrup based and will dry on material allowing students to utilize the dried blood on objects for exams or other lab measurements.
- Bloodstain pattern analysis helps in identification of suspect/victim
- Students examine the effects of several factors such as height, angle of impact, surface texture and velocity before impact and relate them to physical appearance of bloodstains
- Teacher's manual and student study guide copy-masters included
- Contains material for 15 groups of students
- Not regulated by DOT



### INCLUDES:

- 15 bottles of simulated spatter blood, 25mL dropper bottle
- One bottle simulated spatter blood, 200mL
- 100 small index cards, 3 x 5 in.
- 100 large index cards, 5 x 8 in.

- Six rulers
- Three protractors
- Three clipboards
- Three syringes, 3 cc
- 30 tongue depressors
- Three toothbrushes

- 15 acetate sheets
- 15 cloth squares
- Not corn syrup based and will dry on material allowing
- S29560 is simulated blood spatter only, in a bottle.

Cat. No.	Description	Price
S12833	Blood Spatter Kit	142.00/Ea
S29560	Blood Spatter Bottle	55.00/Ea

## Lyle and Louise: Nature's Witness™ Forensic Entomology

Learn how forensic entomologists use maggots to determine the post-mortem interval.

The bodies discovered in the cabin were badly decomposed and had large maggot masses on them. Students are introduced to the techniques of forensic entomology and use those techniques to examine insects collected at the scene.

- Examine exemplars of the life stages of two fly species and develop a key for distinguishing between life stage and species
- Use the key to identify a number of insects collected from the corpses
- Record their information for the entire class to share
- Compare the identification data to a life stage/species development chart and National Weather Service data to determine the post-mortem interval for both decedents
- Class size: six groups of up to five students per group

### INCLUDES:

Six life stages of Species A (*Lucilia sericata*), six life stages of Species B (*Bercaea haemorrhoidalis*), six evidence collections, fully illustrated teacher's manual with technique background

### REQUIRES:

Dissection microscope and tweezers (not included)



Cat. No.	Description	Price
S94587	Nature's Witness Forensic Entomology Kit	232.00/Ea

## Kemtec™ Ballistics Kits: The Sacco & Vanzetti Case



Kemtec™ Ballistics Kits: The Sacco & Vanzetti Case allows students to decide whether suspects are guilty or innocent by examining case evidence



### Complete Kit

- Can aspiring ballistics experts determine if Sacco and Vanzetti committed this crime?
- Reconstruct the crime scene from evidence, then collect evidence from the scene
- Calculate projectile trajectories using a map of gunshot evidence, ballistics blocks, and trajectory rods
- Learn to predict bullet trajectories using both string and laser techniques
- Characterize ammunition using inactive dummy cartridges, fired bullets, and fired casings
- Use gunshot residue analysis to identify suspects
- Analyze crime scene evidence to support the court case
- A great opportunity for teaching chain of custody and proper evidence collection
- Includes instructions and documents for holding a mock trial
- Includes supporting cross curricular extension activities to address social and political issues

### Expansion Set:

Want to run more students per experiment simultaneously avoiding stations?

- Need to accommodate multiple sessions or growing Forensic Science classroom sizes?
- Expansion kit provides additional materials for trajectory analysis and bullet measuring experiments
- Includes:
  - Set of four ballistics blocks with trajectory rods
  - Two lasers with ballistics block adapters
  - Three sets of chemical resistant ballistics evidence maps
  - Six stainless steel calipers

Cat. No.	Description	Price
S30808	Complete Kit	720.00/Ea
S30809	Expansion Kit	350.00/Ea

## Physical Properties of Glass

See how forensic scientists use the chemical and physical properties of glass to discover evidence.



Police and crime scene investigators must use all available tools and evidence, working backwards to create the most likely scenario as to what might have occurred. Different types of evidence provide different pieces to the puzzle.

### INCLUDES:

Teacher's manual and student guide, analysis copy-masters, one bottle of borosilicate glass beads, one bottle of flint glass beads, one bottle of soda-lime glass beads, one set of refractive index solutions, 15 magnifiers. Enough materials for 15 tests.

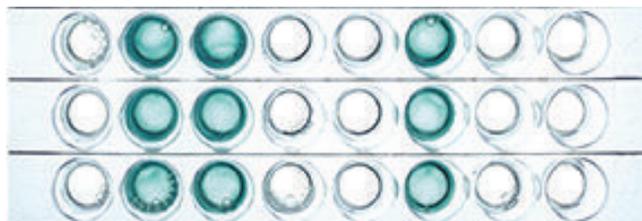
### REQUIRES:

Balance, graduated cylinders (10mL), test tubes (not included)

Cat. No.	Description	Price
S96641	Physical Properties of Glass Kit	129.00/Ea

## Forensic Toxicology Experiment Kit

Student's educational kit to analyze crime scene samples for presence of drugs.



- Identify drugs, toxins in samples collected from crime scenes, victims, potential suspects
- Uses Enzyme Linked Immunosorbent Assay (ELISA) to analyze simulated crime scene samples for the presence of drugs

Cat. No.	Description	Price
S42879	Forensic Toxicology Experiment Kit	140.00/Ea



## Forensic Case Study: Drugs — Small Town, Big Problem

In this activity students work for the Mapledale Forensic Analysis Lab and have been asked to analyze a variety of forensic evidence, including fingerprints, unknown powders, urine specimens, money, and handwriting samples, to assist the Riverside police to find a suspect.



In the small community of Riverside, police have noticed a recent increase in drug-related activity. Under orders of the mayor, the police department was tasked with solving the problem. After extensive investigation the police determined the distributor of the drugs is most likely one of six suspects. The Riverside police have asked the police department from the neighboring town of Mapledale to assist in the investigation.

- Kit includes enough materials for 15 groups
- Teacher's Guide and Student Analysis copymasters are included
- Aligned to the Next Generation Science Standards (NGSS)\*
- Disciplinary Core Ideas: PS1.A; PS1.B; LS1.A
- Performance Expectations: MS-PS1-2; MS-LS1-3
- Cross Cutting Concepts: Patterns; Systems and System Models
- Engineering Practices: Analyzing and Interpreting Data

**⚠️ ALERTS:**  
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Cat. No.	Description	Price
S40779***	Forensic Case Study: Drugs — Small Town Big Problem	62.00/Ea

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 \*\* California - WARNING: Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 \*\*\* California - WARNING: Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Forensic Analysis of Narcotics

Forensic Analysis of Narcotics teaches students about Forensic chemistry by analyzing and identifying unknown substances. They utilize simple chemical tests and reactions, then compare results to determine its chemical profile.



- Forensic chemists are responsible for analyzing and identifying unknown substances, such as drugs and narcotics, that are found at a crime scene
- In this activity, students will learn how forensic chemists can use simple chemical tests and reactions to help determine the identity of an unknown substance
- Students will perform a variety of presumptive tests on an unknown substance along with a series of known controls
- By comparing the test results of the unknown with those of the controls, the most likely identity of the unknown will be determined
- Kit contains enough materials for 15 groups
- Teacher's Manual and Student Study Guide copy masters are included

**⚠️ ALERTS:**  
**WARNING: This product can expose you to chemicals including Phenolphthalein/Methanol/Methyl Isobutyl Ketone, which are known to the State of California to cause cancer and reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**

Cat. No.	Description	Price
S27130***	Forensic Analysis of Narcotics	89.00/Ea

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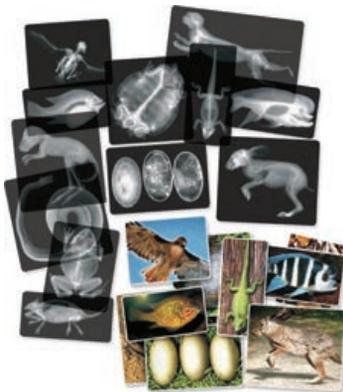
## Health Science

## Veterinary Technology

## Animal X-Rays

Printed on clear, heavy-duty plastic

- Study similarities and differences between animals
- Examine real x-rays
- Mammals, reptiles, fish, amphibians and birds
- Includes: 14 x-rays, 14 matching picture cards, up to 8 × 10 in. (10 × 25cm) and teacher guide



Cat. No.	Description	Price
S40797	Animal X-Rays	23.25/Ea

## Veterinary Student Dissection Kits

For first year veterinary students.

- Contains instruments required for anatomy class

## Veterinary Kit INCLUDES:

- Scalpel handle No. 4
- No. 20 and No. 22 scalpel blades (10 pieces each)
- Tissue forceps with 2 × 3 teeth
- Addison forceps with 1 × 2 teeth
- Thumb Dressing Forceps, 5.5 in. (140mm)
- Hemostatic forceps (Kelly or Criel)
- Dissection scissors 6 in. (152mm), Sharp/Sharp (Two sharp point blades)
- Iris Scissors, 4.5 in. (114.3mm)
- Huber Probe with one end blunt and bent, and other end chisel
- Deluxe Dissection Kit case to hold all tools



## Deluxe Kit INCLUDES:

- Addison Brown Forceps, 4.5 in. (114.3mm)
- 1 × 2 teeth tissue forceps, 5.5 in. (140mm)
- Dissection Scissor, 5.5 in. (140mm), sharp/blunt
- Kelly forceps, 5 in. (127mm), curved
- Huber Probe
- Scalpel handle No. 4
- Blade No. 22, 10 pieces
- Zippered leatherette case for ten instruments

Cat. No.	Description	Price
S07893	Veterinary Dissection Kit	28.00/Ea
S07892	Deluxe Veterinary Dissection Kit	18.25/Ea

## Anatomy, Physiology &amp; Medical Technology

## Instruments &amp; Kits

## Bone Shears

- With coil spring
- 5.5 in. long
- Stainless steel with black oxide coating



Cat. No.	Description	Price
S72153	Bone Shears	13.50/Ea

## Curved Hemostatic Forceps

Curved forceps feature offset tips for accessing hard-to-reach areas during dissection



Cat. No.	Description	Price
S72120	Curved Hemostatic Forceps	5.00/Ea

## Straight Hemostatic Forceps

Straight forceps feature stainless steel precision points



Cat. No.	Description	Price
S72119	Straight Hemostatic Forceps	5.00/Ea

## Reflex Hammer

A proper tool for testing the integrity of the patellar tendon and other reflexes



Cat. No.	Description	Price
S72118	Reflex Hammer	5.30/Ea

## Blood Pressure Kit

How's your blood pressure today?

Our blood pressure kit includes an aneroid sphygmometer, a stethoscope, extra ear buds, and extra diaphragm, and a carrying case. Use this kit to accurately measure blood pressure or teach your students how to take measurements.



Cat. No.	Description	Price
S24562	Blood Pressure Kit	20.25/Ea

## 3B Scientific™ Baseline™ Fingertip Pulse Oximeter

Measures and displays real-time pulse and SpO<sub>2</sub> level



Cat. No.	Description	Price
S20764	Baseline Fingertip Pulse Oximeter	54.75/Ea

## Economy Suture Pad with Suction Base

To be used practicing suturing skills. Made to simulate skin — can be cut and stitched back together.



Constructed of 3-layers with a skin top layer and a muscle bottom layer.

Cat. No.	Description	Price
S72152	Economy Suture Pad with Suction Base	35.00/Ea

## Eisco Dial Type Blood Pressure Apparatus

Dial type apparatus with hook-and-loop type fastening cuff, high-quality inflammation rubber bulb and carrying case.



Cat. No.	Description	Price
S23638	Blood Pressure Apparatus	26.25/Ea

## United Scientific Bowles Stethoscope

Ideal for the classroom, especially in the study of respiration and circulation.

- Ford medical stethoscope has durable, flexible tubing for years of use
- Teaching stethoscope has 3.8cm Bowles chestpiece and two sets of binaurals joined together so the teacher and student can listen simultaneously
- Adjustable, chrome-plated binaurals and PVC Y tubing



Cat. No.	Description	Price
S99444	Stethoscope	10.75/Ea

## United Scientific Dual-Earpiece Teaching Stethoscope

Ideal for the classroom, especially in the study of respiration and circulation.

- Ford medical stethoscope has durable, flexible tubing for years of use
- Teaching stethoscope has 3.8cm Bowles chestpiece and two sets of binaurals joined together so the teacher and student can listen simultaneously
- Bowles-type stethoscope has adjustable, chrome-plated binaurals and PVC Y tubing



Cat. No.	Description	Price
S11008	Dual-Earpiece Teaching Stethoscope	35.75/Ea

## Capillary Tubes

Indispensable for calculating blood clotting time or determining melting points.

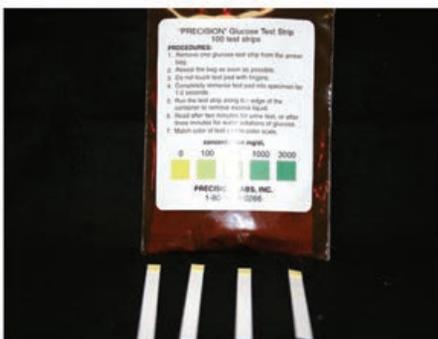
- Made of alkali-free, corrosion-resistant glass
- Extra-thin walls break easily and cleanly
- Good for routine melting point determinations
- Capacity: 30µL
- One sealed end
- 90mm melting-point capillary
- Sold 100 tubes per vial



Cat. No.	Description	Price
S37609E	90mm Melting-Point Capillary Tubes	11.25/Ea

## Glucose Test Strips

Used in biological courses for detection of glucose concentrations.



- Used in osmosis and diffusion experiments, where one is looking for differences in the diffusion of starch when compared to glucose, in a semi permeable membrane system
- Concentration ranges: 0, 100, 300, 1000 and 3000mg/dL

Cat. No.	Description	Price
S80218	Glucose Test Strips	25.50/Ea

## Urinalysis Using Simulated Urine

One of the oldest medical diagnostic tests performed.

Students will:

- Use simulated urine to avoid the unpleasantness of using the real thing
- Perform actual tests used on real urine samples
- Examine simulated urine factors such as pH, color and clarity, as well as test for the presence or absence of proteins, glucose and calcium
- Examine samples microscopically to determine if any crystals are present in the sample



**ORDERING INFORMATION:** Materials for 15 groups.

**INCLUDES:**

Teacher's guide, student study guide copymasters, kit with simulated urine samples (250mL each of patient X, patient Y, patient Z, control), Benedict's reagent (25mL), biuret solution (25mL), Sulkowitch's reagent (25mL), pH test strips, microscope slides, coverslips, graduated plastic cups (30mL), graduated pipets (1mL)

**REQUIRES:** Hot water bath, glass test tubes and compound microscopes (4X/10X/40X)

**COMPLIANCE:** This package conforms to 49CFR 173.4

Cat. No.	Description	Price
S98668A*	Urinalysis Using Stimulated Urine	71.00/Ea



\* California - WARNING: Cancer [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*\* California - WARNING: Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*\*\* California - WARNING: Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Lab-Aids™ Simulated Urinalysis Kit

Shows the importance of urinalysis as a reflection of body health.

Conduct a routine urinalysis with simulated urine. Test for specific gravity, pH, phosphates, chlorides and glucose levels.

- Use test results to indicate body health and measure kidney function
- Uses simulated urine and chemical reagents
- All bottles are drop-controlled

**INCLUDES:**

- 15 LAB-AIDS® Chemplates® with spatula
- 5 density tubes, each containing 2 plastic balls
- 5 pH color charts
- 3 drop-controlled bottles Simulated Urine I

Cat. No.	Description	Price
S19552	Simulated Urinalysis Kit	155.00/Ea

- 3 drop-controlled bottles Simulated Urine II
- 3 drop-controlled bottles Simulated Urine III
- 3 drop-controlled bottles Simulated Urine IV
- 3 drop-controlled bottles Simulated Urine V
- 3 drop-controlled bottles Chloride Test Solution
- 3 drop-controlled bottles Benedict's Solution
- 3 drop controlled bottles Phosphate Test Solution 1
- 3 drop controlled bottles Phosphate Test Solution 2
- 1 vial universal indicator paper
- 30 Student Guides | 1 Teacher's Guide
- 1 Safety Data Sheet (SDS) packet



## Kidneys and Blood Filtration Lab

Learn the role of the kidney in blood filtration and waste removal.



Discover the many functional tasks performed by nephrons.

**Students will:**

- Create an artificial kidney model to filter simulated blood
- Visually determine if filtration of the simulated blood has occurred
- Chemically test the resulting filtrate to detect any waste material removed by the kidney

**INCLUDES:**

Materials for 15 groups, kit with simulated unfiltered blood (100mL), dialysis tubing (15 pieces), 15 plastic cups, 15 pipets (1mL), 30 salt test strips, 30 urea test strips

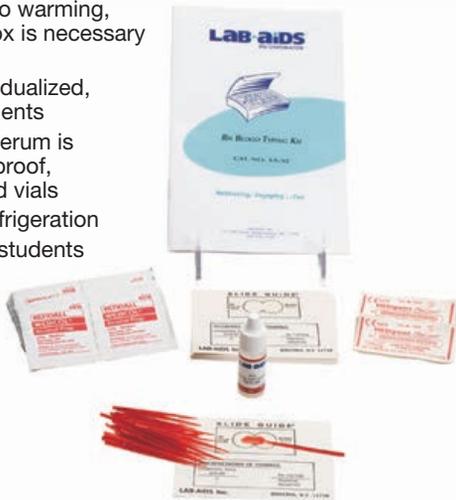
Cat. No.	Description	Price
S98651***	Kidney and Blood Filtration Kit	60.25/Ea

\* California - WARNING: Cancer [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 \*\* California - WARNING: Reproductive Harm [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 \*\*\* California - WARNING: Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Lab-Aids™ Rh Blood-Typing Kit

Determine the presence of the Rh inherited blood factor.

- Students mix a blood sample with the Rh serum and then observe the film for agglutination
- Test requires no warming, and no light box is necessary for viewing
- Contains individualized, sterile components
- Blood-typing serum is bottled in spillproof, drop-controlled vials
- Requires no refrigeration
- Class size: 32 students



**NOTE:**

All sera have been tested for HBs Ag and HTLV-III (AIDS).

Cat. No.	Description	Price
S67357	Rh Blood Typing Kit for 32 Students	68.50/Ea

## Kemtec™ Blood Typing with Saliva Kit

Students use their own saliva, from which antigen secretors will be able to determine their ABO blood type.



- Provides real antisera for demonstrating true ABO blood typing agglutination reactions
- Enhanced instructor's manual with background information, reproducible student protocols and worksheets and complete answer keys
- Ideal for students in advanced biology, physiology, genetics, forensics, or biochemistry
- Antisera and blood cells are perishable, refrigeration prolongs shelf life
- Includes reply cards for blood cells and lectin
- Materials sufficient for up to 50 tests
- Grades 9-14
- Class size: 24 students

Materials must ship 2nd day air on ice in summer months. Reply card items are only shipped within the continental United States. Cells should be used within 20 days.

**REQUIRES:**

Centrifuge or prolonged settling

**INCLUDES:**

- Return cards for type A, B, O red blood cells and H Lectin
- Anti-A Serum
- Anti-B Serum
- SDS
- Instructor's manual
- Student data sheet

Cat. No.	Description	Price
S25080	Blood Typing with Saliva Kit	188.00/Ea

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## Lab-Aids™ ABO-Rh Combination Blood Typing Kit

Provides information on several different subjects related to blood typing.

This popular Lab-Aids product with a specially designed Slide Guide™ provides information on the history of the blood factors, hereditary determination, individual typing techniques, comparisons of blood types in world populations, and blood typing birth problems.

- Determine ABO blood type and Rh factor
- Correlate agglutination to antigen production
- Observe and study Rh mechanisms and relationships to transfusion and genetics
- Classroom size: 32 students

**Note:** All sera have been tested for HBs Ag and HTLV-III (AIDS) and has limited shelf life.

### INCLUDES:

- Lab-Aids Combi-Slide Guides
- 1 drop controlled bottle of Type Anti-A blood typing serum
- 1 drop controlled bottle of Type Anti-B blood typing serum

- 1 drop controlled bottle of Type Anti-Rh blood typing serum
- 32 each spatulas for Anti-A serum (blue), Anti-B serum (yellow), Anti-C serum (red)
- 32 pre-saturated alcohol pads
- 32 sterile disposable blood lancets
- 32 student guides
- Teachers Guide with SDS

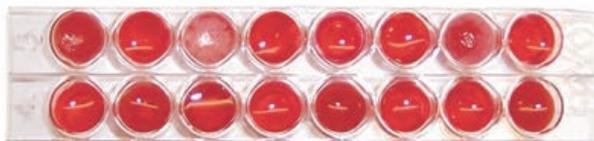


Cat. No.	Description	Price
S67359	ABO-Rh Combination Blood Typing Kit	130.00/Ea

## Blood Typing Kit

Blood typing is essential for blood transfusion and other medical conditions.

- Overview of blood typing is discussed
- Hands-on determination of simple simulation reactions for blood ABO typing
- Known and control samples provided for students to perform agglutination reactions to assign the various blood types
- Class size: 10 groups
- No blood or blood products are used in this experiment.
- Includes: instructions, control ABO simulated blood samples, unknown simulated blood samples, transfer pipets, microtiter plate



Cat. No.	Description	Price
S94671	Blood Typing Kit	72.00/Ea

## Blood Typing Anti-Sera, Anti-A, Anti-B and Anti-Rh

For blood typing of real human blood.

- Available in 5mL vials that contain enough antisera for 75 students
- Freeze-dried samples; can be kept without refrigeration
- Shows negative results for Hepatitis B, HIV and EBV when tested with human-derived cell lines



Cat. No.	Description	Price
S07803	Type A, B and Rh	72.00/Ea
S07802	Anti-A and Anti-B	35.75/Ea
S07804	Anti-Rh	36.00/Ea

## Determination of Cholesterol Using Simulated Blood Kit



Allows students to measure cholesterol levels of four patients, then recommend individual treatment plans after analyzing their results.



- Cholesterol levels can have a major impact on your health and your risk of heart disease
- The cholesterol levels for each patient will be tested again, and students will determine whether or not their treatment plans were successful
- Kit contains enough materials for 15 groups
- Teacher's Manual and Student Study Guide copy masters are included

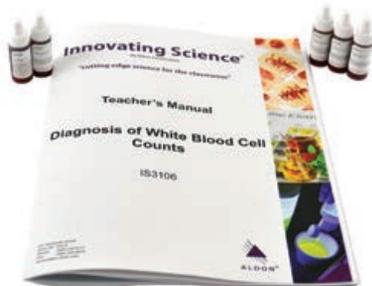
Cat. No.	Description	Price
S27124	Cholesterol Measurement Using Simulated Blood Kit	100.00/Ea

## Diagnosis of White Blood Cell Counts Kit



Allows students to perform white blood cell counts on five patient samples, and then suggest a possible diagnosis based on the determined cell levels.

White blood cells, or leukocytes, only account for approximately 1% of the total number of cells found in blood.

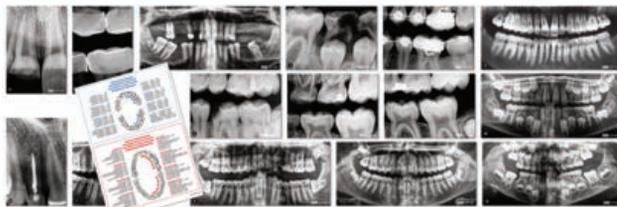


- They are still a critical part of the immune system, protecting the body from foreign invaders such as bacteria and viruses
- White blood cells counts are often performed as part of a medical diagnosis to determine if the level of white blood cells in a patient's blood is within, or outside of the normal range
- The samples contain safe, non-biological simulated cells that do not require staining
- Requires microscopes and hemocytometers (not included)
- Contains enough material for 15 lab groups
- Includes Teacher's Guide and Student Study copy masters

Cat. No.	Description	Price
S27125	Diagnosis of White Blood Cell Counts Kit	38.75/Ea

## Dental X-Rays

Allows exploration of the development of healthy teeth and the intricacies of correcting growing teeth with braces



- X-ray set goes beyond the basics of brushing and flossing
- Gives students an exclusive look at the consequences of tooth injuries and infections of all kinds
- Reminds athletes about the importance of mouth guards
- Includes: 15 x-rays and guide.

Cat. No.	Description	Price
S40793	Dental X-Rays	20.25/Ea

## True to Life Human X-Rays



Reproduce the entire body of a young adult, 5 ft. (1.5 m) tall



- Life-size human x-rays
- Hold up to a light or use on a light table to see every authentic detail of a real skeleton
- Teacher guide includes reproducible artwork and information on radiography
- Includes: 18 X-rays, reproducible worksheets and guide

Cat. No.	Description	Price
S40786	True to Life Human X-Rays	31.75/Ea

## Broken Bones X-Rays



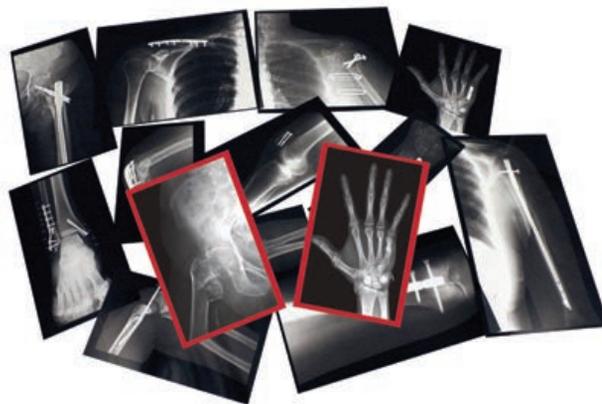
- Shows detailed real X-ray look at common breaks to variety of human bones.
- Includes study guide and 15 X-rays

Cat. No.	Description	Price
S12883	Broken Bones X-Rays	30.25/Ea

## Fixed Bone X-Rays

Ideal for young learners as well as secondary science education.

- Authentic x-ray images
- Shows hardware (plates, screws, nails, pins and wires) used to fix broken bones
- Fourteen added images of fractures on cardstock correspond to the repair x-rays
- Use with a light source to view details as a doctor would
- Includes: 14 x-rays, 14 broken bone images on cardstock up to 7 x 11 in. (19 x 28 cm) and guide



Cat. No.	Description	Price
S40789	Fixed Bone X-Rays	20.25/Ea

### Human Charts, Models & Simulators

## Flip Chart and Online Multimedia Lessons: Human Body



Combine illuminating graphics and write-on/wipe-off exercises with multimedia lessons to master key concepts on the human body. Choose from three different concentrations: Fuel & Transportation, Body Systems, and Diseases/Human Defense Systems.

- Provides graphical instruction and write-on/wipe-off activities with one-year online access to a corresponding Multimedia Lesson featuring in-depth, interactive coverage of the concept
- The Multimedia Lesson can be accessed by a teacher and ALL of your students anywhere, anytime, on any device – including Chromebooks, tablets, computers and mobile devices.
- Flip Chart Set features 10 Laminated, Double-Sided Charts
- Side 1 features a graphic overview of the topic while Side 2 provides corresponding write-on/wipe-off activities for review and reinforcement
- Includes a Teacher Guide with copymaster activities and review questions
- Spiral-bound and mounted on a sturdy easel for years of use, the Flip Chart sets are ideal for small group instruction, learning centers, independent use or classroom reference
- Also included is one year access to a corresponding online multimedia lesson for a teacher and all their students
- Each lesson features Animated, Narrated Tutorials; Interactive Exercises & Activities; Virtual Lab Investigations; Illustrated, Narrated Glossary; Visual Resource Library; and an Inquiry-Based Student Activity Guide
- Developed under sponsorship of the National Institutes of Health (NIH), the lessons are perfect for individual student instruction on any computer as well as classroom presentation on any Interactive Whiteboard
- Grades 6-10



- **Fuel & Transportation covers:** Food & Nutrients; Types of Nutrients; Digestive System; Process of Digestion; Respiratory System; Lung Disease; Cardiovascular System; Blood & Lymph; and Excretory System
- **Body Systems covers:** Body Organization; Homeostasis; Skeletal System; Joints; Muscular System; Central Nervous System; Peripheral Nervous System; Senses; and Endocrine System
- **Maintaining the Human Body:** Disease & the Body's Defenses; Inflammation; Immune Response; Illness; Immunity/Allergies; Skin; Male/Female Reproductive Systems; Fertilization & Fetal Development; and Systems Working Together

Cat. No.	Description	Price
S81114	Fuel and Transportation Flip Chart/Online Media Lessons	50.00/Ea
S81115	Maintaining the Human Body Flip Chart/Online Media Lessons	50.00/Ea
S81113	Move/Control Flip Chart/Online Media Lessons	50.00/Ea



## Human Body III: Maintaining Life Curriculum Learning Module

Combines hands-on and digital learning.

Provides a complete set of visual, digital and hands-on resources designed to support teacher instruction and provide students with the skills to master key concepts on the Human Body. Used in combination or individually, your students will gain thorough comprehension from an engaging blend of technology-based instruction, interactive print resources, game-based learning and a hands-on lab investigation. Includes detailed, standards-based coverage of: Disease and Defense; Immune System; Reproductive System; Fertilization/Fetal Development; and Systems Working Together

Each module includes:

- 1 Flip Chart Set with 10 double-side, laminated charts including a graphic overview and “write-on/wipe-off” activities (S04897)
- 1 Student Learning Guide featuring self-directed readings, illustrated explanations, assessment questions and a lab investigation (S04930)
- 1 Vocabulary Review Card Set
- 1 Curriculum Mastery Game (4 players)
- Additional, individual components are available separately using the Fisher product numbers shown.

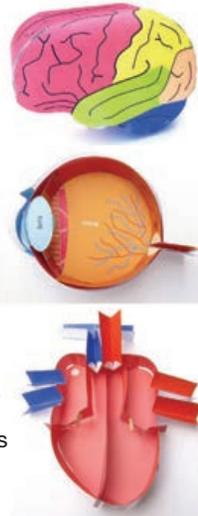


Cat. No.	Description	Price
S14124	Human Body III: Maintaining Life Module	95.00/Ea

## Human Body 3-D Model Kits

Assemble and use 3-D models to visualize and investigate key science structures.

- Gain a critical understanding of complex structures & processes through the assembly of 3-dimensional models
- Kit includes enough materials for students to assemble up to 10 paper models by working either independently or cooperatively in small groups
- Also includes comprehensive Teacher Resource Guide outlining opportunities for your students to Engage, Explore, Explain, Extend & Evaluate their understanding of key Scientific concepts
- Satisfies NGSS Standards which encourage students to develop & use models to represent structures, systems & processes, then provide explanations, make predictions or investigate solutions
- Perfect for use in the classroom, lab or at home
- Grades 6-10



Cat. No.	Description	Price
S81471	Human Brain 3-D Model Kit	30.00/Ea
S81473	Human Eye 3-D Model Kit	30.00/Ea
S81474	Human Heart 3-D Model Kit	30.00/Ea
S81477	Human Lungs 3-D Model Kit	30.00/Ea
S81470	Human Digestive System 3-D Model Kit	30.00/Ea
S81476	Human Liver and Spleen 3-D Model Kit	30.00/Ea
S81478	Human Skin 3-D Model Kit	30.00/Ea
S81475	Human Immune System 3-D Model Kit	40.00/Ea

## Anatomy Model Sets

Helps students gain a deeper understanding of how organs and systems interact.

Ideal for human body centers focusing on major organs or the circulatory, nervous or skeletal systems. Each realistically detailed plastic model includes a display stand and guide with facts and step-by-step, photo-illustrated assembly instructions.

### Brain (S95867)

- Features cerebellum, frontal lobe, parietal lobe, temporal lobe, occipital lobe, corpus callosum, brain stem, hippocampus, ventricles, insula, corpus striatum, internal capsule and lentiform nucleus
- 31-piece model measures 3.75 in.H (9.75cm) when assembled

### Human Body (S95868)

- Features brain, skull, heart, rib cage, lungs, liver, stomach, pancreas, kidneys, small intestine, large intestine and spine
- 31-piece torso model measures 4.5 in.H (11.4cm) when assembled

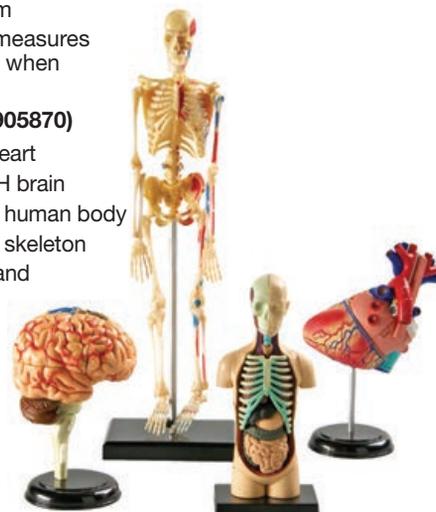
Cat. No.	Description	Price
S95867	Brain Anatomy Model	28.50/Ea
S95868	Human Body Anatomy Model	28.50/Ea
S95869	Human Skeleton Model	28.50/Ea
S95870	Anatomy Model Set	100.00/Ea

### Skeleton (S95869)

- Features skull, rib cage, humerus, spinal column, radius, ulna, hand, pelvis, femur, tibia, fibula, foot and partial circulatory system
- 41-piece model measures 9.2 in.H (23.4cm) when assembled

### Anatomy Model (S905870)

- 29-parts 5 in. H heart
- 31-parts 3.75 in. H brain
- 31-parts 4.5 in. H human body
- 41-parts 9.2 in. H skeleton
- Guide with facts and step by step, photo-illustrated assembly instructions



**ORDERING INFORMATION:**  
Grades 3+. Display stand included.

## 3B Scientific™ Classic Unisex Human Torso Models

Teach anatomy in great detail.

Made of top-quality plastic to withstand many years of handling — includes 3B SMART ANATOMY, the free anatomy app!

### 12-Part Model

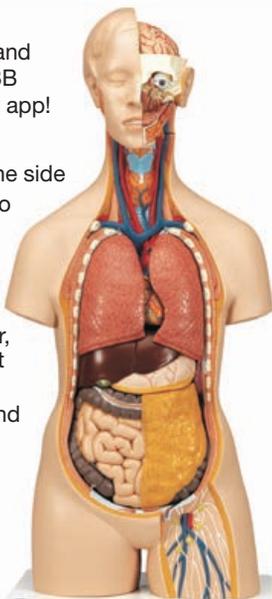
- Head shows skull and brain on one side
- Lungs and heart show junctions to the major vessels
- Front heart wall comes off to show inner chambers
- Exhibits entire intestinal system including the liver with gallbladder, pancreas and removable two-part appendix flap
- All parts numbered and correspond to supplied key card to aid in lesson preparation

### 14-Part Model

- All parts are numbered to correspond to supplied key card — helps you plan class lessons and projects
- Removable head with the skull and brain exposed on one side
- Two-part removable eye with optic nerve
- Two lungs and a heart show junctions to major vessels
- Front heart wall is removable
- Shows entire intestinal system, including a pancreas and a removable appendix flap (two parts)
- Front halves of the kidney and bladder detach to show how they function

### 18-Part Model

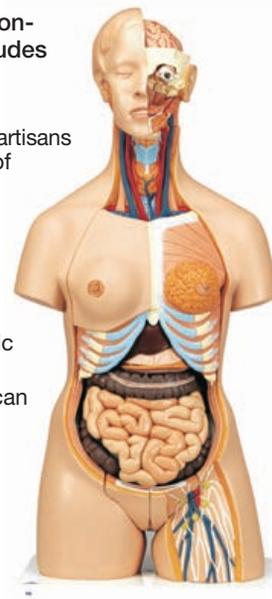
- Removable head with nose and mouth cavities, pharynx, skull base with the rear of the skull exposed and detachable six-part eyeball with optic nerve
- Skull has removable four-part half brain with arteries
- Lower cutaneous layers removed on half of the face to show mandible, dentition, musculature, nerves and blood vessels
- Removable stomach, liver and gallbladder, small and large intestines and pancreas
- Two-part heart with detachable front wall
- Neck and back are open from the cerebellum to the sacrum, with removable seventh thoracic vertebra



## 3B Scientific™ Deluxe Human Torso Models

28- or 24-part models are precision-crafted and hand-painted — includes 3B SMART ANATOMY, the free anatomy app!

- Detailed brushwork by dedicated artisans depicts the most life-like colors of internal organs
- Removable internal organs are meticulously molded to fit securely into their proper anatomical positions, removing unnatural gaps
- Made of unbreakable, vinyl plastic for durable, long-lasting use
- Male and female genital organs can be interchanged
- Mounted on a sturdy base for support
- Dimensions: 14.96 × 9.84 × 34.25 in. (38 × 25 × 87cm)



### INCLUDES:

#### Both models include:

- Three-part removable head with partially exposed mouth and nasopharynx, half brain and arteries
- Two-part stomach
- Female breast plate with rib insertions
- Right and left lungs
- Two-part heart
- Liver with gallbladder
- Three-part large intestine with appendix flap
- Small intestine
- Front half of kidney
- Four-part male genital insert
- Three-part female genital insert with embryo
- Instruction guide

#### 28-part model also includes:

- Open neck and back to study vertebrae, intervertebral discs, spinal cord, spinal nerves and vertebral arteries
- Removable seventh thoracic vertebra
- Eye with optic nerve
- Four-part brain

Cat. No.	Description	Price
S17150H	12-Part Torso with Head	693.00/Ea
S17150C	14-Part Torso with Head	799.00/Ea
S171454	18-Part Torso with Head	930.00/Ea

Cat. No.	Description	Price
S17150A	Deluxe Dual Sex Torso Model	1323.00/Ea
S17139	Deluxe Dual Sex Torso with Opened Back Model	1473.00/Ea



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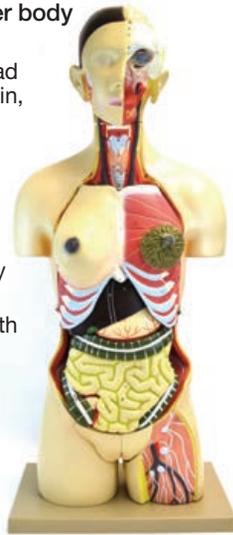
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## Eisco 24-Part Human Torso Model with Interchangeable Sex Organs

Dual sex model detailing human upper body anatomy with open back.

- Life-size cut away spine showing head with nasal and buccal cavity, half brain, eye with optic nerve
- Removable female breast with rib insertions, heart in two parts, two-lung halves, liver with gall bladder, two-part stomach, large and small intestines with appendix flap opening and cover, half of kidney
- Male genital organs in four parts and female genital organs in two parts with embryo in third month of pregnancy
- Back shows vertebral column, spinal cord with nerve endings and removable seventh cervical vertebra
- Base mounted and numbered with English Key Card
- L x W x H: 38 x 24 x 89cm (15 x 9.5 x 35 in.)



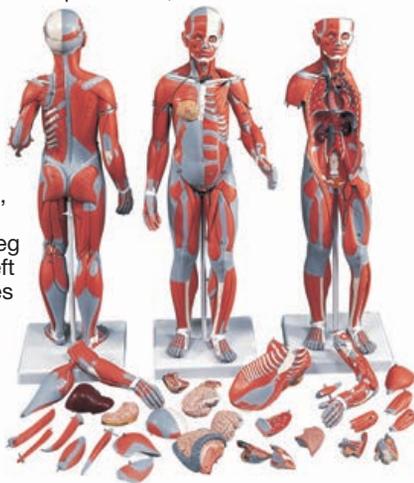
Cat. No.	Description	Price
S15533	Eisco 24-Part Human Torso Model with Interchangeable Sex Organs	945.00/Ea

## 3B Scientific™ 33-Part Muscular Model

Comprehensive anatomy study.

Make sense of human anatomy with this one-half life-size model featuring 33 parts and interchangeable reproductive organs — includes 3B SMART ANATOMY, the free anatomy app!

- Anatomical details conform closely to the human body
- Shows superficial and deep muscles, vessels and nerves and internal organs
- Mounted on stand
- Dissectible parts: body, calvarium (skull), brain, stomach, liver, partial intestine with flap, female genitals, male genitals, eight muscles of the left leg and right arm and left arm and five muscles
- Removable arms, muscles, calvarium and thoracic cover
- Height: 33 in. (82.5cm)



Also available as a 20-Part Female Model, with all of the above components except inner organs and male genitals

Cat. No.	Description	Price
S17150D	33-Part Muscular Model	3997.00/Ea

## 3B Scientific™ Muscle Torso, Two-Sex, with Pregnancy Insert

Two-sex model has 31 removable parts — includes 3B SMART ANATOMY, the free anatomy app!

- Head with nose and mouth cavity
- Pharynx with skull base exposed on one side
- Four-part brain half with arteries
- Six-part eyeball with optic nerve
- Deltoids, chest and belly covering with both superficial and deep musculature
- Two lungs
- Heart with junctions to the major vessels and detachable two-part front heart wall
- Two-part front and rear half of a stomach
- Liver, gallbladder and small intestine
- Entire intestinal system with a pancreas
- Three-part transverse colon with an appendix flap and front kidney half
- Three-part female genital insert with removable fetus in the third month of pregnancy
- Four-part male genital insert with a removable penis
- Back and neck opened from cerebellum to sacrum, with removable seventh thoracic vertebra
- Gluteus maximus



Cat. No.	Description	Price
S17150F	Muscle Torso, Two-Sex, with Pregnancy Insert	3358.00/Ea

## 3B Scientific™ Mini-Musculature Figure Model

One-quarter life-size with full-size value — includes 3B SMART ANATOMY, the free anatomy app!

Our Mini-Musculature Figure Model stands only 22.5 in. (56.3cm) tall, yet provides big value.

- Two-part model gives accurate, detailed representation of the male muscular system
- Depicts and numbers superficial and deep muscles and tendons, blood supply and drainage and major nerves
- Shows female mammary gland on the detachable thoracic/abdominal torso covering
- All major internal organs appear lifelike and have numbered parts keyed to the manual



Cat. No.	Description	Price
S17151	Mini-Musculature Figure Model	810.00/Ea

## 3B Scientific™ Muscular Anatomy Model

For anatomical studies — includes 3B SMART ANATOMY, the free anatomy app!

- Mounted on a roller stand for portability
- Supplied with a detailed key card
- 3/4 life size

### 23-Part Model

Designed primarily for studies of the musculature since it has no removable internal organs.

- Head with removable calvarium
- Trunk with a right leg and portion of a right shoulder
- Right arm
- Left arm with five removable muscles
- Thoracic and abdominal cover
- Two-part female genitalia
- Left leg with eight removable muscles

### 45-Part Model

Models the human muscular system, vessels, nerves and partly dissectible organs.

- Head with removable calvarium and three-part brain
- Trunk with right leg and portion of a shoulder
- Right arm
- Left arm with scapula and five removable muscles
- Left leg with eight removable muscles
- Thoracic and abdominal wall
- Right mammary gland
- Lungs, four parts
- Thymus
- Heart, two parts
- Diaphragm
- Liver with gallbladder
- Stomach, two parts
- Duodenum and pancreas
- Male genitalia, four parts
- Female genitalia, two parts



## 3B Scientific™ Muscular Arm

Six-part, three-quarter life-size left arm to study musculature — includes 3B SMART ANATOMY, the free anatomy app!

- Provides a detailed view of superficial and subjacent muscles, tendons, vessels, nerves, and bones of the hand, arm and shoulder
- Five removable muscles aid in the understanding of the muscular process
- Height: 22.75 in. (57.8cm)

### INCLUDES:

Stand



Cat. No.	Description	Price
S17136	Muscular Arm	699.00/Ea

## Eisco 6-Part Muscular Arm Model

Dissectible muscular arm model for anatomical study.



- Demonstrates six parts including muscles, tendons, blood vessels and nerves of the arm, hand and shoulder
- Five muscles detachable to reveal structure down to bone
- Mounted on base
- Numbered with English Key Card

Cat. No.	Description	Price
S15589	6-Part Muscular Arm Model	341.00/Ea

## Eisco Human Skeleton, Rod Mount - Half Painted, With Ligaments

A life-size model of a human skeleton provides an incredible realism and detail for students. Pinned joints allow for the demonstration of limb movements. The skeleton is made of PVC, finished in natural colors and mounted on a stand.

- 62 in. height
- Articulated joints allow for movement
- Pelvic mounted on rod with wheeled base
- Skull opens for detailed structural analysis
- Left side hand painted by artisan to show muscular points of origin in red and points of insertion in blue, each numbered for your convenience along with ligaments



Cat. No.	Description	Price
S41513	Human Skeleton with Ligaments	378.00/Ea

### 3B Scientific™ Deluxe Human Skeleton

Medical-grade skeleton works for both instructional illustration and chiropractical demonstration — includes 3B SMART ANATOMY, the free anatomy app!

Highly detailed, unbreakable plastic model is natural cast and presents muscle paintings, joint ligaments, numeration of bones and flexible spine with nerve endings.

- Deluxe skull is dissectible into calvarium, base of skull and lower jaw
- Position and spacing of teeth are reproduced from a natural denture
- Special mounting of rib cage maintains proper positioning
- Detachable skull, left arm and leg
- Right side presents muscle insertions in blue and origins in red; left side of skeleton displays more than 300 nominated bones, fissures and foramina
- *M. iliocostalis* and *M. longissimus* are color-contrasted for clarity
- Shoulder, elbow, hip and knee of the right side provided with life-like ligaments and movable joints
- Flexible spine allows natural movement and features a herniated disc, protruding nerves and vertebral artery
- Rotation and movement of skull on first and second cervical vertebrae can also be demonstrated
- Available mounted with pelvic mount or on hanging stand
- Height: 67 in. (170cm)

**INCLUDES:**

- Dust cover
- Manual

Cat. No.	Description	Price
S171563	Pelvis Mount on Roller Stand	1269.00/Ea
S171564	Hanging Roller Stand	1281.00/Ea
S17138A	Skeleton with Muscle Origins and Insertions; Height: 66.9 in.	971.00/Ea
S07912	Skeleton with Muscle Origins and Insertions; Height: 75.8 in.	1006.00/Ea

**Skeleton with Muscle Origins and Insertions**

Shows structural interaction between bones and muscles.

Includes all features of adult skeleton (S17133B) with the addition of color to the right half of the skeleton to show muscle origins and insertions. The perfect model for advanced human physiology courses, its tough vinyl plastic construction holds up to classroom use.

- On left side of skeleton over 600 structures, such as muscle origins (red), insertions (blue) are shown
- Hand-numbered bones, fissures and foramina are shown on right side
- Made from durable, unbreakable synthetic material
- Mounted on a stable metal hanging stand with five casters
- Natural size, anatomically correct and realistic weight of around 200 bones
- Three part assembled skull
- Individually inserted teeth
- Removable limb
- Height: 169.9cm (66.9 in.)
- Weight: 7.2kg (15.87 lb.)



### 3B Scientific™ Flexible Human Skeleton Model

Medical-grade, natural-cast skeleton suitable for instructional and chiropractical demonstrations — includes 3B SMART ANATOMY, the free anatomy app!

- Made from unbreakable plastic material for classroom durability
- Deluxe skull is dissectible into three parts: calvarium, base of skull and lower jaw
- Position and spacing of teeth are reproduced from a natural denture
- Upper and lower extremities are flexibly mounted and removable
- Flexible spine allows almost all natural movements and features a herniated disc, protruding nerves and vertebral artery
- Rotation and movement of the skull on first and second cervical vertebrae can be demonstrated as well
- Height: 70 in. (177.8 cm)

**INCLUDES:**

- Roller stand
- Dust cover

Cat. No.	Description	Price
S171562	Flexible Human Skeleton Model	842.00/Ea



## 3B Scientific™ Adult Human Skeleton

Premier line of skeletal models offers educators medical-grade quality — includes 3B SMART ANATOMY, the free anatomy app!

- Made of durable, unbreakable, washable plastic material
- Natural movements can be demonstrated with detachable arms and legs
- Detachable skull is divisible into three parts: calvarium, base and lower jaw



### Life-Size Skeleton

- Measuring 70 in. (170cm) tall, this pelvic-mounted model is an exact reproduction, natural cast from bones of an adult male
- Special mounting of the rib cage allows the skeleton to maintain proper positioning
- All joints are properly articulated and wired, including the lower jaw, which articulates by means of springs
- Comes complete with roller stand and dust protection cover

### Mini Skeleton

- Half natural size: 33 in. (80cm)
- Carefully reproduced to keep all anatomical details and structures
- Hip joints are specially mounted so their natural rotation can be demonstrated

Cat. No.	Description	Height (English)	Price
S17133B	Life Size	69.5 in.	424.00/Ea
S17137	Mini	8.77 in.	581.00/Ea

## Eisco Human Skeleton Painted Model

Shows muscle origin in red and insertion in blue along left side.

- Quality hardware allows easy movement of major joints
- Three part skull is removable for closer study of jaw and teeth
- Arms and legs can be removed for storage and study
- Mounted on sturdy stand (152.4cm (60 in.) tall) with free rolling wheels
- Includes key card calling out 167 muscle features



Cat. No.	Description	Price
S15623	Human Skeleton Painted Model	640.00/Ea

## Eisco Rod-Mounted Human Skeleton Model

Provides incredibly high amount of realism and detail for students examining human skeleton.

- Pinned joints allow for demonstration of limb movements to showcase how skeletal system interacts during motion
- Stands 170cm tall
- Mounts on wheeled base for easy movement
- Three part skull with movable lower jaw



Cat. No.	Description	Price
S09580	Rod-Mounted Human Skeleton	459.00/Ea

## 3B Scientific™ Disarticulated Human Skeleton

Supports individual study and authentic assessment — includes 3B SMART ANATOMY, the free anatomy app!



Made of durable plastic, skeleton kit includes all of the bones from an adult male skeleton.

- Show how each bone functions and fits amid the larger scheme of the body's framework
- Examine individual bones, as opposed to a fully assembled skeleton
- One hand and one foot are articulated with wire to show correct orientation of the bones
- Second hand and foot are disarticulated and packed in their own plastic bag
- Jaw is articulated with the aid of a spring
- All 24 vertebrae are strung together with a nylon cord to maintain proper sequence; the coccyx is also wired
- All 24 ribs are contained in a plastic bag
- All other bones, including the hyoid and the upper and lower extremities, are packed in a carton
- Skull's calvarium is sectioned horizontally for intercranial studies
- Weight: 10.58 lb.

Cat. No.	Description	Price
S17131B	Disarticulated Human Skeleton	543.00/Ea

## Eisco Human Skeleton Miniature Model With Stand

Miniature model for classrooms.

- Model gives general idea of bones
- Mounted on stand
- Height: 51cm (20 in.)



Cat. No.	Description	Price
S15583	Miniature Human Skeleton With Stand	116.00/Ea

## United Scientific™ Human Skeleton Model

Half-size model for demonstrating basic anatomical features of human skeleton

- Carpals and tarsals are fused, but rest of skeleton has natural movement in joints
- Heavy metal base adds extra measure of stability while skeleton is constructed of rugged plastic
- Features unbreakable ribs, stainless steel screws, brackets and springs to resist corrosion
- Detailed key included



Cat. No.	Description	Price
S13132	Human Skeleton Model	76.00/Ea

## Eisco Human Life Size Skull Color Coded Model

This life size skull is hand painted and comes in 3 parts.



Cat. No.	Description	Price
S13501	Color-Coded Life Size Skull Model	86.00/Ea

## 3B Scientific™ Beauchene 22-Part Adult Human Skull Model

Can be disassembled into 22 individual bones — includes 3B SMART ANATOMY, the free anatomy app!

The human skull consists of many individual bones that gradually grow together as development proceeds. This popular model makes the complex anatomical structure of the skull easy to understand. Easily disassembled, the individual bones can be reassembled by means of inconspicuous, stable connectors attached at the slightly simplified skull sutures. All 22 bones are depicted in their natural bone color in this “Exploded Human Skull.”

- Natural cast
- Dimensions: 8.3 × 5.5 × 6.3 in. (21 × 14 × 16cm)

Includes the following individual bones:

- Parietal bone (left and right)
- Occipital bone
- Frontal bone
- Temporal bone (left and right)
- Sphenoid bone
- Ethmoid bone
- Vomer bone
- Zygomatic bone (left and right)
- Upper jaw (maxilla) with teeth (left and right)
- Palatine bone (left and right)
- Nasal concha (left and right)
- Lacrimal bone (left and right)
- Nasal bone (left and right)
- Lower jaw (mandible) with teeth



Cat. No.	Description	Price
S98674	Didactic Colored Adult Human Skull Model	605.00/Ea

## 3B Scientific™ Half of Head and Neck

See both internal and external features — includes 3B SMART ANATOMY, the free anatomy app!

Two-sided, life-size vinyl plastic model shows both internal and external features of the head and neck.

- One side demonstrates musculature and the most important surface arteries, veins and nerves
- The opposite side shows a median section illustrating inner anatomy
- Nondetachable model mounted on stand with base
- Dimensions: 9 × 7 × 18 in. (22.5 × 17.5 × 45cm)



Cat. No.	Description	Price
S171061	Half of Head and Neck Model	522.00/Ea

## Eisco Human Eye Model in Bony Orbit

Enlarged eye model for detailed anatomical studies.



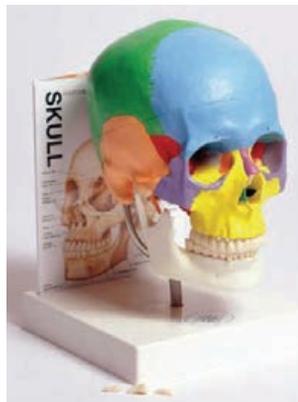
- Nine parts in bony orbit
- Removable upper half eye ball and dissectible into six parts
- Two muscles controlling the eyeball are removable
- Mounted on base
- Numbered with English Key Card
- Size: approx. 33L x 23W x 20cm H (12.9 x 9 x 7.8 in.)

Cat. No.	Description	Price
S15546	Human Eye Model in Bony Orbit	191.00/Ea

## United Scientific Human Skull Model

Molded from PVC plastic and hand-painted to show anterior, internal and lateral views.

- Mounted in rotatable metal wire harness on plastic stand
- Includes fold-out laminated color guide indicating 77 labeled structures of skull
- One side of guide includes structure names
- Other side includes only numbers so it can be used for student assessment
- Also includes 12-page reproducible study guide



Cat. No.	Description	Price
S43601	Human Skull Model	220.00/Ea

## Eisco Prehistoric Man Skull Set

Set of six natural sized replicas of prehistoric skulls.



- Prehistoric man
- Natural sized replica of prehistoric skulls
- Includes: Afarenis cranium, Africanus cranium, Habilis cranium, Erectus cranium, Neanderthalensis cranium and Steinheim skull

### INCLUDES:

*Afarenis cranium, Africanus cranium, Habilis cranium, Erectus cranium, Neanderthalensis cranium and Steinheim skull*

Cat. No.	Description	Price
S15607	Prehistoric Man Skull Set	245.00/Ea

## United Scientific Human Small Spine Model

Molded from PVC plastic and hand-painted to show cervical, thoracic and lumbar regions and sacrum/coccyx.

- Mounted on metal rod with plastic stand
- Includes fold-out laminated color guide indicating 66 labeled structures including vertebral column, detail of vertebrae, herniated disc and spine curvature disorders
- One side of guide includes structure names
- Other side includes only numbers so it can be used for student assessment
- Also includes 10-page reproducible study guide
- 14 x 5.25 x 4 in.



Cat. No.	Description	Price
S43603	Human Small Spine Model	97.00/Ea

## 3B Scientific™ Functional Joint Models

Life-size, vinyl plastic ligamented joint models simulate actual joint movement — includes 3B SMART ANATOMY, the free anatomy app!



- Medical-quality joints have ligaments that actually stretch
- Demonstrate abduction, anteversion, retroversion, internal/external rotation, and more
- **Shoulder Joint** consists of the scapula with part of the clavicle and the top portion of the humerus
- **Elbow Joint** consists of a portion of the upper arm with a complete radius and ulna
- **Hip Joint** demonstrates rotations of the femoral head in the socket
- **Knee Joint** consists of part of the femur, and upper parts of the tibia and fibula

Cat. No.	Description	Price
S171342	Functional Shoulder Joint Model	117.00/Ea
S171341	Functional Elbow Joint Model	117.00/Ea
S171343	Functional Hip Joint Model	117.00/Ea
S171344	Anatomical and Cellular Human Functional Knee Joint Bio Model	117.00/Ea

## 3B Scientific™ Brain Models

Different separations of the brain expose different levels of detail and complexity — includes 3B SMART ANATOMY, the free anatomy app!



- Vinyl plastic models are nonbreakable and natural cast
- Rest on a form-fitting molded base
- Dimensions: 5 x 6 x 5 in. (12.7 x 15.2 x 12.7cm)

### Two-Part Brain (S17108)

- Median section divides brain into two sections

### Two-Part Brain (S98678)

- Structures of the brain shown in one color
- Provides an introduction to the human nervous system and anatomy of the brain
- Delivered on a removable base

### Four-Part Brain (S17109)

- Median section dissectible into two vertical halves
- Right half is dissectible into brain lobe and brain stem with occipital lobe

### Eight-Part Brain (S17110)

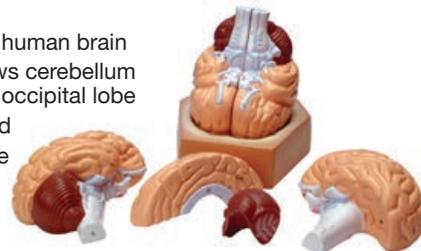
- Each median section is dissectible into frontal with parietal lobes, temporal with occipital lobes, half of cerebellum and half of brain stem
- Superb coloration highlights variety of brain systems

Cat. No.	Description	Price
S17109	Four-Part Brain	275.00/Ea
S17108	Two-Part Brain	165.00/Ea
S17110	Eight-Part Brain	322.00/Ea
S98678	Two-Part Brain	129.00/Ea

## Eisco 4-Part Human Brain Model

Four parts support a deeper understanding of brain anatomy.

- Median section of human brain
- Right section shows cerebellum and the stem with occipital lobe
- Features numbered
- Supported on base



**INCLUDES:**  
English Key Card

Cat. No.	Description	Price
S95928	4-Part Human Brain Model	108.00/Ea

## Human Heart/Brain Cross-Section Models

Colorful foam model comes apart to create a cross section view for hands-on classroom demonstrations.

- Included activity guides provide activity ideas, facts and detailed information on the function of the structure being modeled
- Key structures are labeled on one half of the model with the other half left unlabeled for testing purposes



Cat. No.	Description	Price
S90818	Human Heart Cross Section Model	21.50/Ea
S90819	Human Brain Cross Section Model	21.50/Ea

## Soft Foam Cross-Section Eye Model

Open up nature for inner exploration.

- One side shows the name of each part; other side is labeled only with letters so kids can quiz themselves
- Features cornea, iris, pupil, retina, lens, optic nerve, vitreous humor, sclera, choroid, macula ciliary muscle, optic disc and zonules
- Measures 5 in. diameter



**ORDERING INFORMATION:**  
Grades 2+.

**INCLUDES:**  
Activity Guide with lots of facts and a reproducible eye diagram to label.

Cat. No.	Description	Price
S95872	Soft Foam Cross-Section Eye Model	22.25/Ea

## 3B Scientific™ 6-Part Human Eye Model

Dissects into sclera with cornea and eye muscle attachments, choroid with iris and retina, lens and vitreous humour. 3B Scientific™ 6-Part Human Eye Model is three times full size for optimal — includes 3B SMART ANATOMY, the free anatomy app!

Dissects into several parts:

- Both halves of sclera with cornea and eye muscle attachments
- Both halves of the choroid with iris and retina
- Lens
- Vitreous humour

### ORDERING INFORMATION:

Dimensions (L x W x H): 3.5 x 3.5 x 5.9 in. (9 x 9 x 15cm). Weight: 3.5 oz. (0.1kg).

### INCLUDES:

Base

Cat. No.	Description	Price
S17118C	6-Part Human Eye Model	141.00/Ea



## Eisco 7-Part Human Eye Model

Three times life size for hands-on exploration of the eye.

- Upper half of sclera with cornea and eye muscle attachments
- Both choroids with iris and retina
- Lens and vitreous humor are removable
- Features numbered
- Supported on base

### INCLUDES:

English Key Card



Cat. No.	Description	Price
S95929	7-Part Human Eye Model	87.00/Ea

## 3B Scientific™ 4-Part Enlarged Ear

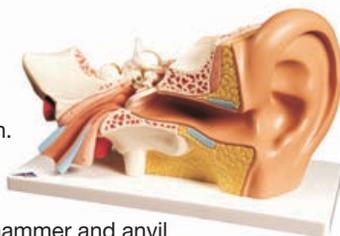
The complex functions of the ear exposed — includes 3B SMART ANATOMY, the free anatomy app!

This rugged vinyl plastic model shows the outer, middle and inner ear.

- Enlarged approximately three times life size
- Mounted on a board
- Dimensions: 13 x 7 x 7.5 in. (32.5 x 17.5 x 18.8cm)

### Separates into four parts:

- Removable eardrum with hammer and anvil
- Labyrinth with cochlea
- Auditory/balance nerve (two-part)



Cat. No.	Description	Price
S17124	4-Part Enlarged Ear	178.00/Ea

## 3B Scientific™ Heart Model, 3/4 Full-Sized, Two-Part with 3B Smart Anatomy

The heart's major functions and structures are numbered for easy memorization.

This slightly reduced adult-size heart clearly shows the aorta, pulmonary artery, left and right ventricles, left and right atria, septum and both venae cavae.

- Removable front wall
- Hangs on its own stand
- Includes a key card
- Dimensions: 7.6 x 4.8 x 4.8 in. (19 x 12 x 12cm)
- 3B Smart Anatomy is now included with any 3B Scientific anatomy model
- Free access to the anatomy course 3B Smart Anatomy, hosted inside the award-winning Complete Anatomy app by 3D4Medical
- The 3B Smart Anatomy course includes 23 digital anatomy lectures, 117 different virtual anatomy models and 39 anatomy quizzes to test your knowledge
- FREE warranty upgrade from 3 to 5 years with every product registration
- You will also receive access to a free 3-day trial to all premium features of the Complete Anatomy app when you sign up for your 3B Smart Anatomy course
- To unlock these benefits, simply scan the label located on your model and register online. All 3B Smart Anatomy features are completely free of charge



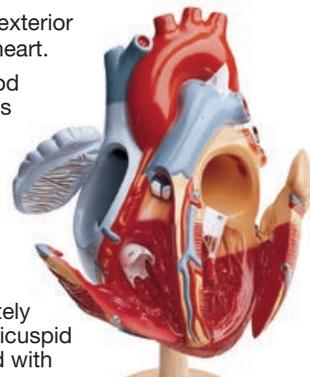
Cat. No.	Description	Price
S17153C	Two-Part, 3/4 Full-Sized Heart Model	82.00/Ea

## The Heart of America

Provides students with an accurate, lifelike view of the heart.

Twice life size, the model shows exterior and interior views of the human heart.

- Model mounted on a hardwood pedestal support 45 structures permanently hand-numbered and keyed to accompanying reference manual for easy memorization
- Three easy-access flaps flip open to allow internal study of the heart
- Chambers and valves accurately reproduced to scale Lifelike bicuspid and tricuspid valves equipped with flexible chordae tendineae
- Dimensions: 7 x 7 x 15 in. (17.5 x 17.5 x 37.5cm)



Cat. No.	Description	Price
S171572	Heart of America	526.00/Ea

## Eisco Hand Painted Human Heart Model — Life Size

Portion of the heart removes for further study of the heart.

Numbered hand painted human heart model on base. Identification key card included

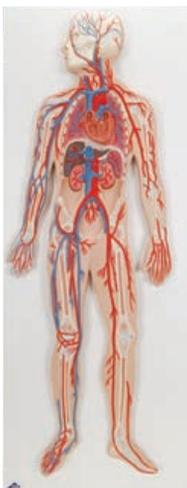


Cat. No.	Description	Price
S15622	Life Size Painted Human Heart Model	59.25/Ea

## 3B Scientific™ Blood Circulatory System, Master Series™

See a schematic presentation of blood circulation — includes 3B SMART ANATOMY, the free anatomy app!

- Detailed schematic of circulatory system in raised relief is approximately one-half life size
- Dimensions: 13 × 22 × 2 in. (32.5 × 55 × 5cm)



Cat. No.	Description	Price
S171262	Blood Circulatory System Master Series	394.00/Ea

## Auditory Ossicles

Life-size, embedded replicas of middle-ear bones — the malleus (hammer), incus (anvil) and stapes (stirrup) — cast from human specimens.



Cat. No.	Description	Price
S17835	Auditory Ossicles	95.00/Ea

## 3B Scientific™ MICROanatomy™ Artery and Vein

14 times larger than life — includes 3B SMART ANATOMY, the free anatomy app!

Model illustrates the reciprocal anatomical relationship of artery and vein, and the basic functional techniques of the venous valves.



- Medium-sized muscular artery has two adjacent veins from the antebrachial area with adjoining fat tissue and muscle
- Left vein and middle artery are fenestrated in upper anterior segment to reveal wall structure in a cross section, longitudinal section and top view
- Right vein is open throughout anterior segment to display the orifice of a feeder vein and two venous valves
- Relief of two veins illustrates functional aspect of the venous valves
- Dimensions: 10.4 × 7.6 × 7.4 in. (26 × 19 × 18.5cm)

Cat. No.	Description	Price
S90777	Artery and Vein Model	421.00/Ea

## 3B Scientific™ MICROanatomy™ Muscle Fiber Model

Magnified 10,000 times — includes 3B SMART ANATOMY, the free anatomy app!

Illustrates a section of a skeletal muscle fiber and its neuromuscular end plate magnified. The muscle fiber is the basic element of the diagonally striped skeletal muscle.



Dimensions: 9.4 × 10.4 × 7.4 in. (23.5 × 26 × 18.5cm)

Cat. No.	Description	Price
S68279	Muscle Fiber Model	360.00/Ea



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## 3B Scientific™ MICROanatomy™ Bone Structure

Extremely detailed model shows a typical structure of a tubular bone enlarged 80 times — includes 3B SMART ANATOMY, the free anatomy app!

Three-dimensional section of a lamellar bone with typical elements identified to help understand its structure and function with the characteristic osteons, also referred to as Haversian systems.



- Shows various planes in cross and longitudinal section through all levels of the bone
- Displays two-plane section through the inner structure of the bone marrow
- Graphically illustrates the interplay of components, such as spongy and compact substance, endosteum, cortical substance, osteocytes and Volkmann and Haversian canals
- Supplied on base
- Dimensions: 10.1 × 7.4 × 5.7 in. (26 × 19 × 14.5cm)

Cat. No.	Description	Price
S90774	Bone Structure Model	196.00/Ea

## 3B Scientific™ MICROanatomy™ Kidney

Extremely detailed model shows the morphologic/functional units of the kidney — includes 3B SMART ANATOMY, the free anatomy app!

Six model zones illustrate the fine tissue structures that serve the production of urine.



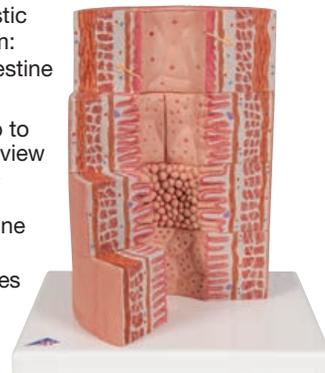
- Longitudinal section of the kidney
- Section of the renal cortex and renal medulla
- Wedge-shaped section of a kidney lobe with a diagrammatic depiction of three nephrons with Henle's loops of different lengths and diagrammatic depiction of the vascular supply
- Diagrammatic illustration of a nephron with a short Henle's loop and didactic/diagrammatic illustration of the vascular supply
- Diagrammatic illustration of an opened renal corpuscle with nephron and light-microscopic transverse sections of the proximal, attenuated and distal segments of a renal tubule
- Diagrammatic and didactic illustration of an opened renal corpuscle
- Dimensions: 9.2 × 9.9 × 7.4 in. (23.5 × 25.5 × 19cm)

Cat. No.	Description	Price
S90780	Kidney Model	381.00/Ea

## 3B Scientific™ MICROanatomy™ Digestive System

Illustrates the structure of fine tissues of the digestive system — includes 3B SMART ANATOMY, the free anatomy app!

Model includes four characteristic sections of the digestive system: esophagus, stomach, small intestine and large intestine.

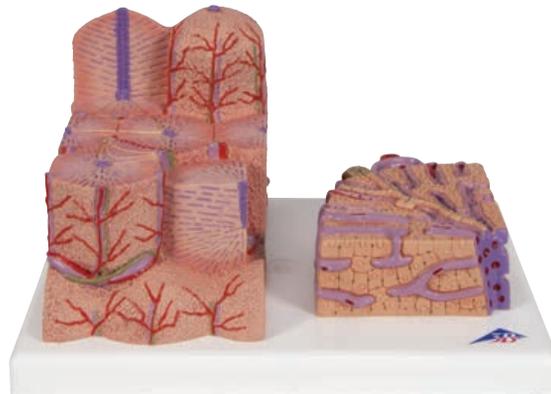


- Front of the model, from top to bottom, shows a magnified view in histological section of the individual sections of the digestive system and their fine tissue structures
- Back of the model emphasizes didactically interesting areas of the digestive system with highly magnified views
- Dimensions: 11.8 × 10.4 × 7.4 in. (29.5 × 26 × 18.5cm)

Cat. No.	Description	Price
S90778	Digestive System Model	388.00/Ea

## 3B Scientific™ MICROanatomy™ Liver

Study the liver in detail — includes 3B SMART ANATOMY, the free anatomy app!



Two-part model shows a highly magnified diagrammatic view of a section of the liver.

- Left part shows section of the liver that comprises several lobules
- Right part offers highly magnified view of the sectioned liver lobule on left
- Dimensions: 6 × 10.4 × 7.4 in. (15 × 26 × 18.5cm)

Cat. No.	Description	Price
S90779	Liver Model	387.00/Ea

### 3B Scientific™ Lungs with Heart, Diaphragm and Larynx, Master Series™

Life-size model has many removable parts — includes 3B SMART ANATOMY, the free anatomy app!

Displays the viscera of the thorax.

- Durable vinyl construction
- Mounted on base for display
- Dimensions: 16 × 12 × 5 in. (40 × 30 × 12.5cm)

Contains the following removable parts for added anatomical detail:

- Two-part larynx
- Trachea with bronchial tree
- Two-part heart
- Subclavian artery and vein
- Vena cava
- Aorta
- Pulmonary artery



- Esophagus
- Two-part lung (front halves removable)
- Diaphragm

Cat. No.	Description	Price
<b>\$17155</b>	Lungs with Heart, Diaphragm and Larynx, Master Series	649.00/Ea

### Lung Demonstration Model

Sturdy plastic apparatus for classroom to demonstrate how lungs function. Partial vacuum inside the jar causes the lung shaped balloons to relax and contract.



Cat. No.	Description	Price
<b>\$28099</b>	Lung Demonstration Model	31.50/Ea

### Nine-Liter Wet Spirometer

Specially designed to meet the needs of today's physiology teachers.

This academic-quality wet spirometer combines reliability and accuracy with an increased volume to accommodate students with larger lung capacities.

- Large, easy-to-read scale graduations
- Includes disposable mouthpieces and a one-way plastic valve for sanitary classroom use
- Made of lightweight, yet durable, high-density polyethylene (HDPE) plastic and aluminum



#### Determine Five Different Respiratory Volumes:

- Tidal Volume (TV)
- Inspiratory Capacity (IC)
- Inspiratory Reserve Volume (IRV)
- Expiratory Reserve Volume (ERV)
- Vital Capacity (VC)

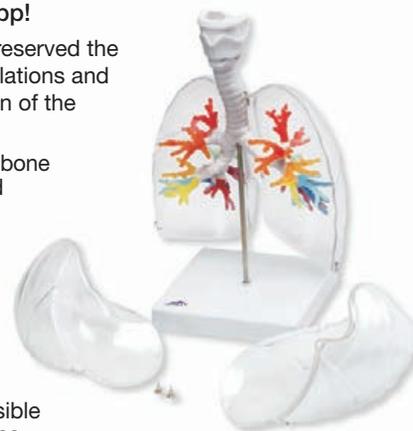
Cat. No.	Description	Price
<b>\$65066</b>	Student Wet Spirometer	984.00/Ea
<b>\$17046A</b>	Mouthpiece	85.00/Pk

### 3B Scientific™ CT Bronchial Tree with Larynx and Transparent Lungs

Created using computer tomography data of a human male — includes 3B SMART ANATOMY, the free anatomy app!

This unique model preserved the natural spatial 3-D relations and the reciprocal location of the segmental bronchi.

- Larynx with hyoid bone and epiglottis, and the trachea with primary and lobar bronchi are depicted in one color
- Larynx is detachable at the second tracheal cartilage and divisible in the median plane
- Epiglottis is mounted flexibly
- The various segmental bronchi are made of elastic material and depicted in various transparent colors so that they are easier to distinguish visually
- Dimensions: 22 × 18 × 37cm (8.8 × 7.2 × 14.8 in.)



Cat. No.	Description	Price
<b>\$06777</b>	With Larynx and Transparent Lungs	861.00/Ea
<b>\$68295</b>	With Larynx	616.00/Ea

## 3B Scientific™ 4-Part Digestive System Model

Two-part stomach reveals interior walls — includes 3B SMART ANATOMY, the free anatomy app!

Life-size, vinyl plastic model demonstrates the digestive tract from mouth to rectum.

- Nasal and oral cavities, pharynx, larynx with epiglottis and esophagus are median sectioned
- Two-part stomach is dissectible to reveal the interior wall, liver, gallbladder, pancreas, small intestine, colon and rectum
- Model separates into four parts and is mounted
- Dimensions: 31 × 13 × 4 in. (77.5 × 32.5 × 10cm)



Cat. No.	Description	Price
S171584	4-Part Digestive System Model	613.00/Ea

## 3B Scientific™ Nervous System

This nervous system relief model shows a schematic representation of the central and peripheral nervous system — includes 3B SMART ANATOMY, the free anatomy app!

This relief model is securely mounted on a firm backing. It features a schematic presentation of the central and peripheral nervous systems of Homo sapiens. It has no removable parts, so it will remain intact for many years. The model is approximately one-half life size. Dimensions are 32 × 13 × 2 in.



Cat. No.	Description	Price
S171131	Nervous System Model	505.00/Ea

## Eisco Lymph Nodes Model



Lymph nodes model with incoming and outgoing lymph vessels, germinal center, sinus, capsule, Trabecula, artery and vein.

- Mounted on a base, includes English key card.
- 3-D Model of Lymph Nodes, perfect for laboratory study
- Vividly hand painted detailed anatomy
- 24 in. tall, 15 in. wide, and 9.5 in. long
- One year warranty



Cat. No.	Description	Price
S29614	Lymph Nodes Model	258.00/Ea

## Eisco Human Ovary Model

Anatomically accurate representation of female reproductive organs.

- For students to understand anatomy, physiology of ovary and reproduction
- Features anatomical structures of female reproductive organs, including ovaries, fallopian tubes, uterus, cervix and vagina
- Uterus, one Fallopian tube and ovary are bisected to show internal structures
- Size: 30 × 14 × 21cm (11.8 × 5.51 × 8.26 in.)



Cat. No.	Description	Price
S15618	Human Ovary Model	80.00/Ea

## 3B Scientific™ Pregnancy Series

Eight-stage pregnancy models — includes 3B SMART ANATOMY, the free anatomy app!



The 14-part series includes depictions of placenta, umbilical cord, ovaries, fallopian tubes and cervix. Eight natural-size, vinyl plastic models show the uterus with embryo and fetus in the following stages of pregnancy:

- First month
- Second month
- Third month
- Fourth to fifth month (removable fetus in prone position)
- Fifth month (removable fetus in breech presentation)
- Fifth month (removable fetus lying on its back)
- Seventh month (removable fetus)
- Twin fetuses in fifth month (removable fetuses)
- Each model is individually mounted on a stand and base
- Dimensions: 5 × 5 × 9 in. (12.7 × 12.7 × 22.9cm)

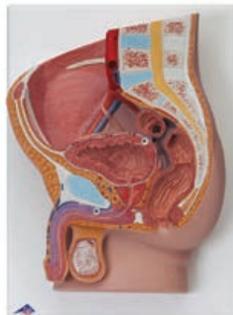
Cat. No.	Description	Price
S17101	Pregnancy Series Model	1144.00/Ea

## 3B Scientific™ Male Pelvis Master Series™

Male pelvis comes with removable parts — includes 3B SMART ANATOMY, the free anatomy app!

Our life-size median section of the male pelvis outlines sex organs, bladder and muscles, and is suitable for teaching small or large groups.

- Presents parts of the abdominal and dorsal muscular system with lumbar vertebrae, and partial kidney
- Removable bladder and reproductive organs
- Pelvis dissects into two parts
- Use with 3B Scientific Female Pelvis Master Series (see S17143) for comparative studies



## 3B Scientific™ Female Pelvis Master Series™

Removable bladder and reproductive organs — includes 3B SMART ANATOMY, the free anatomy app!

Our life-size median section shows how organs are situated in the female pelvis.

- Presents parts of the abdominal and dorsal muscular system with lumbar vertebrae and partial kidney
- Removable bladder and reproductive organs
- Base-mounted
- Use with 3B Scientific Male Pelvis Master Series (see S17144) for comparative studies



Cat. No.	Description	Price
S17144	Male Pelvis Model	274.00/Ea

Cat. No.	Description	Price
S17143	Female Pelvis Model	274.00/Ea

## Medical Trainers

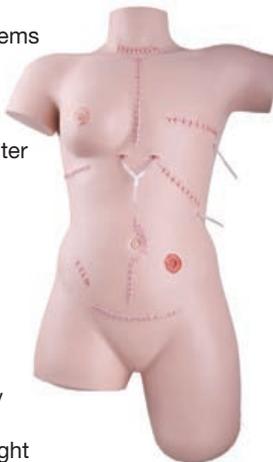
## 3B Scientific™ Trainer for Wound Care and Bandaging Techniques



Allows students to practice a wide range of dressing and bandaging techniques.

The following wounds and drain systems as the result of surgical procedures and injuries are shown realistically on the torso:

- Wound after a thyroidectomy, center
- Wound after a sternotomy (with drain), center
- Wound after a mastectomy (with drain), right
- Wound after a splenectomy (with drain), left
- Wound after a thoracotomy (pneumonectomy), right
- Wound after a median laparotomy (e.g. cystectomy), center
- Wound after an appendectomy, right
- Wound after a Pfannenstiel incision (e.g. C-section or abdominal hysterectomy), center
- Wound after a laminectomy, center; rear
- Wound after a nephrectomy (side incision)
- Wound after an amputation (leg stump), left
- Colostomy
- Decubitus (grade 2), center; rear



The wound care can be carried out using the normal means, so students can practice in conditions as close to reality as possible. Given the flexible structure of the material used, students can practice putting on and changing bandages and dressings in realistic conditions.

Cat. No.	Description	Price
S27333	Trainer for Wound Care and Bandaging Techniques	1321.00/Ea

## 3B Scientific™ Suture Practice Arm



Offers realistic anatomy allows for complex suture training

- Movable fingers for suture training of challenging wounds between fingers
- Skin and subcutaneous tissue differentiated for realistic suture experience
- Customized wounds can be inflicted by instructor anywhere on the training arm
- Each cut can be sutured several times
- Surgical staples procedure possible



Cat. No.	Description	Price
S27332	Suture Practice Arm	425.00/Ea

## 3B Scientific™ Intramuscular Upper Arm Injection Simulator



Features all important anatomical palpable landmarks such as acromion and humerus to allow for placing correct intramuscular injections in a graphic way.

- Built-in fine electronics produce audio-visual feedback of the result, e.g. correct or incorrect injection, bone contact, or wrong location.
- Additional trainings and control modes optionally provide an immediate or subsequent performance check under training conditions.
- Included life-like silicone skin is extremely durable and can be quickly and easily exchanged when necessary.

### Includes:

- 2 AA batteries
- Detailed instruction manual
- Replacement skin
- 5-mL injection syringe
- 21G/0.8 injection needle



Cat. No.	Description	Price
S27329	IM Injection Simulator - Upper Arm	1461.00/Ea

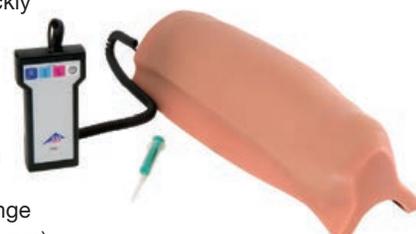
## 3B Scientific™ Intramuscular Upper Leg Injection Simulator

Displays all of the important anatomical, palpable landmarks such as patella and greater trochanter for realistic practice of correct intramuscular injections.

- Built-in fine electronics produce audio-visual feedback of the result, e.g. correct or incorrect injection, bone contact, or false localization.
- Additional training and control modes optionally provide an immediate or subsequent performance check under training conditions.
- Included life-like silicone skin is extremely durable and can be exchanged quickly and easily when necessary.

### Includes:

- Two AA batteries
- Detailed instruction manual
- 5 mL injection syringe
- 21 gauge (0.8 x 50 mm) injection cannula



Cat. No.	Description	Price
S27328	IM Injection Simulator - Leg	1900.00/Ea

## 3B Scientific™ Cardionics SAM II™ Student Auscultation Manikin



Used for teaching or learning heart, lung, and bowel sounds

- Auscultation is an essential clinical skill needed to assess and monitor patients' conditions
- The SAM II™ trainer can be used with any stethoscope
- All sounds and videos are recorded from live patients for students to experience a life-like simulation
- Users can also create and save their own case videos
- When connected to the included laptop with pre-installed software, a variety of sounds, videos and lessons recorded can be accessed
- When connected to speakers (Sold Separately) SAM II Student Auscultation Manikin can be easily moved into a classroom or an auditorium for group instruction
- The programmable and password protected lectures allow teaching institutions to have numerous instructors utilize the SAM II trainer

### Delivery content:

- Portable SAM II Male Auscultation Torso
- New DELL laptop computer pre-installed with auscultation teaching software, programmable and password protected lectures
- Digital copy of SAM's Lesson Guide: located on the laptop in digital form, can be printed and used to support auscultation teaching anytime
- One SAM t-shirt
- User's manual

### How is SAM II Student Auscultation Manikin different from other auscultation products available on the market?

- It is lightweight & portable
- It has the largest library of sounds (24 sounds) & videos (36 videos altogether)
- It has the complete Lesson Guide
- It can be used with any stethoscope
- It has a palpable carotid pulse
- Users can setup password protected lectures for student assessment
- It is available in light and dark skin version



Cat. No.	Description	Price
S27941	SAM II Manikin, Dark Skin	13750.00/Ea
S27940	SAM II Manikin, Light Skin	13750.00/Ea

## 3B Scientific™ Cardionics SAM Basic™ Student Auscultation Manikin



Used to teach or learn heart, lung, and bowel sounds

- Auscultation is an essential clinical skill needed to assess and monitor patients' conditions
- SAM Basic™ Trainer can be used with the SimScope stethoscope (included)
- All sounds and videos are recorded from adult live patients for students to experience a life-like simulation
- SimScope stethoscope is used to simulate adult heart, lung and bowel sounds, utilizing a large sound library incorporated into the SimScope stethoscope
- By placing the SimScope over the anatomically correct locations of SAM Basic, the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills.
- Uses include: individual learning, group lectures, and for viewing phonocardiograms

### Delivery content:

- A portable SAM Basic Male Auscultation Torso
- One SimScope stethoscope
- The SimScope software and site license
- USB cable
- One SAM t-shirt
- User's manual

### How is SAM Basic Student Auscultation Manikin different?

- It is lightweight & portable
- It utilizes the extensive Cardionics proprietary heart, lung, bowel and bruit sounds library
- Students can listen at anatomically correct auscultation sites
- Customized Library is available to fit specific scenarios and programs



Cat. No.	Description	Price
S27945	SAM Basic Minikin, Dark Skin	3751.00/Ea
S27944	SAM Basic Minikin, Light Skin	3751.00/Ea

## 3B Scientific™ Cardionics SAM Basic™ Student Auscultation Manikin with WiFi

NEW

With WiFi for teaching or learning heart, lung, and bowel sounds

- Auscultation is an essential clinical skill needed to assess and monitor patients' conditions
- SAM Basic™ Trainer can be used with the SimScope stethoscope (included)
- All sounds and videos are recorded from adult live patients for students to experience a life-like simulation
- SimScope stethoscope is used to simulate adult heart, lung and bowel sounds, utilizing a large sound library incorporated into the SimScope stethoscope
- WiFi upgrade enables wireless communication between the SimScope and the SAM Basic manikin
- Users are able to change sounds remotely or in conjunction with a scenario-based simulation
- By placing the SimScope over the anatomically correct locations of SAM Basic, the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills.
- Uses include: individual learning, group lectures, and for viewing phonocardiograms



### Delivery content:

- A portable SAM Basic Male Auscultation Torso
- One SimScope stethoscope with WiFi
- The SimScope software and site license
- USB cable
- One SAM t-shirt
- User's manual

### How is SAM Basic Student Auscultation Manikin different?

- It is lightweight & portable
- It utilizes the extensive Cardionics proprietary heart, lung, bowel and bruit sounds library
- Students can listen at anatomically correct auscultation sites
- Customized Library is available to fit specific scenarios and programs
- The SimScope WiFi upgrade allows for remote selection of sound scenarios

Cat. No.	Description	Price
S27949	SAM II Basic Minikin with WiFi, Dark Skin	7000.00/Ea
S27948	SAM II Basic Minikin with WiFi, Light Skin	7000.00/Ea

## 3B Scientific™ Cardionics SAM 3G™ Student Auscultation Manikin

NEW

The new Cardionics SAM 3G Student Auscultation Manikin 3rd Generation makes teaching and learning this skill even more versatile and economic

- Auscultation is an essential clinical skill needed to assess and monitor patients conditions
- Can be used with any stethoscope available and offers the largest Real Sound Library, Case Videos, Echo Cardiogram Videos and ECG Waveforms for students to master identification of various heart, lung and bowel sounds
- All sounds and videos are recorded from live patients for students to experience a life-like simulation
- Case videos contain patient and clinical interactions for various conditions and enhance the learning by providing visual representation of the sounds
- When connected to the laptop (Included) with the pre-installed software, a variety of sounds, videos and lessons recorded can be accessed
- When connected to speakers (sold separately) SAM 3G Student Auscultation Manikin can be easily moved into a classroom or an auditorium for group instruction
- The programmable and password protected lectures allow teaching institutions to have numerous instructors utilize the SAM 3G Trainer

### Real Sound Library for Auscultation Training includes:

- Normal Sensi 75 BPM
- Physiological Splitting of S2 UM 70 BPM
- Aortic Septal Defect Sensi 80 BPM
- Central Shunt UM 150 BPM
- Innocent Murmur Sensi 85 BPM
- Mitral Regurgitation Sensi 95 BPM
- MVP Sensi 90 BPM
- Patent Ductus Arteriosus UM 96 BPM
- Patent Ductus Arteriosus Sensi 95 BPM
- Pulmonary Stenosis and Patent Ductus Arteriosus UM 138 BPM
- Pulmonary Stenosis Sensi 88 BPM
- Restrictive Ventricular Septal Defect UM 72 BPM
- Tetralogy of Fallot Sensi 120 BPM
- Ventricular Septal Defect Sensi 76 BPM
- Ventricular Septal Defect UM 130 BPM
- Bronchial Breath 13 BPM
- BronchoVesicular 26 BPM
- Vesicular Normal 16 BPM
- Fine Crackles 10 BPM
- Late Inspiratory Crackles 14 BPM
- Low Pitched Crackles 24 BPM
- Pleural Friction Rub 28 BPM
- Velcro Crackles 10 BPM
- Wheeze High Pitched 16 BPM
- Wheeze Low Pitched 34 BPM



Cat. No.	Description	Price
S27939	SAM 3G Minikin, Dark Skin	22250.00/Ea
S27953	SAM 3G Minikin, Light Skin	22250.00/Ea

## 3B Scientific™ Cardionics PAT Basic™ Pediatric Auscultation Trainers



Uses a SimScope stethoscope to simulate pediatric heart, lung, and bowel sounds. Choose models with or without WiFi

- The PAT Basic™ trainer engages the technology of the SimScope stethoscope to simulate pediatric heart, lung, and bowel sounds utilizing a large sounds library
- Using the provided SimScope stethoscope, users are able to access a large variety of pathological conditions in order to customize scenarios
- By placing the SimScope over the anatomically correct locations of PAT Basic™, the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills
- PAT Basic™ consists of a Male Manikin, a SimScope, SimScope Software, Site License, USB Cable, SAM T-Shirt, and User's Manual



### Models WiFi (S27951)

- The SimScope WiFi upgrade enables wireless communication between the Simscope and PAT BasicC manikin which allows users to change sounds remotely or to use in conjunction with a scenario-based simulation

### Models without WiFi (S27947 and S27946)

- PAT Basic consists of a Male Manikin, SimScope WiFi, SimScope Software, Site License, USB cable, SAM T-Shirt, and a User's Manual

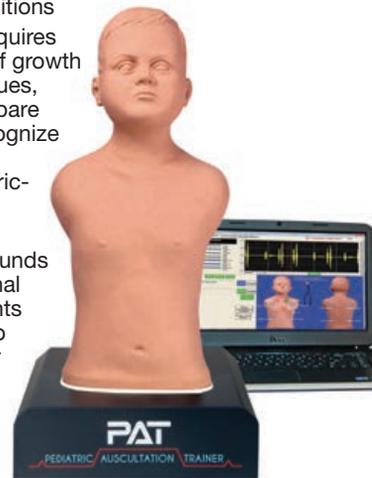
Cat. No.	Description	Price
S27947	PAT Basic without WiFi, Dark Skin	2200.00/Ea
S27946	PAT Basic without WiFi, Light Skin	2200.00/Ea
S27951	PAT Basic with WiFi, Dark Skin	7000.00/Ea

## 3B Scientific™ Cardionics PAT™ Pediatric Auscultation Trainer



A complete auscultation manikin for pediatric-specific conditions

- PAT is the complete auscultation manikin for pediatric-specific conditions
- Since pediatric care requires careful consideration of growth and developmental issues, PAT is designed to prepare students to readily recognize the signs and sounds associated with pediatric-specific disorders
- With one of the largest libraries of pediatric sounds and intuitive instructional tools, PAT gives students everything they need to actively engage in their auscultation education
- Pediatric size auscultation trainer with listening points at the correct anatomical locations
- Heart sounds at different rates for comparison, (e.g. Example: Atrial Septal Defect at 75 bpm and 90 bpm)
- PAT's computer software interface is easily projected into any smart classroom
- The software includes phonocardiograms, correct anatomical locations, and written lessons for each sound



Cat. No.	Description	Price
S27943	PAT Pediatric Trainer, Dark Skin	13750.00/Ea
S27942	PAT Pediatric Trainer, Light Skin	13750.00/Ea

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## 3B Scientific™ CPRLilly PRO+ Training Mannequins



3B Scientific™ CPRLilly PRO+ is a training mannequin that enables instructors and healthcare providers to measure, monitor and analyze the CPR performance of up to 10 trainees at a time. Choose model with or without tablet device.

CPR CPRLilly Pro+ helps instructors increase effectiveness and efficiency in their CPR courses by connecting with the free CPRLilly App on tablet to follow the CPR performance and deliver objective feedback leading to Quality CPR training (App available on Apple and Google play). It also enables trainees to see and monitor their own performance in real-time with the student view of the App. LED lights located directly on mannequin's neck provide direct CPR feedback and indicate correct compressions parameters (depth, release and rate).

The easy to use App lets the instructor and trainees review CPR performance in real-time. Trainee performance can be tested with the results being saved for further analysis and debriefing.

### Quality CPR Feedback:

- Compression depth
- Compression rate
- Compression fraction
- Chest complete release
- Correct hand placement
- Jaw thrust and head tilt control
- Appropriate ventilation volume

### Key Training Features:

- Quality CPR feedback with debriefing history
- Mouth-to-mouth and mouth-to-nose ventilation
- Ventilation with face shield, pocket mask and BVM
- Chest rise with proper ventilation
- Control of proper airway desobstruction
- Carotid pulses
- AED pads placement training capable
- Free App available on google play and iOS
- Constant analysis of CPR parameters for up to 10 mannequins simultaneously
- Individual review possibility in group training for more efficient training
- Adaptable to different course concepts
- Simplified student feedback view available with the CPRLilly App

### Solid mannequin for effective training:

- Made in Germany of extremely durable, latex free material
- Face masks and lungs bags can be changed easily without tools
- Easy to clean with hygienic airway system
- Runs quietly with efficient power usage and rechargeable battery
- Stable WiFi connection and intuitive App interface
- Practical carrying bag with training mat for comfortable practise
- Dark skin mannequin available

### Includes:

- 1 CPRLilly PRO+ training mannequin
- 1 tablet
- 1 charger and battery
- 4 lower face masks
- 25 throat bags
- 12 AED-Pad adapters
- 1 carrying bag with training mat



Cat. No.	Description	Price
S27323	CPRLilly PRO+ with Tablet	2406.00/Ea
S30514	CPRLilly PRO+ without Tablet	2189.00/Ea

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## 3B Scientific™ BASICBilly+ Basic Life Support Simulator



Includes a direct CPR Feedback Upgrade Kit which enables students and instructors to effectively train CPR with free, accurate, and user friendly mobile apps powered by heartisense™



- Made of easy to clean durable, latex free material
- Hygienic, with easy to change disposable airways
- Realistic anatomical landmarks to learn correct hand position for chest compression
- Mouth-to-mouth, mouth-to-nose or BVM resuscitation can be practiced
- Offers head-tilt functionality to open the airway or simulate obstructed airway
- Visible chest rise when the lungs are ventilated
- Force required for effective chest compressions has been carefully studied to offer a realistic training approach
- Operation requires (2) AA batteries, not included

### Provide Feedback For:

- Compression (depth, recoil, and rate)
- Breath (volume)
- Hands-off time in real-time
- Feedback and evaluation meet the standard of the latest guidelines of the American Heart Association (AHA) and the European Resuscitation Council (ERC)

### CPR APP Features:

- Offers overall scoring and intuitive point of improvement during CPR
- Direct (real-time) and summative CPR feedback for students
- Instructor view can monitor up to 6 manikins at a time
- Saved student results for review
- Export or share students result/certificate as a PDF file
- Instructor can use CPR analysis for detailed debriefing
- Easily switch from conventional CPR training to Compression Only CPR settings
- Stable connection is provided by a reliable Bluetooth connection
- Mobile devices used to access the apps are not included in the delivery scope
- An Upgrade Kit is available to equip previously purchased BASICBilly manikins with the AHA required direct feedback functionalities

Cat. No.	Description	Price
S27925	BASIC Billy+ Life Support Simulator, Dark Skin	376.00/Ea
S27924	BASIC Billy+ Life Support Simulator, Light Skin	376.00/Ea

## 3B Scientific™ Cardionics SimScope™ The Hybrid Simulator without WiFi



Allows a change or selection of pathological sounds and conditions for any standardized patient

- The SimScope enables communication between the SimScope and the computer
- Allows for a selection and change of pathological sounds and conditions of any standardized patient, O.S.C.E. or low-fidelity manikin
- SimScope Patches are customizable and easily programmable for specific diagnostic case studies
- SimScope plays the programmed heart, breath and bowel sounds specific to each correct anatomical location enabling a realistic standardized patient encounter
- Up to 15 patches may be programmed and simultaneously activated to simulate real time auscultation during a physical exam
- Includes a SimScope, SimScope Patches, SimScope Software and USB cable



Cat. No.	Description	Price
S27952	SimScope Stethoscope	5500.00/Ea

## 3B Scientific™ Bionic Hybrid Auscultation Simulator (BHS)

NEW

When worn by the standardized patient, this suit simulates physiological conditions to test diagnostic and procedural skills. The Bionic Hybrid Auscultation Simulator is controlled wirelessly with easy to use software, responds in real time to diagnosis and treatment with direct feedback.

- Simulates physiological conditions to test diagnostic and procedural skills
- Suit is controlled wirelessly with easy to use software
- Responds in real time to diagnosis and treatment with direct feedback
- Can be worn by students and/or manikins
- Integrated RFID Sensor Tags

- Carotid, and Radial Pulse
- Features 5-wire EKG connections, pulse points, blood pressure cuff accessory, as well as auscultation capabilities
- Instructors can easily adjust and adapt the suit scenarios to fit many conditions wirelessly by using the SimScope™ Wifi
- Includes SimScope™ Wifi, Tablet and Blood Pressure Cuff Accessory
- Reusable and washable at 30°C



Cat. No.	Description	Price
S27926	Size: Medium	12500.00/Ea
S27927	Size: Large	12500.00/Ea
S27928	Size: X-Large	12500.00/Ea
S27929	Size: 2 X-Large	12500.00/Ea

## 3B Scientific™ Gynecologic Skills Trainer P91

NEW

P91 is an adult-sized lower torso designed as a versatile clinical training tool to add hands-on experience for learners practicing gynecologic skills.

### For these procedures:

- Bi-manual examinations with palpable, realistic, normal and abnormal uteri
- Train vaginal examination with speculum and easily interchangeable cervixes and have visual recognition of normal and abnormal anatomy variations
- Evaluate multiple conditions using the interchangeable normal and pathologic cervixes
- Pap test for cervical screening
- Practice catheterization (no fluid)
- Suppository administration and digital rectal examination



### Additional Features:

- SKINlike™ high-quality silicone offers a realistic look, feel and texture in addition to a life-like softness.
- Four different uteri modules with externally palpable abnormal pathologies are easily interchangeable and can be completed with 6 different cervixes.
- Adult-sized female lower torso with accurate anatomy, including ischial spines, pubic bones and sacrum for a realistic examination
- Leg stumps already in examination position and with the gynecologic examination wedge the possibility to simulate a leaned position of the patient as in a gynecological examination chair
- Bladder can be simulated full or empty to make the palpation of the structure possibly restricted
- Offers realistic flexibility of the vaginal canal wall
- Seamless, flexible skin for practice of speculum placement
- Labia can be realistically separated
- Urethra built for catheterization simulation with CH 14 catheter

- Abdominal wall can be removed quickly and without any tools to change the uterus and the cervix easily
- Latex free

### Includes:

- Gynecologic Skills Trainer P91
- Uteri set (4): Normal, bicornate, enlarged, uterus with 3 removable sections
- Cervices Set (6): Normal nulliparous or para 0 cervix, normal multiparous cervix, ectropion cervix (erosion), dysplasia cervix, cervix with carcinoma, cervix with barrel-shaped carcinoma
- Gynecologic examination wedge
- Lubricant (2 x 250 mL)

Cat. No.	Description	Price
S27320	Gynecologic Skills Traibner P91	1183.00/Ea

### 3B Scientific™ Epidural and Spinal Injection Trainer

Features realistic haptic feedback and a light, compact structure.



**Functions:**

- Epidural anesthesia using the loss-of-resistance and the hanging-drop technique
- Spinal anesthesia with realistic resistance of the dura and arachnoid mater with or without a cannula
- Fluid-filled spinal canal with realistic outflow rate thanks to the ability to adjust the excess pressure
- Epidural catheter can be inserted into the epidural space
- Closed water system
- Easy to clean
- Suitable for both medical training and for specialist medical training.

**Includes:**

- Base body
- Vertebral bar
- LOR insert (loss-of-resistance)
- Skin
- Spinal canal with connector
- Water collection container
- 10 cm tube
- 2 x 100 mL injections with cap
- Spacer ring for injection
- Extension tube for the hanging-drop technique
- Carry bag



Cat. No.	Description	Price
S27324	Epidural and Spinal Injection Trainer	1885.00/Ea

### 3B Scientific™ Episiotomy and Suturing Trainer

Provides realistic help with practicing taking care of and closing birth injuries after vaginal births.



The following birth injuries can be practiced and demonstrated:

- Episiotomy, for example:
  - Lateral episiotomy
  - Median episiotomy
  - Mediolateral episiotomy
  - Vaginal tears
  - Labial tears

- Suture technique can be recorded and assessed by the trainers so that students can improve, after which the students can practice again once the sutures have been removed.
- Material used for the simulation of the tissue feels realistic, and it is easy to keep clean.
- Complete trainer does not take up much room when stowed away.
- Adjustable holder for the simulated tissue stands firmly on the table without slipping.
- Insert can be taken out of the holder and then worked on while it is lying on the table.
- Latex-free, silicone-based material

Muscle structures can be palpated and sutured in the perineal area:

- M. sphincter ani externus (outer anal sphincter muscle)
- M. transversus perinei superficialis (superficial transverse perineal muscle)
- M. bulbospongiosus (bulbospongiosus muscle)

**Features:**

- Muscle and skin layers can be sutured separately.
- Each cut can be sutured several times; by repeating the procedure, the midwifery and obstetrics students learn about professional wound management.

**Includes:**

- Silicone insert
- Base
- Stand



Cat. No.	Description	Price
S27318	Episiotomy Suture Training	342.00/Ea

### 3B Scientific™ Birthing Stages Trainer

Allows students in midwifery and obstetrics to practice, correctly assessing the progress of birth



Trainer consists of a set of 6 inserts that show the level of cervical dilation and effacing. The inserts can be used both as stand-alone trainers and as an extension module for birth simulator P90. The inserts look the same from the outside, but indicate, using a number code on the back, the condition of the cervix on the inside. The following levels and birth stages are shown:

- Insert no. 1: Cervix closed (0.5 cm), level -2
- Insert no. 2: Cervix open 2 cm, level -2
- Insert no. 3: Cervix open 3 cm, half effaced, level -2
- Insert no. 4: Cervix open 5 cm, effaced, level -1
- Insert no. 5: Cervix open 7 cm, effaced, level -1
- Insert no. 6: Cervix open 9 cm, effaced, level 0



**Includes:**

- 6 birth stage inserts
- Safety plate with 4 screws (for the optional insert in birth simulator P90)
- Lubricant
- Carry bag

Cat. No.	Description	Price
S27319	Birthing Stages Trainer	1512.00/Ea

## 3B Scientific™ P90 Birthing Simulators



3B Scientific P90 Basic and PRO Simulators have been developed for the skill training in normal deliveries, complicated deliveries and obstetric emergencies. Obstetric simulation has proven successful to enhance the training of delivery skills, following of protocols and reaction in emergency situation.

Assessment and manipulation of fetal positions:

- Birthing complications are in general less likely when an abnormal fetal position or presentation can be detected before the labor process starts.
- Using obstetric simulation, trainees will learn how to detect abnormal positions and presentations, and how to use manual techniques to assist the birthing process.
- Training of manual birthing maneuvers (like Leopold, or Pinard's) must be trained so that correct measures are applied during complicated deliveries.
- Trainee will learn when to apply obstetric emergency interventions (like a cesarean section).

Users can see how manual maneuvers affect the fetus in-utero and train the following delivery skills and techniques:

- Normal vaginal delivery
- Normal delivery of umbilical cord and placenta
- Palpation and assessment of fetal position and presentation
- Diagnosis of all normal and abnormal fetal positions and presentations (like face, neck, or brow) to represent routine and difficult deliveries
- Intrauterine manipulation of fetus
- Shoulder dystocia demonstration and management
- Breech deliveries (including complete, footling or incomplete, and frank breech presentation)
- Palpation of fetal fontanelles features
- Complete and incomplete placenta birth
- Demonstration of placenta previa: total, partial, and marginal
- Prolapse of umbilical cord
- Nuchal umbilical cord
- Cesarean delivery with incision
- Artificial rupture of membranes (ARM or AROM, amniotomy)
- Clamping and cutting of umbilical cord
- Simulated suctioning of baby's mouth and nose
- Leopold maneuver
- Pinard's maneuver
- Mauriceu-Smellie-Veit maneuver
- Prague maneuver
- Woods maneuver
- Rubin

### Features:

- Fully articulating fetus with open mouth, tiltable head, shoulder blade, and anatomical correct fontanelles
- Life-size adult female lower torso, anatomically correct landmarks like pelvis, pelvic cavity, and spine
- Manual birthing system to control rotation and speed of fetus delivery
- Easy to change position of fetus during birthing process including descend, flexion, extension, internal and external rotation, and restitution
- Uterus with correct positioning of fetus, inflatable to lift fetus for Leopold maneuver
- Easy change-out of parts through pin connections, no tools necessary
- Anti-slip base and handles for extra support on tables
- Belt for fastening to table or bed
- Made of soft vinyl (hard for inner structures) and silicone
- Easy to clean

### Includes:

- Birthing simulator PRO or Basic
- Detachable, padded stomach cover with advanced insert for caesarian section
- Inflatable uterus insert for Leopold Maneuver including cover that can be cut for caesarian section
- Birth canal (portio, cervix, vulva)
- Fastening belt
- Lubricant
- Amniotic fluid and 100 inserts
- Assembly kit
- Fully articulating fetal baby
- Umbilical cord
- Placenta



Cat. No.	Description	Price
S27321	P90 Birthing Simulator Pro	1535.00/Ea
S27314	P90 Basic Birthing Simulator	1034.00/Ea

## 3B Scientific™ Episiotomy Suture Training Module

3B Scientific™ Episiotomy Suture Training Module is for use with Birthing Simulator P90



Cat. No.	Description	Price
S27316	Episiotomy Suture Training Module	206.00/Ea

## 3B Scientific™ Postpartum Hemorrhage Trainer P97 Module



A postpartum hemorrhage module designed to be easily integrated into the Birthing Simulator P90 PRO and BASIC.

This versatile obstetric training tool offers a SKINlike™ high-quality silicone vaginal canal and post-partum cervix. The pump attachment allows easy adjustment of the uterine tone to simulate an atonic or contracted uterus.



The PPH trainer module will be useful for training the following procedures:

- Delivery of placenta, also incomplete
- Identification of the post-partum hemorrhage bleeding nature: uterus bleeding, cervix bleeding (rupture), vaginal bleeding (lesion)
- Visual estimation of the blood loss volume up to 1.5 L
- Atonic uterus management
- Practice the fundal massage
- Practice bimanual compression
- Practice catheterization with CH 14 catheter

**Includes:**

- PPH Trainer P97- Module
- Blood reservoir 1,500 mL
- Blood reservoir stand
- Artificial blood concentrate (2 x 250 mL)
- 2 placentas

Cat. No.	Description	Price
S27315	Postpartum Hemorrhage P97 Module	657.00/Ea

## 3B Scientific™ Postpartum Hemorrhage Trainer P97



A versatile and realistic obstetric training tool that offers accurate anatomy, including ischial spines, pubic bones and sacrum. For a realistic feel and texture in addition to a life-like softness, the vaginal canal and post-partum cervix have been made in SKINlike™ high-quality silicone.

Useful for training the following procedures:

- Delivery of placenta, also incomplete
- Identification of the post-partum hemorrhage bleeding nature: uterus bleeding, cervix bleeding (rupture), vaginal bleeding (lesion)
- Visual estimation of the blood loss volume up to 1.5 L
- Atonic uterus management
- Practice the fundal massage
- Practice bimanual compression
- Practice catheterization with CH 14 catheter
- Pump attachment allows easy adjustment of the uterine tone to simulate an atonic or contracted uterus.



**Includes:**

- PPH Trainer P97
- Blood reservoir 1.500 mL
- Blood reservoir stand
- Artificial blood concentrate (2 x 250 mL)
- 2 placentas

Cat. No.	Description	Price
S27317	Postpartum Hemorrhage Trainer P97	1149.00/Ea

## 3B Scientific™ Prostate Examination Trainer

Used in medical simulation and clinical training for the demonstration and practice of digital rectal examinations.



- Includes 4 different prostates to train professional palpation methods (side position or bent forward) and diagnostic skills associated with rectal examinations.
- An index finger is inserted into the rectum, facilitating palpation of the rear part of the prostate, where the majority of prostate carcinomas are found.
- Shape, position and consistency of the prostate are assessed, allowing irregularities, induration and nodes on the otherwise smooth surface of the prostate to be felt.

**The following stages are included:**

- Normal prostate
- Advanced prostate carcinoma
- Prostate carcinoma at an early stage
- Benign prostatic hyperplasia (BPH)
- For reference and self-control, the trainer also includes the corresponding transrectal sonographic imaging (transrectal ultrasound, TRUS) for each stage. While in use, the prostate and the sonographic images are hidden and cannot be seen by the trainee. The compact shape of the DRE Trainer makes it easy to store and the perfect skill trainer for every medical simulation lab.



Cat. No.	Description	Price
S27326	Prostate Exam Trainer	184.00/Ea

## 3B Scientific™ Decubitus Trainer

Allows students to learn about professional assessment (examination, measurement and description), wound care and bandaging techniques in various stages of decubitus.



- Flexible material provides realistic training in changing and putting on dressings and bandages, which form a considerable part of nursing and wound care.

### Decubitus stages are shown on the trainer:

- **Grade 1 (Greater trochanter - Right)** Redness, but the skin is intact.
- **Grade 2 (Buttocks - Right)** Partial skin loss is visible. Epidermis shows signs of damage which extends into the dermis (corium). Superficial pressure injury shown can manifest itself through the development of blisters and skin abrasions.
- **Grade 3 (Buttocks - Left)** Recognized by the loss of all layers of the skin, with damage to the subcutaneous tissue, through to necrosis. Distinguished by black coloration in the wound area.

- **Grade 4 (Greater Trochanter - Left, Sacrum)** All skin layers and muscle fascia have been destroyed. Necrotic areas have been marked black. Muscles and bone areas below this layer are also affected and damage can become necrotic. Supporting structures such as tendons, ligaments or joint structures can also be affected. Pocket formations, more or less extended, can also be seen



Cat. No.	Description	Price
S27330	Decubitus Trainer	895.00/Ea

## 3B Scientific™ Bowel Care and Enema Trainer P16

A life-size bowel care trainer for realistic enema and bowel care management interventions training to help reduce the risk of complications associated with management of lower bowel dysfunction and ensure patient safety.



Simulator allows the trainees to administer different procedures. A secure fluid reception reservoir system makes the trainer leakage free. Sponge bath practice is possible using the simulated solid and soluble stool. Thanks to quick and easy change of the setting (< 1 min) various techniques can be trained under instructor control and during student practice.

Train the following bowel care procedures:

- Enema Administration
- Cleansing
- Oil-Retention
- Return-Flow
- Medicated Enemas
- Suppositories administration
- Medication administration
- Digital Rectal Examination (DRE) and Stimulation (DRS)
- Digital Removal of Faeces (DRF)

### Features:

- Simulates the buttock of a patient with femoral stumps, anus and bowel in pre-positioned left lateral recumbent position
- Upper buttock is soft and flexible to be most realistic; the trainee has to lift it to gain access to the anus
- Supports the insertion of CH16 to CH40 catheters and balloon rectal tubes
- Digital Rectal Inserts are made of SKINlike™ sturdy silicone to simulate human skin and tissue haptic during DRE and DRS
- Anus stays close and remains impenetrable after the removal of the catheter due to the high quality of the insert material
- Contains two 3D anatomical didactic models of hemorrhoids to facilitate the explanation of complication or contraindication:
- One displaying a rectum frontal section with hemorrhoids, anal fissures and fistulae
- Another of an external view with swollen anal prolapse and hemorrhoid knots
- 3D models are attached to the model with magnet so the model can be passed from student to student during class



- Secure fluid reception reservoir system:
  - Ensures portability, impermeability, security
  - Administer standard enema solutions without risk up to a volume of 2 liters
  - Fluid can be drained into the reception reservoir or directly into a nearby sink or canister
  - Easy to clean
  - Optimized design to enable a quick and simple installation for each procedure

### Includes:

- Bowel Care Trainer P16
- 1 DRE, 1 DRS and 1 DRF insert
- Artificial solid stools (Bristol Stool Chart type I)
- Solid (150 g) and soluble (60 g) stool powder, artificial
- Dosage spatula and cup for stool preparation
- Bottle of concentrate blood (250 mL), artificial
- Blood pipette injector
- Talcum powder (100 g), Vaseline
- Plastic storage box for consumables
- Soft carrying bag

Cat. No.	Description	Price
S27325	Bowel Care and Enema Trainer	1003.00/Ea

## 3B Scientific™ Buttock Injection Simulator



A high-quality, life-like strap-on intramuscular simulator of a right buttock

- Simulator features anatomical landmarks for intramuscular (I.M.) injections:
  - Iliac crest
  - Anterior superior iliac spine
  - Greater trochanter
- Integrated fine electronics provide graphic feedback when training the intramuscular injection technique, and correctly administered injections will produce audiovisual feedback
- Additional training and control modes are available for checking results either immediately or upon completion of a training session.
- Includes a 21G/0.8 injection needle and 5 mL syringe.



## 3B Scientific™ Diabetic Foot Treatment Trainer



Features a gangrenous alteration on the big toe of the right foot that has spread from the back of the foot to the metatarsal.

- Mal perforans (trophic ulcer) visible on the sole of the foot (plantar)
- Grade 3 pressure-ulcer depicted in the heel area
- Complete skin layer is lost and the subcutaneous tissue is damaged up to necrosis
- Black colouration in the wound area
- Leg not included



Cat. No.	Description	Price
<b>S27327</b>	Buttock Injection Simulator	1900.00/Ea

Cat. No.	Description	Price
<b>S27331</b>	Diabetic Foot Treatment Trainer	150.00/Ea



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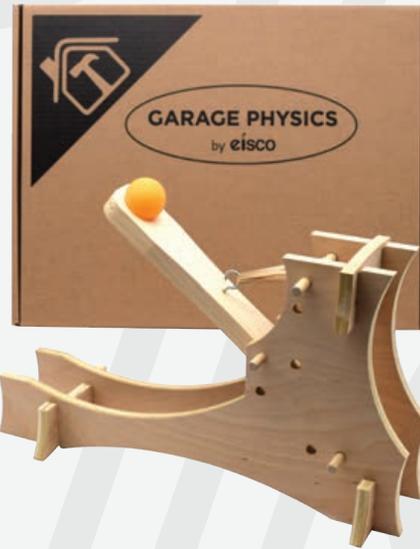
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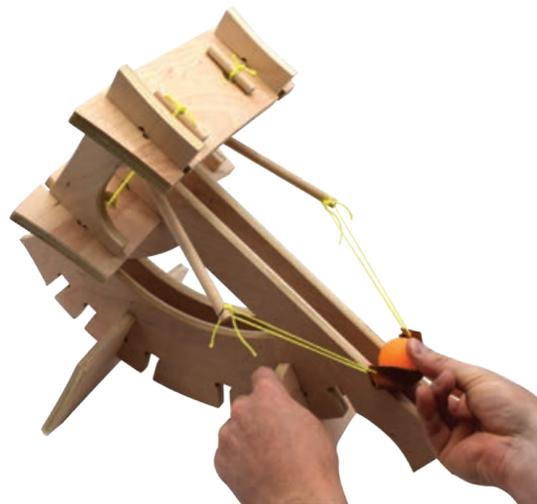
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