

## **Featured Suppliers**

























Visit **fisheredu.com/featuredsuppliers** to learn more about these suppliers and their products.

## Helpful Icons



New product



Must be shipped by truck for regulatory reasons



Meets Americans with Disabilities Act requirements



Protects against splashes from hazardous chemicals or potentially infectious materials



Applicable for remote learning



Defined as a medical device by the FDA

### Guarantee

If you're not 100% satisfied with your purchase, contact our customer service team within 30 days of your invoice date and we'll either exchange, repair, or replace the product, or give you a credit for the full purchase price. Call us toll-free for a return authorization number.

Special order items, furniture, and closeouts cannot be exchanged or credited.

**Phone:** 1-800-955-1177 • 7 a.m. to 5:30 p.m.

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Fax: 1-800-955-0740 • 24 hours a day, 7 days a week

Email: fse.custserv@thermofisher.com

Website: fisheredu.com

**Address:** Fisher Science Education

4500 Turnberry Drive Hanover Park, IL 60133

For international orders, see page 116.

Products featured in this catalog may have limited availability and extended lead times. Prices are subject to change.

## Connect with Us on Social Media



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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** 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** 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 2023 catalogs:

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



Agate, a mineral classified in the quartz family, takes fifty million years to form. Most agates materialize in volcanic rock or ancient lava.

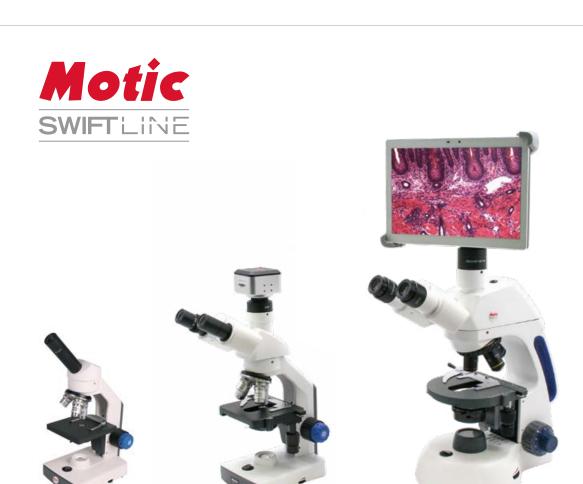
Visit **fisheredu.com/headlinediscoveries** for more articles and information for your classroom.

**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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Visit **fisheredu.com/stem** to view our full offering of products.



## The evolution of digital microscopy is here

Whether it's conventional microscopes, cameras, or our latest full classroom connectivity, we have your needs covered.

Keep your classroom in focus with Motic Swift Line.



## **NEW** Featured Products





#### Hands-On Experiments

Facilitate robust learning experiences through real-life laboratory simulations.

Description	Cat. No.	Price
EDVOTEK™ MyLab™ Custom Kit - Forensics Blood Typing	S06464	\$42.75
EDVOTEK MyLab Custom Kit - How is Substance Abuse Determined?	S06474	\$42.75





#### Learn from Biological Models

Explore replicas to understand the specific anatomy and functions of various species.

Description	Cat. No.	Price
3B Scientific™ Canine Vertebrae Column Model	S00587	\$106.00
3B Scientific Feline Heart and Lung Model	S00595	\$91.00
3B Scientific The NEW Heart of America PLUS with Coronary Bypass Vessels	S00280	\$551.00



#### **Study Specimens**

Examine the structure of a real horse spinal column and rabbit skull.

Description	Cat. No.	Price
3B Scientific Horse (Equus ferus caballus) Spinal Column	S00572	\$1,516.00
3B Scientific Rabbit Skull (Oryctolagus cuniculus var. domestica)	S00599	\$395.00



#### Analyze the Effects of Injury and Disease

Determine how the human body is affected by concussions and type 2 diabetes through interactive demonstrations and miniature replicas.

Description	Cat. No.	Price
3B Scientific Concussion Program Kit	S00529	\$669.00
3B Scientific Type 2 Diabetes Set	S00269	\$189.00



#### **Experience the Power of Solar Energy**

Excite the youngest learners with an engaging learning tool powered by the sun.

Description	Cat. No.	Price
PicoStudio Solar Car	S4131924	\$26.50





#### Observe the Outdoors

Inspire budding field scientists with a comprehensive kit including a microscope, insect net, bug viewer, and more.

Description	Cat. No.	Price
Supertek™ The Field Explorer Kit	S89528	\$178.00





#### **Compare Heat Absorption**

Distinguish heat absorption and radiation between shiny and dull items.

Description	Cat. No.	Price
Eisco™ Heat Absorption Radiation Comparator	S15122	\$61.50

#### Learning Loss & Remote Learning

#### **Learning Loss**

## Plate Tectonics Flip Chart with Online Multimedia Lesson

This multimedia kit can help students master key earth sciences concepts.

- 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's 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 and 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

**Covers:** Earth's Interior; Heat Transfer & Convection Currents; Continental Drift; Sea-Floor Spreading; Theory of Plate Tectonics; Plate Tectonic Boundaries: Changes in Earth's Surface: Volcanoes

Boundaries; Changes in Earth's Surface; Volcanoes & Plate Boundaries; and Earthquakes & Plate Boundaries



Cat. No.	Price
S81118	\$55.25/Ea

## **Ecosystems, Food Chains and Food Learning Center**

Engaging, ready-to-use learning centers for review of standards-based science skills.

- For learning essential grade-appropriate science skills
- Designed for teacher-directed instruction or independent student group learning
- Materials sufficient for up to four students
- Allows for use in classroom, after-school programs, or at home
- Four Visual Learning Guides focused on same topic
- Packed in zippered storage pouch
- For Grades 6, 7, 8, High School

## Includes one Curriculum Mastery Game featuring:

- One set of 30 illustrated self-checking question cards
- One laminated double-sided game board and game pieces for up to 4 players



Cat. No.	Price
\$24139	\$34.75/Ea





### YOUR STEM PROGRAM

MAKE IT AMAZING!

fisheredu.com/STEM: Your source for products, professional development, resources and everything STEM.



## All About Cells Student Learning Guide with Online Lesson

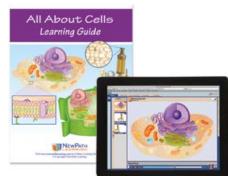
An ideal blended learning solution for use in the classroom or for remote learning/home study.

- Colorfully-illustrated student learning guide provides 36 pages featuring self-directed readings easy-to-follow illustrated explanations guiding questions a lab investigation key vocabulary review and assessments
- Also includes one year access to a corresponding multimedia lesson for a teacher and all their students. Each lesson features animated narrated tutorials interactive exercises and 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 or tablet as well as classroom presentation on any interactive whiteboard

Covers: Discovering Cells, Animal and Plant Cell Organelles, Cell Energy Photosynthesis, Comparing Plant and Animal Cells, Organization of Cells, Specialized Cells, and Single-Cell Organisms



Cat. No.	Price
S436007	\$16.00/Ea

### Simple Animal Cell 3D Model Kit

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

- Gain a critical understanding of complex structures and 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 and evaluate their understanding of key scientific concepts
- Satisfies NGSS Standards which encourage students to develop and use models to represent structures, systems and processes, then provide explanations, make predictions or investigate solutions
- Perfect for use in the classroom, lab or at home



Cat. No.	Price
S81461	\$39.75/Ea

## **Science Visual Learning Guides**

Use visual learning methods to improve student performance.

Laminated "write-on/wipe-off" guides cover 10 key topics per set and help your students make connections, understand relationships and recall related details using visual learning processes.

#### Each 11 x 17 in. guide includes four panels:

- Panel 1 features an illustrated overview of concept
- Panel 2 includes labeling and review exercises
- · Panel 3 presents graphic organizer of topic
- Panel 4 provides assessment and review questions

#### Life Science Grades 5 to 9 (S01885):

Photosynthesis, Mitosis/Meiosis, Genetics, Osmosis/Diffusion, and more

Physical Science Grades 5 to 9 (S01887): Work and Machines, Forces and Motion, Periodic Table, Chemical Reactions, and more

#### Science Grade 4 (S01878):

Cells - The Building Blocks, Invertebrates and Vertebrates, Rocks & Minerals, Earth - Inside & Out, Force, Motion & Energy, and more

Human Body Grades 6 to 10 (S01895): Bones, Muscles & Skin, The Digestive System, Nutrition, The Circulatory System, The Immune System, The Respiratory System, and more



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Cat. No.	Subject	Grade	Price
S01885	Biology - Life Science	5 to 9	\$49.75/Ea
S01887	Physical Science	5 to 9	\$49.75/Ea
S01895	Human Body	6 to 10	\$49.75/Ea





### **Summer Bridge Activities**™

Summer Bridge Activities are a distinguished series that engages children's creativity and learning potential. Prevent summer learning loss and prepare your child for back-to-school success in just 15 minutes a day.



















**How It Works:** Each page is numbered by day so kids and parents can track progress and reach monthly learning goals. Each activity features clear, step-by-step instructions and practice pages to help sharpen students' skills for the school year ahead.

**Just 15 Minutes A Day:** Two months of learning loss occurs during the summer, with the highest losses being in math and spelling. This activity book is designed to prevent summer brain drain in just 15 minutes per day through engaging activities.

Why Summer Bridge: Award-winning Summer Bridge Activities™ engage children's creativity and learning potential and keep kids mentally and physically active to prevent summer learning loss and pave the way for a successful new school year ahead.

#### Nine workbooks cover grades Pre-K through 8. Each workbook includes:

- 160 pages, about 8 inches x 10½ inches
- Activities for 60+ days
- Social studies, science experiments and fitness activities for all levels
- Flash cards, answer keys and completion certificates
- Other lessons and activities appropriate for the students' age and learning level (as listed below)

#### Pre-K to K (\$81806), ages

**4-5.** Includes versatile subjects covering phonics, handwriting, counting numbers. With reward stickers

#### K to 1 (S81807), ages 5-6.

Reading comprehension, handwriting, and counting, with reward stickers

#### 1 to 2 (S81808), ages 6-7.

Writing, parts of speech, adding and subtracting

2 to 3 (S81809), ages 7-8. Parts of speech, number patterns, counting money

#### 3 to 4 (\$81810), ages 8-9.

Reading passages, word problems

#### 4 to 5 (\$81811), ages 9-10.

Reading passages, grammar, multiplication and division

#### 5 to 6 (S81812), ages 10-11.

Grammar, writing skills, fractions, solving equations

#### 6 to 7 (S81813), ages 11-12.

Writing skills, root words, factors, graphing, dictionary skills

#### 7 to 8 (S81814), ages 12-13.

Grammar, reading passages, graphing, dictionary skills, geometry

Cat. No.	Description	Price
S81806	Grades Pre-K to K	\$13.25/Ea
S81807	Grades K to 1	\$13.25/Ea
S81808	Grades 1 to 2	\$13.25/Ea
S81809	Grades 2 to 3	\$13.25/Ea
S81810	Grades 3 to 4	\$13.25/Ea
S81811	Grades 4 to 5	\$13.25/Ea
S81812	Grades 5 to 6	\$13.25/Ea
S81813	Grades 6 to 7	\$13.25/Ea
S81814	Grades 7 to 8	\$13.25/Ea



### Summer Bridge Essentials<sup>™</sup> Backpack

Prevent summer learning loss and prepare your child for back-to-school success with fun activities, engaging children's books, exercises, interactive games, and more-all in one bundle.















**Preventing Learning Loss:** Two months of learning loss occurs during the summer, with the highest losses being in math and spelling. This bundle is designed to prevent summer brain drain through engaging, hands-on activities.

**How It Works:** Use the User Guide to increase family engagement, and flash cards for added practice. Track daily progress and reach monthly learning goals in the workbook. Check answers with the answer key and reward kids with motivational stickers.

Why Summer Bridge: Award-winning Summer Bridge Activities<sup>™</sup> engage children's creativity and learning potential and keep kids mentally and physically active to prevent summer learning loss and pave the way for a successful new school year ahead.

## Seven bundles cover grades Pre-K through 6. Bundles include:

- All-subject activity workbook with stickers and completion certificate
- Activities for 60+ days
- Topics include reading, writing, math, social studies, science and fitness (age appropriate)
- Four books (two nonfiction and two fiction)
- Drawstring bag and user guide
- Flash cards appropriate for the students' age and learning level (as listed below)

**Pre-K to K (S81815), ages 4-5.** Flash cards teach phonics and pronunciation

K to 1 (S81816), ages 5-6. Flash cards for words build student's vocabulary and spelling skills

1 to 2 (\$81817), ages 6-7. Flash cards aid in building student's addition skills

**2 to 3 (S81818), ages 7-8.** Flash cards help to teach subtraction principles

**3 to 4 (S81819), ages 8-9.** Flash cards for learning multiplication

4 to 5 (S81820), ages 9-10. Flash cards for learning division

5 to 6 (S81821), ages 10-11. Flash cards for enhancing division skills

Cat. No.	Description	Price
S81815	Grades Pre-K to K	\$36.50/Ea
S81816	Grades K to 1	\$36.50/Ea
S81817	Grades 1 to 2	\$36.50/Ea
S81818	Grades 2 to 3	\$36.50/Ea
S81819	Grades 3 to 4	\$36.50/Ea
S81820	Grades 4 to 5	\$36.50/Ea
S81821	Grades 5 to 6	\$36.50/Ea



## Online Learning Program -1 Year Class License (1 Teacher/150 Students)

Use interactive, multimedia lessons and innovative teaching tools to engage students through differentiated instruction.

- · Research-based and classroom-tested
- · Innovative and easy to use
- Includes everything needed to provide students with interactive lessons meeting the current state and national standards, including NGSS
- · Engages students and improves their learning through differentiated instruction
- Allows students to learn anywhere, anytime, on any device (including tablets and Chromebooks)
- · Can also be used on interactive whiteboards for classroom instruction
- Includes the following: click-and-play lessons, narrated multimedia science lessons with interactive exercises, virtual lab investigations, vocabulary, quizzes, and more
- The program also includes: easy-to-use tools and templates to create and deliver custom lessons to meet individual class and student needs, a unique learning management system to track and analyze student performance, and cloud-based storage to save lessons for a future semester or share them with colleagues

Cat. No.	Price
S98490	\$211.00/Ea



### **Starry Night Astronomy Lessons**

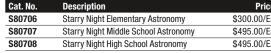
Starry Night Elementary features an easy-to-use, complete curriculum for elementary space science education.

- Up to 35 student logins and 1 instructor per license
- 8 Lesson plans joined to exercises and hundreds of simulations, animations and images
- Teachable Moments feature keeps content fresh and relevant
- · Lessons are correlated to state standards and the NGSS
- Accurate visualizations allow students to make precise observations of moon phases, motions of the sun and planets, seasons, eclipses and much more
- Interactive exercises and hands-on activities encourage questioning,

- experimentation and exploration, and accommodate diverse learning styles
- Pre- and post-assessment resources with recommendations for improved student performance
- Flexible teaching models for easy adaptation to pacing and classroom
- Opportunities to develop key skills: observation, data collection, analytical thinking and discovery
- · Extensions that connect to history and literacy
- · Access for the entire classroom, teachers and staff

- Includes digital teacher's guide with helpful how-to's and support resources
- Runs in the browser using a standard Internet connection
- Chromebook™, iPad™, Android™, Windows™, and Mac™ compatible

Cat. No.	Description	Price
S80706	Starry Night Elementary Astronomy	\$300.00/Ea
S80707	Starry Night Middle School Astronomy	\$495.00/Ea
S80708	Starry Night High School Astronomy	\$495.00/Ea



## **Layered Earth**

Features easy-to-use, complete curriculum for middle and high school science education.

- Up to 35 student logins and 1 instructor per license
- · 35 Lesson plans joined to exercises and hundreds of interactions, simulations and images
- · Lessons are correlated to state standards and the NGSS
- · Clear articulation of learner expectations for each lesson through the use of introductory Guiding Questions, bulleted Key Concepts and lesson summaries highlighting main points
- · Attractive learning environment with clear and easy-to-follow progression
- Accurate and innovative visualizations and simulations that engage

- students, and illustrate and enhance basic concepts
- In-depth discovery exercises that foster observation, measurement, mathematical and analytical thinking
- Pre- and post-assessment activities to test student knowledge and learning and reinforce basic concepts
- Incorporates learner strategies from current educational research such as anticipation guides, multiple intelligences and graphic organizers
- · Numerous links and extensions for a rich learning environment that provides connections to mathematics, literacy, history, travel, and STSE (Science, Technology, Society and the Environment)

- Teachable Moments feature keeps content fresh and relevant
- · Access for the entire classroom, teachers and
- · Includes digital teacher's auide with helpful how-to's and support resources
- Runs in the browser using a standard Internet connection
- Chromebook™, iPad™, Android™, Windows<sup>™</sup>, and Mac<sup>™</sup> compatible

Description	Price
Layered Earth Meteorology	\$495.00/Ea
Layered Earth Geology	\$495.00/Ea
	Layered Earth Meteorology





## StarSense Explorer<sup>™</sup> Smartphone App-Enabled Telescopes

StarSense Explorer<sup>™</sup> Smartphone App-Enabled Telescopes are compatible with most modern smartphones.

Celestron has reinvented the manual telescope with StarSense Explorer\*— the first telescope that uses your smartphone to analyze the night sky and calculate its position in real time. StarSense Explorer is ideal for beginners thanks to the app's user-friendly interface and detailed tutorials. It's like having your own personal tour guide of the night sky.

#### Dock, Launch, Explore

Leave complicated star charts, imprecise planetarium apps, and computerized mounts behind. With StarSense Explorer, locating objects has never been easier, faster, or more accurate. Within minutes of setting up the telescope, you'll be navigating the sky with confidence. Simply place your phone in the unique StarSense dock and launch the StarSense Explorer app. After aligning your phone to the telescope's optics (a quick, 2-minute procedure), StarSense Explorer generates a list of celestial objects currently visible. Make your selection and arrows appear onscreen, guiding you as you to move the telescope. When the object is ready to view, the bullseye turns green.

#### **Smartphone Compatibility**

StarSense Explorer" works with most modern smartphones, including iPhone 6 and up and most devices running Android 7.1.2 or later manufactured since 2016. Compatibility will show when on home screen when app is launched.

## Patent-Pending StarSense Sky Recognition Technology

StarSense Explorer™ uses patent-pending technology and your smartphone to determine exactly where the telescope is pointed in the night sky. A Lost in Space



Algorithm (LISA), like the ones satellites use in orbit to correctly reorient themselves, helps the app match star patterns it detects overhead to its internal database. While other astronomy apps may claim that they can help you find objects, they rely exclusively on the phone's gyros and accelerometers, which aren't as accurate as LISA technology. No other app can accurately tell you when your target is visible in the eyepiece.

#### **Dazzling Views with High Quality Optics**

You can expect sharp, bright views through this 80 mm refractor. Fully-coated glass optics provide increased light transmission, enhancing details in celestial objects. The telescope also includes a 90-degree erect image diagonal, so you can use it during the day to view birds, wildlife, landscapes, and more

#### Perfect for the City or Dark Sky Sites

Even if you live in a light-polluted city location, StarSense Explorer™ is advanced enough to be able to pick out Jupiter, Saturn, Venus, the Orion Nebula, double stars, and a few more of the most famous celestial objects. But if

you can take the telescope to an even slightly darker location, more objects will become visible. The entire telescope kit weighs just 9.2 pounds, so it's perfectly portable and easy to bring on your next camping trip, or to a remote observing site.

## **Everything You Need to Observe Immediately**

When you unbox your new StarSense Explorer™ LT, you'll find:

- 80 mm refractor optical tube
- StarSense dock for your smartphone
- Low powered (25 mm) and high powered (10 mm) eyepiece
- 2x Barlow lens to double the power of each eyepiece
- 90-degree erect image diagonal
- StarPointer red dot finderscope, perfect for using the telescope during the day or without the StarSense Explorer app
- Altazimuth mount with slow motion control rod
- Full-height tripod with an accessory tray to keep you organized

Cat. No.	Optical Design	Model	Price
S81338***	Refractor	LT 80AZ	\$244.00/Ea
S81339***	Newtonian Reflector	LT 114AZ	\$250.00/Ea
S81340***	Refractor	DX 102AZ	\$506.00/Ea
S81341***	Newtonian Reflector	DX 130AZ	\$511.00/Ea

Please see Safety & Security Catalog for Social Distancing Aids and Cleaning Supplies.





#### FISHER SCIENCE EDUCATION

MAKING SCIENCE MATTER

Visit us online at **fisheredu.com** to learn more about our programs, services and resources.



#### Remote Learning: Life Science

#### Microslides™

Each Microslide title consists of images photographed through a microscope. Each Microslide is accompanied by a detailed lesson plan.

Each Microslide title includes a slide featuring 8 related 35mm images photographed through a microscope called photomicrographs. Arrows and call outs help the student locate important features. Each Microslide is accompanied by a detailed lesson plan designed to stimulate, inform, and

Cat. No.	Description	Price
S816700	Ultra Structure of Animal Cell	\$11.50/Ea
S816701	Cells of Your Body	\$11.50/Ea
S816702	Cells of Plants	\$11.50/Ea
S816703	Chick Embryo	\$11.50/Ea
S816704	Insect Parts	\$11.50/Ea
S816705	Helpful Bacteria	\$11.50/Ea
S816706	Harmful Bacteria	\$11.50/Ea
S816707	Animal Tissues-A Set	\$11.50/Ea
S816708	Animal Tissues-B Set	\$11.50/Ea
S816709	Animal Mitosis	\$11.50/Ea
S816710	Plant Mitosis	\$11.50/Ea
S816711	Cell Structure	\$11.50/Ea
S816712	Photosynthesis	\$11.50/Ea
S816713	Reproduction	\$11.50/Ea
S816714	Digestive System	\$11.50/Ea
S816715	Circulatory System	\$11.50/Ea
S816716	Central Nervous System	\$11.50/Ea

question students about the topic under study. Each lesson plan has a pocket in which the Microslide is stored. When buying in sets of 15 you will receive a reproducible worksheet.

Cat. No.	Description	Price
S816717	Respiratory System	\$11.50/Ea
S816718	Micro Chromosomes and Genes in Action	\$11.50/Ea
S816719	Fern Life Cycle	\$11.50/Ea
S816720	Meiosis	\$11.50/Ea
S816721	Human Blood	\$11.50/Ea
S816722	Virus Set	\$11.50/Ea
S816728	Protozoa Set	\$11.50/Ea
S816732	The Kingdom Fungi Set	\$11.50/Ea
S816733	Marine Biology Set	\$11.50/Ea
S816734	Marine Plankton	\$11.50/Ea
S816735	Nerve and Muscle Action Set	\$11.50/Ea
S816736	Skeletal System	\$11.50/Ea
S816738	The Five Kingdom	\$11.50/Ea
S816739	Cancer	\$11.50/Ea
S816740	Cell Nucleus	\$11.50/Ea
S816741	Basic Human Histology	\$11.50/Ea



#### Microslide<sup>™</sup> Viewer

This Microslide Viewer was specially designed for the Microslides as a companion to ensure the best viewing possible. Simply insert slide and focus; it is as simple as that. The white reflector provides sufficient light for a bright image in the normal light of a classroom.

- Designed for use with Microslides
- Easy to use
- Quick focus
- Use indoor or outdoor

•	Nο	<b>hatteries</b>	required

- 9 in. tall
- Lightweight





S816743	\$21.50/Ea

## **Eisco™ Human Skeleton Miniature Model With Stand**

Miniature model for classrooms.

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

Cat. No.	Price
S15583	\$47.75/Ea





### **Butterfly Garden**<sup>™</sup> **Homeschool Edition**

Hands-on educational kit that explores the ever-changing life cycle of a butterfly.

- · Butterfly-growing kit provides weeks of STEM learning
- · Ideal for both Home School and the classroom
- Designed to ensure the best possible viewing and learning experience
- · Describes the 4 stages of metamorphosis and includes facts about each exciting stage



### **Small Group Learning: Production Of Biodiesel**

In this activity, students will perform a two-phase process to produce small batches of crude biodiesel. The crude biodiesel produced is of sufficient quality for use in the demonstration of the burning qualities of both biodiesel and vegetable oil.



Butterflu Garden 200655

- Included is an optional small-scale exercise where the students will use a washing procedure for the crude biodiesel
- · Students experience the full process of producing biodiesel to meet quality levels necessary for use in vehicles
- Kit contains enough material for 5 groups
- Teacher's Manual and student study guide copymasters are
- Aligned to the Next Generation Science Standards (NGSS)
- · Disciplinary core ideas: PS1.A; PS1.B
- Performance expectations: MS-PS1-2; MS-PS1-3; HS-PS1-2
- · Cross cutting concepts: patterns; structure and function
- Engineering practices: Analyzing and Interpreting Data; Obtaining, Evaluating and Communicating Information

Cat. No.	Price
S40756**	\$35.75/Ea

#### **Owl Pellet Kit**

Teaches students the concepts of food webs and food chains, while identifying the small animals that are prey for the owls.

· Owls have a specialized digestive tract which helps them expel the indigestible parts of their prey in pellet form



- · The pellets are heat-sterilized and individually wrapped
- Kit Includes: 5 owl pellets, 10 wooden probes, 5 forceps, 5 plastic rulers, 5 hand magnifiers, 20 nitrile gloves, teacher's manual and guide





Blood type, an inherited characteristic, has use in everything from forensic investigations to medical procedures. In



this activity, students will learn about the genetics that determine blood type, and the possible inheritance patterns and how they express themselves.

- Students will use simulated blood to determine the blood type of four unknown samples, and use their results to assist in the resolution of a fictional paternity dispute
- · Kit contains materials for 5 groups
- Aligned to the Next Generation Science Standards (NGSS)
- Disciplinary core ideas: PS1.A; PS1.B; LS1.A; LS1.B; LS3.A; LS3.B
- Performance expectations: MS-PS1-2; MS-LS3-2; HS- LS3-1; HS-LS3-3
- Cross cutting concepts: structure and function; cause and effect; scale, proportion and quantity; science is a human endeavor
- Engineering practices: developing and using models; asking questions and defining problems; analyzing and interpreting data

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Cat. No.	Price
S40735	\$23.25/Ea

## MyLab™ Custom Kit -Simulation of COVID-19 **Antibody Test**



Simulation

of COVID-19

**Antibody Test** 

EDVOTEK

Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan vour curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

- · Learn about antibody-based detection techniques
- Perform an ELISA at home
- Understand current testing techniques for COVID-19 through a simulated experiment

Includes controls, antibodies, test strips, detection substrate,

transfer pipettes

Cat. No.	Price
S06462	\$43.00/Ea



## MyLab<sup>™</sup> Custom Kit -**Micropipetting Basics**

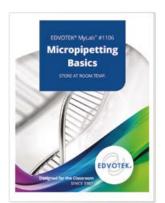


Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

· Learn the critical skill of micropipetting

S06463

- Hands-on pipetting practice
- · Understand the importance of micropipetting in science
- · Includes instructions, fixed volume micropipette, tips, dves.



## MyLab<sup>™</sup> Custom Kit -Spooling DNA on a Stick



EDVOTEK\* MyLab\* #1104

**Spooling DNA** 

on a Stick

EDVOTEK\* MyLab\* #1105

**Extracting Fruit** 

& Vegetable

DNA

EDVOTEK

EDVOTEK

Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

- · Learn about living organisms and DNA
- Hands-on experiment using real
- · Spool DNA and visualize genetic material
- Includes chromosomal DNA, spooling sticks, transfer pipettes, DNA stain

 Alcohol included upon request S06466 \$42.75/Ea

Cat. No.			
and pipetting sheet			
	- 1 / - 3 /		

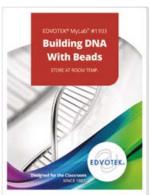
## MyLab™ Custom Kit -**Building DNA With Beads**



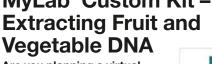
\$43.00/Ea

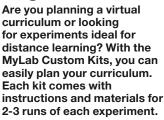
Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

- Understand DNA base pairing
- · Model the structure of DNA
- Explore palindromes, restriction enzymes, DNA synthesis, and genetic engineering
- Includes instructions, 75 colored beads



MyLab™ Custom Kit -**Extracting Fruit and** 





- Learn about the basics of cells and DNA
- Extract DNA from household fruits and vegetables
- Spool DNA to visualize genetic material
- · Includes extraction buffer, test tubes, pipettes, and spooling stick
- Alcohol included upon request

Cat. No.	Price
S06467	\$42.75/Ea









BIOTECHNOLOGY

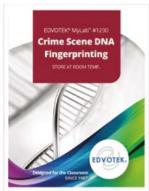
Visit fisheredu.com/biotechnology

MyLab<sup>™</sup> Custom Kit – Crime Scene DNA Fingerprinting

NEW

Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

Forensic scientists use DNA fingerprinting to analyze crime scene DNA evidence and identify missing people. In this simulation of DNA fingerprinting, students will utilize paper chromatography to



analyze the crime scene and suspect samples to identify 'whodunnit'.

- Explore DNA analysis and its forensic applications
- Learn about restriction enzymes, electrophoresis and chromatography
- Analyze crime scene and suspect samples to determine 'whodunnit'
- Includes instructions, simulated DNA samples, chromatography paper, buffer, pipettes

 Cat. No.
 Price

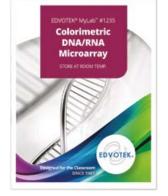
 \$06470
 \$42.75/Ea

MyLab<sup>™</sup> Custom Kit – Colorimetric DNA/RNA Microarray



Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

Microarrays allows scientists to analyze gene expression of many samples in one assay. This technology has led to cost savings by reducing the sample size, while saving time and yielding accurate



results. In this experiment, students explore the biology of cancer by looking at changes in gene expression in simulated patient samples.

- · Explore the biology of cancer
- Learn about gene expression and regulation
- · Perform a simulated microarray on four patient biopsies
- Includes instructions, microarray card, patient samples, indicator dye, pipettes

 Cat. No.
 Price

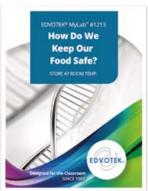
 \$06471
 \$42.75/Ea





Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

Bacteria grows and multiplies rapidly unless kept in check by good sanitation, food safety, and personal hygiene. Many procedures are routinely used in food safety that include cooking, chilling,



cleaning, and avoiding cross-contamination. In this experiment, milk will be used as a growth medium for bacteria. A blue dye will be added that turns colorless when bacteria grow in it. The impact of cooking, chilling, and cross-contamination will be tested to determine bacterial growth.

- Learn how biotechnologies and the 4Cs protect food from pathogenic bacteria
- Explore how temperature affects bacteria growth
- Open-ended experiment lets students design and test additional variables
- Includes indicator dye, pH paper, acetic acid, sodium bicarbonate, tubes, pipettes

Cat. No.	Price
S06472	\$42.75/Ea

MyLab<sup>™</sup> Custom Kit – How Clean is Our Home Environment?



EDVOTEK

15

**How Clean Is** 

**Our Home** 

**Environment?** 

Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

- Learn about bacteria and where they are in your home
- Experiment with household cleaners to see which are most effective at killing bacteria
- Understand the relationship between bacteria and cleaning
- Includes petri dishes, agar, filter paper, and transfer pipettes

Cat. No.	Price
S06469	\$42.75/Ea

Please see Delta dissection kits located in the Life Sciences catalog.



Phone 1-800-955-1177 Fax 1-800-955-0740 fisheredu.com

#### Remote Learning: Physical Sciences

## **Distance Learning: Forensic Chemistry – Drug Detection**

Students work as forensic toxicologists to perform chemical tests in order to determine if all ingredients are what they should be.

#### **Objectives:**

- · Work as a forensic toxicologist to determine if someone tainted the cafeteria's chili
- Determine if any ingredients were substituted for aspirin (stolen form the nurse's office)
- · Perform chemical tests on cafeteria ingredients and control aspirin

#### Includes:

- 4 g acetylsalicylic acid (control)
- 4 g corn starch
- 4 g salt
- 4 g sugar

- 4 mL sodium hydroxide, 1M
- 4 mL ferric nitrate, 0.2M
- 4 mL Lugol's iodine
- · 4 mL deionized water
- 1 Pk. toothpicks
- 4 plastic scoops
- 2 microreaction plates
- Instruction manual and enough materials for two groups

Cat. No.	Price
\$08200	\$25.00/Ea

## Distance Learning: Forensic Chemistry of Blood Typing

Students determine the blood type of simulated samples from a crime scene and which suspect is involved in the crime.

#### **Objectives:**

- · Understand blood typing, antigens, and inheritance properties
- Determine the blood type of simulated blood samples collected at a crime scene
- Determine suspect involvement in the crime

#### Includes:

- 4 simulated blood samples
- 3 mL victim
- 3 mL suspect no. 1
- 3 mL suspect no. 2
- 3 mL crime scene
- 1 set ABO/Rh blood typing anti-sera (3 mL of each)
- 8 blood typing trays
- 1 package of mixing sticks
- Instruction manual and enough materials for two groups

Cat. No.	Price
\$08199	\$24.50/Ea

## Distance Learning: Acids and Bases

An acid and base introduction unit, litmus paper tests. Objectives:

- · Acid and base introduction
- Test a dilute acid and dilute base with neutral litmus paper
- · Learn how pH strips indicate if something is an acid or base
- Test common household items and determine if they are acids or bases

#### Includes:

- 10 mL 0.01M HCI
- 10 mL 0.01M NaOH
- 10 mL distilled water
- 10 mL vinegar
- 10 mL household ammonia
- 10 mL liquid hand soap
- 10 mL lemon juice
- 1 Pk. neutral litmus paper





- 2 spot plates
- Instruction manual and enough materials for two groups

Cat. No.	Price
S08191	\$18.75/Ea



## **Distance Learning: Elephant Toothpaste**

Teaches students the effects of a catalyst on a chemical reaction.

- · Teach students the effect of a catalyst on a chemical reaction
- · Displays decomposition of hydrogen peroxide by mixing dish soap and adding yeast (catalyst) to

#### Includes:

- 50 mL hydrogen peroxide (3%)
- 6 mL dish soap
- · 2 g yeast

- 2 plastic cups, 5 oz.
- · 2 stir sticks
- 1 clear bottle, 8 oz.

· Instruction manual and enough materials for two groups



Cat. No. S08192 \$11.00/Ea

## **Distance Learning: Paper** Chromatography

Students perform paper chromatography on three dyes, a dye mixture, and determine the mixture's composition.

#### **Objectives:**

- Perform paper chromatography on three dyes
- Perform paper chromatography on a dye mixture
- Determine mixture composition
- Understand component of a chromatography system and why different substances separate/move at different rates

#### One dye set includes:

- · 0.5 mL crystal violet
- 0.5 mL safranin O
- 0.5 mL toluidine blue
- 0.5 mL chromatography mixture
- 30 mL 50% ethanol
- · 2 chromatography sheets
- · 4 capillary tubes
- 2 plastic cups, 10 oz.
- · Instruction manual and enough materials for two groups

Cat. No.	Price
\$08193	\$17.00/Ea

### **Distance Learning: Acids,** Bases and the pH Scale

Discusses differences between properties of acids and bases, the role of hydrogen and hydroxide ions in acidic and basic substances, and the pH scale with regards to acid and base strength.

#### **Objectives:**

- Examine effects of acids and bases on several pH indicators
- · Determine pH of several common household materials
- · Use knowledge gained to determine the identity of four unknown solutions

#### Includes:

- 5 mL deionized water
- 5 mL dilute acid (0.1 M HCl)
- 5 mL dilute base (0.1 M NaOH)
- 5 mL litmus blue (0.5%)
- 5 mL methyl red (0.02%)
- 5 mL bromothymol blue (0.5%)
- 5 mL phenolphthalein (1%)
- 5 mL vinegar

- 5 mL household ammonia
- 5 mL soap solution
- 5 mL filtered water
- 5 mL vitamin C solution
- 5 mL unknown solution No. 1
- 5 mL unknown solution No. 2 (dilute base)
- 5 mL unknown solution No. 3 (phenolphthalein)
- 5 mL unknown solution No. 4 (dilute acid)
- 1 wide-range pH test strips (50 Pk.)
- 2 reaction trays
- Instruction manual and enough materials for two groups







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## **Distance Learning: Periodic Table –** Nonmetals, Metals, and Metalloids

Students examine the physical properties of nonmetals. metals, and metalloids, as well as chemical reactivity.

#### **Objectives:**

- · Learn about Dmitri Mendeleev's construction of the periodic table
- Periodic table organization is based on properties of elements in relation to others
- · Examine physical properties of several elements and test chemical reactivity of elements
- Use knowledge to classify each tested element as nonmetal, metal, or metalloid

#### Includes:

- 4 g aluminum pellets
- 4 g carbon pellets
- 4 g silicon pellets
- 4 g zinc pieces
- 4 g sulfur pieces
- 5 g sodium bicarbonate
- 6 copper pieces
- 6 magnesium pieces
- 20 mL hydrochloric acid 1 N
- 20 mL copper (II) chloride
- 14 test tubes
- 4 pipettes
- 2 nails
- plastic cups, 5 oz.
- 1 plastic scoop
- Instruction manual and enough materials for two groups

Cat. No.	Price
S08195	\$22.25/Ea

### **Distance Learning: DNA Extraction**

Discusses the history of DNA and its structure, as well as genetic inheritance. **Objectives:** 

- · Learn about DNA structure, history, and discovery and understand the role of DNA and proteins in genetic expression
- Use biological detergents, enzymes, and ethanol to isolate DNA from plant material

#### Includes:

- 50 mL 7.5% SDS/ 1.5% NaCl
- 1 pepsin (to make 25 mL 0.5% solution)
- 10 mL ethanol, 95%
- 2 zipper bags
- 2 filters
- 2 plastic tubes
- · 4 graduated pipettes
- · 2 stirrers
- · 2 plastic cups

 Instruction manual and enough materials for

two groups



Cat. No.	Price
\$08196	\$8.45/Ea

### **Distance Learning: Kidneys** and Blood Filtration

Understand kidneys and their role in blood filtration, and determine if blood filtration has occurred based on a simulation.

#### **Objectives:**

- · Understand the role of the kidney in blood filtration and waste removal
- Understand the function of nephrons and their structure
- Create an artificial kidney model to filter a simulated blood solution
- · Determine if filtration of simulated blood occurred
- Perform chemical tests on filtrate to detect waste that may have been removed by artificial kidney

#### Includes:

- 10 mL simulated unfiltered blood
- 250 mL deionized water
- · 2 pieces dialysis tubing
- 2 plastic cups
- · 2 pipettes
- 4 salt test strips
- 4 urea test strips
- Instruction manual and enough materials for two groups







## **Distance Learning: Forensic Chemistry of Unknown Substances**



Students become forensic scientists to determine the identity of two mystery substances.

• Students perform the duties of forensic scientists to determine the identity of two mystery substances

#### Includes:

- 4 g baking powder
- · 4 g baking soda
- 4 g corn starch
- 4 g talcum powder
- 4 g salt
- 4 g gelatin
- 4 g mystery substance no. 1
- 4 g mystery substance no. 2
- · 4 mL buret reagent
- 4 mL dilute Lugol's iodine
- · 4 mL acetic acid
- 4 reaction plates



· Instruction manual and enough materials for two groups



Cat. No. S08198

\$35.00/Ea

### **Distance Learning: Cellular** Respiration - What Sugar **Does Yeast Like Best**



Allows students to understand yeast may use different options for energy production, with varying degrees of effectiveness.

#### **Objectives:**

- · Expose living yeast cells to glucose, sucrose, and lactose
- Observe yeast using sugar as food source
- Allows students to understand yeast can use different options for energy production
- · Use pH indicator to indirectly determine the effectiveness of each sugar

#### Includes:

- 10 mL 0.5% litmus
- 1 g dehydrated yeast
- 5 mL 0.1M sodium hydroxide
- 1 glucose QuickSolution (to make 30 mL)
- 1 sucrose QuickSolution (to make 30 mL)
- QuickSolution (to make 30 mL)
- 6 plastic cups
- 2 plastic scoops



 Instruction manual and enough materials for two groups

Cat. No. Price S08201

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#### Follow us on











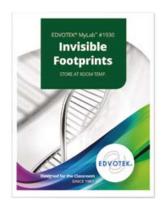


## MyLab<sup>™</sup> Custom Kit – Invisible Footprints



Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

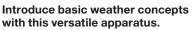
What would happen if each person was in charge of their own personal atmosphere? In this colorful experiment, students actually are! Explore the global carbon cycle and climate change in a simple, positive, and intimate way.



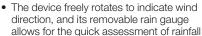
- · Learn about the carbon cycle and climate change
- Examine, calculate, and emit a carbon footprint, then see the effects
- · Create a positive carbon handprint and see its effects
- Includes instructions, atmosphere and CO<sub>2</sub> powder, color change solution, mitigation solution, tubes, pipettes

Cat. No.	Price
S06473	\$42.75/Ea

## United Scientific<sup>™</sup> Mini Weather Station







• The product is designed to mount on posts

Cat. No.	Price
S111030	\$11.25/Ea

## United Scientific<sup>™</sup> Sling Psychrometer

Use this simple apparatus to measure relative humidity.

Includes two plastic-backed Celsius
thermometers, one for dry bulb
measurements and the other for wet bulb
measurements. The thermometers mount
on a wooden handle so they can be spun
to obtain temperature readings. Includes an activity guide with relative



humidity calculation table. Requires assembly.

Cat. No.	Price
S23981	\$6.20/Ea

## MyLab<sup>™</sup> Custom Kit – Exploring Gel Filtration Chromatography



EDVOTEK

**Exploring Gel** 

**Filtration** 

Chromatography

Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits, you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

Introduce chromatographic separation to your students! In this experiment, students separate dyes of different colors based on their size and shape. This experiment contains materials for dye separation which include dye

sample, elution buffer and plastic disposables. Columns may be rinsed and reused.

- Understand and practice chromatography
- · Explore how shape and size affect a molecule's behavior
- Separate colorful molecules using gel filtration chromatography
- Includes instructions, dye samples, matrix, buffer, pipettes, microtiter plate, chromatography column

Cat. No.	Price
S06468	\$42.75/Ea

# Small Group Learning: Properties Of Soaps and Detergents

Though similar in function, soaps and detergents differ in chemistry and performance. Students will examine the similarities and differences in the properties



of soap, hand dishwashing detergent, and machine dishwashing detergent.

- Activities include testing pH, examining the effect of soap and detergent on the surface tension of water, foaming ability, fat emulsification, and the performance of soap and detergent in hard water
- · Kit contains enough materials for 5 groups
- Teacher's Manual and student study guide copymasters are included
- Aligned to the Next Generation Science Standards (NGSS)
- Disciplinary core ideas: PS1.A; PS1.B
- Performance expectations: MS-PS1-3; HS-PS1-3
- Cross cutting concepts: patterns; structure and function
- Engineering practices: planning and carrying out investigations; obtaining, evaluating and communicating information

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Cat. No.	Price
S40753	\$32.50/Ea



## Kemtec<sup>™</sup> Shampoo Evaluation Kit

Students examine different brands of shampoo and choose between products

based on their own scientific and economic evaluations.





- foam generation, foam retention and ink dispersion
- Detergent micelles and the hydrophobic and hydrophilic properties of cationic and anionic detergents are investigated
- Students perform cost analysis on the shampoos
- Grades 8-12
- · Class size: 24 students

riangle ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.

Cat. No.	Price
S25090	\$56.75/Ea

### Eisco<sup>™</sup> Molecular Model Set

#### Introductory kit.

 Includes 60 atoms and 66 bonds



Cat. No.	Price
S13020	\$36.00/Ea

### Eisco<sup>™</sup> Basic Organic Chemistry Molecular Model Set

Let students visualize three-dimensional molecule structures and understand molecular formulas.

- Hard plastic balls of different colors represent atoms
- Each has holes at correct angles to be connected with flexible plastic "bonds"
- Medium links represent single covalent bonds while long links can be used for double and triple covalent bonds

#### 114-Piece Set (S96539) contains:

- 12 black carbon (4 holes)
- 20 white hydrogen (1 hole)
- 6 red oxygen (2 holes)
- 4 blue nitrogen (4 holes)
- 4 green halogen (1 hole)
- 2 yellow sulphur (6 holes; 1 hole)
- 1 purple phosphorus (4 holes)
- 1 gray metal (1 hole)
- 26 gray links (28 mm)
- 12 gray links (43 mm)
- 26 white links (28 mm)
- Assembly tool

#### 54-Piece Set (S96538) contains:

- 14 white hydrogen (1 hole)
- 6 black carbon (4 holes)
- 2 blue nitrogen (4 holes)
- 6 red oxygen (2 holes)
- 2 green halogen (1 hole)
- 20 gray links (28 mm)
- 4 gray links (43 mm)

Cat. No.	Description	Price
S96538	54 pieces	\$43.25/Ea
S96539	114 pieces	\$58.00/Ea

## United Scientific™ Atomic Model Sets

Used to model different organic and inorganic compounds.

 Molded storage box with compartments keeps contents orderly



Cat. No.	Includes	Price
S90329B	Periodic table of the elements, 30 connecting lugs and 75 balls	\$46.25/Ea
S90329A	Periodic table, 150 connecting lugs, 370 colored balls and a compartmented storage box	\$130.00/Ea







## Eisco<sup>™</sup> Garage Physics Spiral of Theodorus Kit

Allows students to experiment with square roots and irrational numbers in physical form.

- Includes 18 wooden triangles to build Spiral of Theodorus, labels, pen, instruction guide
- Hands-on activities aid in conceptualization of abstract mathematical ideas
- Elementary school children use triangles to explore Pythagorean theorem and square roots
- Middle school students use triangles to test equivalencies with square roots, and explore abstract concepts like sequence of geometric shapes based on Fibonacci numbers
- High school students use kit to explore proof of irrationality for non-square integer roots

Cat. No.	Price
S24328	\$28.75/Ea

## Eisco<sup>™</sup> Garage Physics Large Trebuchet DIY Kit

Kit engages the young learner to discover new ideas about the physical world through assembly and play. Contains pre-cut wooden pieces that resemble woodworking projects.

- Medieval weapons, engineering, and physics

   not a bad way to spend
   a Saturday afternoon
   constructing this trebuchet.
- ping pong ball (included) more than 30
- The trebuchet will throw the ping pong ball (included) more than 30 feet, and heavier objects even farther
- The main material is high-quality, precision-cut Birch vernier pure bond plywood
- All necessary parts are included, and holes are pre-drilled
- The kit is specially designed to be safe and robust. Dry firings and heavy projectiles are no problems for this kit.
- All that is needed for assembly is time, a screwdriver, a hammer, and fun. No glue, mess or fuss, just assembly, and experimentation.

The trebuchet is one of the most elegant of all medieval weapons ever invented. With a simple counterweight, beam arm, and sling, heavier projectiles can be launched much further than is possible with other siege engines. Think of it as a machine which transforms gravitational potential energy into kinetic energy. A lot of kinetic energy! Arcing across your yard! We include a ping pong ball, but have experimented with marshmallows, jelly beans, bouncy balls and other safe objects. Two release pin angles allow exploration of how the release angle changes the trajectory. The included guide provides clear assembly instructions with pictures. It also contains pedagogy for exploring concepts of energy transfer using the scientific method.

Cat. No.	Price
S43526	\$103.00/Ea



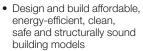
Allows students to explore force, acceleration, Hooke law, and parabolic trajectories by building and testing a fully-functional catapult.

- Designed for elementary through high school students
- Contains catapult base, sides, lever arm, rubber bands, screws, dowels, hook, and ping pong ball
- DIY kit includes adjustable parts to experiment with different initial conditions
- Instructions detail learning exercises and routes of further exploration

Cat. No.	Price
S24329	\$50.25/Ea

## Eisco<sup>™</sup> Science Fair Kits – Eco-Structure Building Kit

Allows budding architects and engineers to creatively design safe, affordable, eco-friendly housing. Designed for classroom or school-wide STEM challenge competitions.







- Set also includes thermometer to test structure insulation and summer/winter solar resilience, and a photocell with leads to measure the amount of natural light
- The kit includes enough materials for students to build both a prototype and a final version of their design
- The final version can be put through 2 solar radiation tests (summer inclination and winter inclination), 1 ambient light test, and 2 structural integrity tests (wind and snow)
- Guide includes bill of materials worksheet, judging rubric and test result calculation sheet

Cat. No.	Price
S30766	\$91.00/Ea



## Eisco<sup>™</sup> Garage Physics Murlin Trebuchet Kit

By redirecting the pulling force of the counterweight with a pulley, the Garage Physics MURLIN Trebuchet kit is able to transfer much more energy to the projectile than the standard trebuchet.

- Includes the trebuchet, ping pong ball, and 1 kg counterweight
- Assembled kit throws the ping pong ball 30 feet or more
- Manufactured with high-quality, precision-cut Birch veneer pure bond plywood
- A small Phillips screwdriver is required for assembly
- Kit comes with a step-by-step educational guide

**WARRANTY:** 1-year limited manufacturer warranty





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.
- Team up multiple bots to explore group behavior
- Exploration of the kit takes about an hour, including assembly
- · Scissors required, not included

#### Kit includes:

- Two toothbrush heads
- One 25 pin micro breadboard
- One 2N3904 NPN bipolar transistor
- One CR2032 3V lithium coin cell battery
- One Micro 3V DC vibration motor
- One 5539 photoresistor
- Mounting tape
- Single-use superglue
- · Four googly eyes
- Two bare metal paperclips
- · Detailed, illustrative instructions, and pedagogical materials

Cat. No.	Price
S30767	\$30.00/Ea



## Eisco<sup>™</sup> Garage Physics Leonardo Da Vinci Bridge Kit



Garage Physics Leonardo Da Vinci Bridge Kit demonstrates how gravitational forces are transformed into lateral forces.

- Completed bridge spans 5 feet and can support 60 lbs.
- Complete assembly and pedagogical guide
- Helps students understand engineering principles
- No tools required for assembly

#### Kit Includes:

- 5 x 16 in. dowels
- 10 x 24 in, beams
- 34 rubber bands

WARRANTY: 1-year limited manufacturer warranty

Cat. No.	Price
\$88363	\$58.75/Ea

## Eisco<sup>™</sup> Garage Physics Ballista Catapult Kit

Garage Physics Ballista Catapult Kit allows students to explore torsion springs, forces, energy transformation, mechanical advantage, and projectile motion.

- Shoots ping pong balls over 30 ft, depending on launch angle and string tension
- Included stand allows exploration of launch angles from 15° to 45°, in increments of 10°
- · Press fit assembly no tools required. Instructional guide included.
- · Contains ballista and ping pong ball
- Birch plywood is formaldehyde-free using soy-based technology, LEED compliant, and CARB compliant
- Launches are highly repeatable, giving consistent experimental regults

WARRANTY: 1-year limited manufacturer warranty

Cat. No.	Price
S88360	\$137 00/Fa

## United Scientific<sup>™</sup> Morse Code Experiment Kit

Designed to show the principle of a telegraph.

- The kit consists of a "D" cell battery holder, a telegraph key, a miniature lamp with holder, and three connector cords
- · Instructions are included







## Eisco™ Science Fair Kits -Film Canister Rockets

Launch a rocket using vinegar and Alka-Seltzer. The Film Canister **Rocket Kit** includes enough to build and launch your own rocket, and explore mass, measurement and simple chemical reactions.



- · Simple project for fun, hands-on learning
- · Combine the ingredients into the film canister and watch as the canister launches into the air
- Team up with your friends to see whose rocket can launch the
- · Safety goggles are required, not included

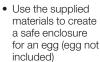
#### Kit includes:

- · Two film canisters
- One 10 mL bottle of vinegar
- Two packs of Alka-Seltzer tablets (2 tablets per pack)
- · Experiment instructions
- · Chemical safety sheet

Cat. No. Price S30768 \$19.25/Ea

## Eisco™ Science Fair Kits - Egg Drop Kit

Design, document, and test their unique enclosures for an egg that will go through an industry standard drop test (egg not included).





- · Explore physics concepts including drag, gravity, and impact
- · Egg required, not included

#### Kit includes:

- One roll of masking tape
- One 6 x 4 x 4 cardboard box
- Two foam sheets
- Two sheets of bubble wrap



- One 5 x 7 corrugated pad
- Two plastic bags
- · Instruction guide

#### Cat. No. S30769 \$24.25/Fa

## Eisco™ Garage Physics Ball **Bearing Roller Coaster Kit**

**Garage Physics Ball Bearing Roller Coaster** Kit for students and educators studying gravitational potential energy, translational and rotational kinetic energy.

- · Allows students to watch potential energy convert to kinetic energy
- · Stick included hooks to the wall or other vertical surface, or use chairs and tables to support the track
- Create loop-de-loops, corkscrews and dives
- · Easy to assemble

#### Kit Includes:

- · Educational guide
- 20-foot long (5/8 in. diameter) FDA-approved vinyl tube
- 9 removable wire hooks
- Twist ties and clipper
- 4 steel ball bearings (3/8 in. diameter)



• 3 rubbing alcohol pads

#### Required but not included:

- · Scratch paper (US letter or A4 size is sufficient)
- · Pair of scissors
- Tape
- 2 tin cans per class (any size)

WARRANTY: 1-year limited manufacturer warranty

Cat. No. S88361 \$145.00/Ea

### **Inertia Apparatus**

Known as ball and card mass force demonstrator.

- 0.75 in. (1.9 cm) ball rests on top of a small cardboard square that sits on an aluminum post
- Spring is positioned alongside the post
- · When the spring is released the square shoots out from under the ball, and the ball falls into a recess on top of the post
- Ball appears to remain at rest on top of the post as if nothing has moved
- Size: 3 x 3 x 4 in.  $(7.6 \times 7.6 \times 10.2 \text{ cm});$ weight: 0.22 lb. (0.1 kg)



Cat. No.	Price
S41011A	\$17.50/Fa

#### **Eisco™ Build A DC Motor Kit**

Classic activity used to teach crucial scientific and physics concepts.

- Contains everything needed to build a working DC motor and learn its parts from the inside out
- Wind your own armature and field coil, and build the commutator with two snap-together pieces



#### Kit includes:

- Two copper wire coils
- Plastic base
- Field poles

- · Armature core
- Brushes and fasteners

Cat. No.	Price
S13013	\$13.00/Ea

## United Scientific™ Create-a-Circuit Kit

Handy kit makes it easy to create a circuit.

Includes: One D-cell battery holder, one knife switch, two miniature light bulbs, two lamp holders, four connector cords, instructions



Cat. No.	Description	Price
S05820	Create-a-Circuit Kit	\$27.50/Ea

### Eisco<sup>™</sup> Basic Circuits Kit

An inventive way to teach series-parallel circuits.

- Contains everything required to study series-parallel circuits and batteries
- Battery holders, knife switches and lamp holders feature clip or screw contacts for easy assembly and disassembly



Cat. No.	Price
S63323A	\$34.50/Fa

### United Scientific<sup>™</sup> Solar Powered Car

Economical and attractive demonstration car model.

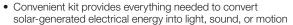
- Powered by a solar cell or a rechargeable battery
- Battery can be recharged from the solar cell, demonstrating an electricity storage system for solar power
- Solar cell can be tilted to maximize the solar input
- · Solar cell output can be measured at two binding posts
- Slide switch turns on/off and selects function
- All working parts visible through clear molded housing

Cat. No.	Price
S02601	\$42.50/Ea

## United Scientific<sup>™</sup> Basic Solar Kit

A convenient introduction to the conversion





Observe the correlation between angle of incidence and energy output

Cat. No.	Price
S27844	\$10.50/Ea

## United Scientific<sup>™</sup> Hand-Held Generator

This 6V DC hand-held generator can deliver up to

400mA current. The generator is equipped with a polarity-coded plug-in lead with alligator clips. The clear plastic housing allows students to watch the coils, terminals, and gears. Students get a hands-on demonstration of the Second Law of Thermodynamics. Includes activity guide.

Cat. No.	Price
S23977	\$19.00/Ea



## United Scientific<sup>™</sup> Economy Magnet Kit

A complete magnet kit that

will keep your students engaged for hours.

 A variety of magnets and accessories for teaching the basics of magnetism

⚠ ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.



## Eisco<sup>™</sup> Garage Physics Torque Demonstration Kit

Designed to teach the concept of torque by moving a mass set down a rod while balancing the main rod.

DIY assembly and activity kit

**Kit contains:** storage box, 1,000 g mass set, custom washer, 2 dowels, 2 bolts, 2 nuts, steel ball and instructions



Cat. No.	Price
S24324	\$47.00/Ea





## Telescope, Microscope, and Binocular Science Kit

Perfect for budding scientists.

This complete optical science kit combines

a large 50 mm refractor telescope with a complete illuminated microscope kit and powerful 4x binoculars. All 3 devices built strong with professional craftsmanship for exceptional viewing experience. Suitable for ages 10 years and above

#### Telescope

- View the moon's craters, explore your favorite constellations, and see Saturn's rings
- Includes: a height adjustable tripod, a finderscope for easily lining up your sight, and two powerful eyepieces (5 mm, 10 mm)

#### Microscope

- Magnifies up to 900x with additional powers of 150x and 450x
- Includes: blank and prepared slides, cover slips, blank labels, spatula, dissecting probe, eye dropper, tweezers, spare light bulbs, and specimen vials

#### Binoculars

- Great for exploring the amazing landscapes, animals, and astonishing occurrences around us
- Feature: 4x magnification and a 30 mm coated glass ive lenses, 150x/450x/900x magnification (2 AA batteries required, not included)

Cat. No.	Price
S81330***	\$72.50/Ea

### **Kids Telescope Kit**

Includes everything the budding astronomer needs to start observing.

- Up to 185x power!
- Telescope includes 30x eyepiece, 62.5x eyepiece, and a 3x Barlow lens
- Coated glass optics provide great views of the moon and planets



- Telescope can also be used for daytime land observing
- Plastic carry case included for storage and transport
- Includes metal table top tripod with rubber feet
- CPSIA and ASTM F963-tested and compliant
- For ages 8+

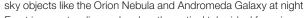
Cat. No.	Price
S81333***	\$61.25/Ea

## National Park Foundation Telescopes

Designed with travelers in mind, yet offer high-quality optical power.

#### TravelScope<sup>™</sup> 60

- Designed with traveling in mind - offers high-quality performance at an exceptional value
- This refractor telescope is perfect for terrestrial and celestial viewing on the go
- Can view the planets, moon, star clusters and brighter deep



- Erect image star diagonal makes the optical tube ideal for using as a spotting scope during the day
- Adjustable tripod legs allow you to customize the telescope's height, or place it on raised surfaces like a picnic table

#### **FirstScope**

- It doesn't get much simpler or more portable than the FirstScope's tabletop Dobsonian design
- The Newtonian reflector optical system features a spherical glass mirror with a generous 76 mm of aperture
- You'll get bright, sharp views of celestial objects and observe the Moon's mountains and craters in crisp detail
- Wide field of view allows for observation of the expansive views of the sky, which include open star clusters, or favorite deep sky objects like the Orion Nebula
- At just 4.3 lb. it is the perfect companion for any outdoor adventure

Cat. No.	Model	Price
S81328***	Travel Scope <sup>™</sup> 60 Telescope	\$93.00/Ea
S81329***	FirstScope Telescope	\$82.00/Ea

## Kids Binoculars

Binoculars have small form factor and are great for kids.

- 4x magnification brings the world closer
- Glass objective lenses for a clear image
- Coated lenses for a brighter view
- Fun outdoor green color
- CPSIA and ASTM F963-tested
- For ages 6+

Cat. No.	Price
S81334***	\$10.50/Ea



## Stinger<sup>™</sup> Series Compact and Lightweight Roof Prism



#### **Binoculars**

Lightweight and compact for travel and backpacking.

- · Lightweight, compact
- Have fully multi-coated lenses which will allow for bright, sharp and crystal clear images
- Include a soft pouch, wrist strap and microfiber lens cloth
- Can be used while camping, and for surveillance, nature viewing, bird watching, concerts, sporting events, hunting, safaris and so much more

#### Sizas

- 10x, 25 mm (S98180) offers greater magnification and better light transmission due to the wider objective lenses but a narrower field of view
- 8x, 22 mm (S81730) compact model with less magnification but a greater field of view

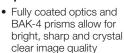
WARRANTY: Backed by manufacturer's no-fault, no-hassle warranty

Cat. No.	Description	Price
S98180	Stinger Series 10x, 25 mm Compact Binoculars	\$52.50/Ea
S81730	Stinger Series 8x, 22 mm Compact Binoculars	\$48.00/Ea

### MonoZoom 7 to 21x, 21 mm Zoom Monocular



Compact, portable and lightweight monocular, for traveling and exploration.





- Sturdy and durable outer housing shell
- · Smooth focusing knob
- Tripod compatible
- For bird watching, hiking, sight-seeing, sporting events, hunting, and concerts
- Includes: soft pouch, neck strap, and lens cover

**WARRANTY:** Backed by manufacturer's no-fault, no-hassle warranty

Cat. No.	Price
\$81729	\$43.00/Ea



Lume Series Aspheric COB LED Lighted

Hand-Held
Magnifier with 7x
Spot Lens and
Two Brightness
Settings

Magnifying glasses contain three ultra bright COB LED lights spread proportionally around the lens rim for wide and even lighting.

- For low-vision tasks including reading fine print, hobby, crafts, coin and stamp inspection, model building, jewelry making
- · Lightweight, acrylic lenses have aspheric design
- Light rays pass through lens and meet at a single point for crystal clear and distortion-free image quality
- COB LED lights powered by 2 AAA batteries (not included)

## Magnifiers available in two different magnifications:

- 2x power (S81723) Provides a wider viewing area
- 2.5x power (S81724) Stronger magnification but smaller lens diameter

#### Includes:

- 7x power spot lens built into handle at magnifier
- Protective rim around lens to protect from scratching and breaking

**WARRANTY:** Limited lifetime warranty

Cat. No.	Lens Diameter	Magnification	Quantity	Price
S81723	4.5 in.	2x	4/Pack	\$83.00/Pk
S81724	3.5 in.	2.5x	4/Pack	\$60.00/Pk

## VersaLoupe 10X Focusing Stand Loupe Magnifier

A power focusable stand loupe magnifier that contains dual acrylic lenses to provide ultra sharp and precise image quality.

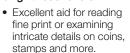
- Simply twist the focusing ring on the eyepiece in order to get a subject in focus
- Internal optics contain dual acrylic crystal clear lenses that provide ultra precise image quality
- Excellent for multiple hobbies, crafts and tasks, ideal for viewing stamps, coins, photography, and more

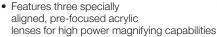
**WARRANTY:** Limited lifetime warranty

Cat. No.	Price
S81160	\$6.40/Ea



An ergonomically designed acrylic stand magnifier with six ultra bright LED lights spaced around the base with three different brightness levels.





- Six ultra bright LED lights are spaced around the base with three different brightness levels for a customizable viewing experience
- Ergonomic design offers textured finger grips at either side of the device and a tapered base with a conveniently located on/off toggle switch
- Allows one to read for an extended period of time without having to hold a magnifier.
- Powered by 3 AAA batteries (not included)

**WARRANTY:** Limited lifetime warranty

Cat. No.	Price
S81161	\$22.25/Ea

LED VersaLoupe 10x LED Lighted Focusing Stand Loupe Magnifier



Has internal optics containing dual acrylic crystal clear lenses providing ultra-precise image quality.

- Contains five built-in powerful LED lights to illuminate subjects with ease
- For hobbies, crafts, and tasks like viewing stamps, coins, photography, jewelry, fabric, printing pixels, and small electronics
- Includes one CR2032 button cell battery

**WARRANTY:** Limited lifetime warranty

Cat. No.	Price
S81731	\$18.00/Ea



## MagniLoupe Eye Loupe Magnifier Set with Smartphone Digiscoping Clip

Includes 4 magnification options: 4.5X, 6.5X, 8X, and 13X.

- Contains 4 ergonomically designed eye loupe magnifiers that are engineered to rest comfortably in the eye socket
- 4 different magnifications: 4.5X, 6.5X, 8X, and 13X powers
- Distortion-free acrylic lens design is extremely compact and lightweight
- Smartphone digiscoping clip that attaches to each of the loupes by removing the rubber eyecup and sliding the smartphone adapter clip onto the loupe until it clicks into place
- Smartphone digiscoping clip is compatible with iPhone, Samsung, LG, Huawei, and Google Pixel phone models
- Digiscoping adapter is compatible with most cases, but it does not work on the largest OtterBox-style cases
- Excellent for a variety of hobbies, crafts, and tasks or for jewelers, watchmakers, viewing printing pixels, rocks, stones, gems, stamps, currency, model building and other hobby, craft, and inspection purposes

**WARRANTY:** Limited lifetime warranty

Cat. No.	Price
S81149	\$21.50/Ea

# PRO Series 1.8x (+3.25 Diopter) Magnifying Hobby Glasses with Protective Case

PRO series magnifying hobby glasses for a hands-free way to support low vision needs.

- Coated lenses to increase light transmission and prevent scratching
- Lenses reduce blue light to ease digital eye strain, decrease risk of macular degeneration, reduce glare, increase clarity of vision
- Can use with or without prescription glasses
- For reading fine point, model-building, fly-tying, jewelry work, arts and crafts
- Includes a protective hard shell case and microfiber cleaning cloth **WARRANTY:** Limited lifetime warranty

Cat. No.	Price
S81728	\$40.00/Ea



## DeskBrite 300 2X COB LED Lighted 3.5 in. Desktop Magnifier



DeskBrite 300 includes 5X spot lens and USB-C wall adapter, with an adjustable flexible neck allows users to position lens.

- Has an aspheric design
- Light rays pass through lens and meet at a single point for crystal clear, distortion-free image quality
- Magnifier power by USB-C to wall adapter (included) or 3 AA batteries (not included)
- For reading fine print, hobbies, crafts, sewing, needlework,
- model building, jewelry making, soldering, painting nails, inspection
- Includes four ultra bright COB LED lights with two brightness settings

**WARRANTY:** Limited lifetime warranty

Cat. No.	Price
S81722	\$47.50/Ea

## United Scientific<sup>™</sup> 5X Single Lens

Folding magnifier in a plastic case.

This basic pocket magnifier has a 25 mm diameter lens with a 50 mm focal length for 5X magnification. The viewer's fold-over case makes it perfect for out-in-the-field uses.



Cat. No.	Price
\$19008	\$5.65/Ea



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CARSON

PocketMicro 20 to 60x LED Lighted Pocket

Microscope with Aspheric Lens System

LED lighted pocket microscope contains a 20 to 60x power zoom magnification range and internal aspheric lens system.

- Aspheric lens system allows light rays passing through lens to converge at a single focal point for a sharp, clear, distortion-free image
- Great beginner microscope for kids, students, hobbyists and professionals
- For examining plant buds, coins, stamps, bugs, nature, electronics, fabric, printing
- Lightweight, compact design
- Powered by 1 AA battery (not included)

#### For ideal use:

- Hold microscope flat against surface and make sure LED light is activated
- Begin at lowest 20x magnification and focus subject using focusing dial
- Increase magnification to desired range using zoom dial

**WARRANTY:** Limited lifetime warranty









Features a flip-down slide base and smartphone digiscoping adapter clip.

- Contains a unique flip-down slide base
- Magnification ranges from 100X to 250X power
- Built-in UV flashlight that is ideal for detecting counterfeit currency, nectar mapping and more
- Comes with a smartphone digiscoping clip, 1 starter slide with cover slip, and a wrist strap for convenient portability
- Use the smartphone digiscoping clip to take pictures and record video using the built-in camera application on a smartphone
- Digiscoping clip will work with most smartphone models in the marketplace including iPhone, Samsung, HTC, LG and more
- Thicker cases like OtterBox-style cases may need to be removed before attaching the digiscoping clip
- Powered by 1 AA battery (not included)
- Excellent educational field microscope for multiple hobbies, tasks, learning and exploration
- For kids, students and even professional usage
- Fits all phones

**WARRANTY:** Lifetime limited warranty

Cat. No.	Price
S81143	\$23.75/Ea

## United Scientific<sup>™</sup> Reflection Refraction Kit



This unique kit is great for the classroom, distance learning, and individual student demonstrations.

Introduce students to the basic concepts of light reflection and refraction with this economical kit. Guided activities include reflection of light at a plane mirror and the refraction of light at a water interface.

#### Contents:

- Acrylic plane mirror, 10 x 10 cm
- Cork mat, 15 x 15 cm
- 4 Steel T-pins
- Semicircular refraction cell, 12 cm diameter x 2.5 cm high



- Clear protractor
- Pair of mirror support clips
- · Activity guide

Cat. No.	Price
S83791***	\$18.75/Ea

### **Conductivity Kit**

Allows 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 deluxe battery holder, 1 piezoelectric buzzer.

1 motor with fan, 1 mechanical buzzer, 1 switch, 40 LEDs (5 each of red, green, white, yellow, blue, purple, orange, and color changing), 1 set of dough sculpting tools, 1 rolling pin, 1 7 oz. container of white insulating dough, 7 7 oz. containers of conductive dough (in red, blue, and green, yellow, orange, purple, and black)

Standard Kit - Includes everything needed to get started with advanced projects

• Contents: 1 battery holder, 1 piezoelectric buzzer, 25 LEDs (5 each of red, green, white, yellow, blue), 1 3.5 oz. container of insulating dough, 3 3.5 oz. containers of conductive dough (in red, green, and

#### ALERTS: Choking Hazard

Cat. No.	Product Type	Price
S29667	Standard Kit	\$37.25/Ea
S29668	Deluxe Kit	\$79.50/Ea

## Military Field Compass

Accurate and shock-resistant compass preferred by military forces.

- · Works with USGS topographical maps
- · Graduated in 6400 mil increments
- Lens has a 0°-to-360° dial that is graduated in 5° increments
- Calibrated to North America
- · Includes instructions, sighting wire, rotating bezel

⚠ ALERTS: Not a toy. Product intended for ages 13 and up.

Cat. No.	Price
S28113	\$11.50/Ea

## Orienteering Compass

#### For any map-related work.

- Featuring 4 scales and 2° increments
- · Includes a black bezel and liquid-filled capsule
- Designed with a declination correction scale and luminous points
- 4X magnifier

ALERTS: Not a toy. Product intended for ages 13 and up.





## Power & Play 50 Model **Motorized Building Set**

**Engage students** with a fun-filled building set that stimulates curiosity and creativity.

- The K'NEX Power and Play Motorized Building Set contains 529 parts, including different types of connectors, rods, and wheels
- The parts can be joined in endless configurations to simulate 3D objects, allowing your students to experiment and craft every model they can imagine
- The set includes a motor that brings your students' project to life
- The portable storage box provides hassle-free carrying
- This set comes with easy-to-follow instructions that will teach your students to create an endless array of models, from a chopper race car, or carousel to a rocket, a spaceship, or even a game of
- Promotes the development of STEAM (science, technology, engineering, arts, and math) concepts by igniting your students' natural curiosity and creativity

Cat. No.	Price
S81363	\$27.25/Ea

#### **STEAM Primer with Accessories**

A revolution in smart construction fun! Keep young imaginations entertained for hours and immerse them into the STEAM subjects of science. technology, engineering,



Kit includes 111

⚠ ALERTS: Set Includes Small Parts Which May Present a **Choking Hazard** 

Cat. No.	Price
S81699	\$44.50/Ea





## STEAM Inventor with Accessories

A big, beautiful tube of inventing fun! Certified as an authentic STEM experience, students can enter into the world of LUX construction and learn how to build big working machines, creatures, or their own toys and inventions.



- Kit includes 223 pieces
- Packaging: clear, 14 in. tube

Cat. No.	Price
\$81700	\$70.50/Ea

### The Build Anything Bin



Kit contains 1,000 pieces, allowing students to create virtually anything! Provides a creative outlet to help them learn and retain the perfect balance of physical, emotional, and cognitive information.

- Create a guitar, spaceship, castle, even a near life-sized boat!
- Connections are made through linking which provides kids the immediate experience in the world of kinematics
- Includes bags upon bags full of brilliant colors, all in secured in a durable storage tote
- Parents' Choice Gold Award Winner, named Top Toy by Autism Live
- ABS Plastic is tested safe and presents no choking hazard

Cat. No.	Price
S81701	\$211.00/Ea



The perfect way for students to become immersed in the world of Lux Blox.

- One-of-a-kind hinged pieces snap together to allow students to build anything their imaginations can dream up
- Durable building block pieces connect on all 4 sides to allow for

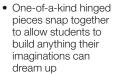


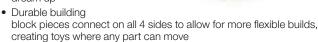
- Set includes instructions for multiple builds including a Dragon, Sword, Bug Buggy, and Race Car
- Supervised use is recommended for young students

Cat. No.	Price
S81703	\$46.50/Ea

## Mini Freestyle Set

The perfect way for students to try out the world of Lux Blox.





- Set includes instructions for multiple builds including a Lux Cycle, Robot, Monoplane, and Martian Lander
- Supervised use is recommended for young students

Cat. No.	Price
S81704	\$26.00/Ea





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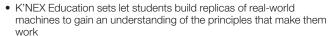
Visit **fisheredu.com/featuredsuppliers** to learn more about enhanced products and promotional information.

## STEM Explorations Building Sets

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.

- Accommodate 1-2 students, working as a team
- Ideal solution for home-school families
- Easy-to-follow, step-by-step building instructions included
- All teacher guides and experiment guides are





**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
S81356	Levers and Pulleys Building Set	\$18.50/Ea
S81355	Gears Building Set	\$18.50/Ea
S81357	Vehicles Building Set	\$30.25/Ea

## **Beginner 40 Model Building Set**

Beginner Building Set with new parts that are designed specifically for young builders. The design enables

students to build on a flat surface, and then combining their flat builds into one 3D creation.

- Features all new easy-build parts that allow students ages
   5 and up to have a frustration-free building experience
- The new parts include a barbell-shaped rod that easily sandwiches between 2 connectors, and a flat panel piece that provides structural support
- New parts specifically designed to address the needs of younger builders, who can easily build 2 flat shapes and then connect them together into a 3D creation
- Newly designed wheels pop right on
- This set contains 141 parts and easy-to-follow, step-by-step building instructions, and ideas for 40 different models
- Can also use the parts to design and create from their own imagination
- Packaged in a sturdy suitcase-style box with a handle for easy clean-up and portable storage
- Building with K'NEX supports students' developmental growth and puts them on a path towards a better understanding of STEM subjects
- Students can develop spatial awareness and fine motor skills as they create and fit pieces together
- Give your students the gift of creativity with K'NEX and think outside the blocks

Cat. No.	Price
S81358	\$23.25/Ea

## Introduction to Structures: Bridges Set

Construct, investigate and experiment with seven different types of bridges.

- Builds 13 bridge models, one model at a time
- Models demonstrate seven key bridge types: arch, beam, bascule, cantilever, cable-stayed, truss and suspensions
- Grades 5 to 9
- Key concepts include:
- Design process
- Compression

Tension

- · Load (dead and live)
- Force
- Stress
- Cantilever construction
- Suspension technology

33

Cat. No.	Price
S67346	\$62.50/Ea



## **K'NEXosaurus Rex Building Set**

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

 Build a K'NEXosaurus Rex with the 255 vibrant parts and pieces included in this set



- All parts are well-constructed plastic
- Includes an additional model for a Megasaurus dinosaur
- Package includes iconic rods and connectors that snap together to make customizable figures and a battery-powered motor to operate the structures
- Step-by-step instructions are downloadable for two motorized builds
- Promote your students' development of STEAM (science, technology, engineering, arts, and math) concepts by igniting their natural curiosity and creativity

 Cat. No.
 Price

 \$81360
 \$33.50/Ea



The **Fisher Science Education** team is proud to bring you the convenience of custom educational kits for elementary- to college-level instruction.

Visit **fisheredu.com/customkitting** to learn more.



## **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
- Pullev 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

⚠ ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.

Cat. No.	Product Type	Price
S67347	Gears 7 Model Set	\$62.50/Ea
S67348	Levers and Pulleys 8 Model Set	\$53.25/Ea
S67349	Wheel and Axle 7 Model Set	\$62.50/Ea



## STEM Explorations: Roller Coaster Building Set

Students explore STEM concepts while building a working roller coaster.

- Middle school students will be engaged and energized as they further their knowledge and understanding of the science, technology, engineering and math concepts associated with a real-life amusement park ride
- R NOT COMMENT OF THE PARTY OF T
- Once built, a downloadable booklet guides students through 3 hands-on, inquiry-based experiments on each of the models
- Students will learn about the relationship between time, distance, and speed plus much more
- The Experiment Guide is aligned to national STEM standards and is appropriate for grade levels 5 to 9

#### Set includes:

- More than 500 parts
- A battery-powered motor for one student or team of 2-3 students to build a working roller coaster
- This kit can be used to build three projects: a roller coaster, a ramp, or a half-pipe (each can be built one at a time)

Cat. No.	Price
S14016	\$72.50/Ea

## Intermediate 60 Model Building Set

K'NEX<sup>™</sup> Intermediate Building Set for building and rebuilding over 60 models.

- 395 parts featuring an all new color palette
- K'NEX rods and connectors easily snap together with a satisfying click
- STEM Learning Fun:
   Building with K'NEX helps
   strengthen fine motor skills
   and apptial appropriate put

and spatial awareness; putting students on a path towards a greater understanding of STEM subjects





## Classic Constructions 70 Model Building Set

Stimulate imagination the fun way with more than 700 classic K'NEX pieces and 70 different models.

 With more than 700 classic K'NEX pieces, this building toy gives students a resource for learning and enjoying themselves at the same time



- The K'NEX building system contains plastic rods and connectors , which combine in many different ways.
- They can be assembled to create working vehicles, animals, moving structures, buildings, and just about anything else students can imagine
- Includes more than 70 building ideas and an illustrated manual that guides young engineers toward amazing creations
- This educational toy not only provides hours and hours of fun, it helps students understand STEAM (science, technology, engineer, arts, and math) subjects
- This set helps support key points of students' development: hand-eye coordination, fine motor skills, problem-solving ability, spatial awareness, and imagination
- Tested and guaranteed to be durable, all K'NEX products meet the strictest quality and safety standards
- Create scale models of famous buildings, creepy crawlies, blazing fast race cars, or anything else your students can think of

Cat. No.	Price
S81362	\$49.25/Ea

## STEM Explorations: Swing Ride Building Set

Students explore STEM concepts while building a motorized swing ride.

 Middle school students will be engaged and energized as they further their knowledge and understanding of the science, technology, engineering and math concepts associated with a real-life amusement park ride



35

- Once built, a downloadable booklet guides students through 3 hands-on, inquiry-based experiments on each of the models.
   Students will learn about how mass affects speed, how to gear-up and gear down, and much more
- The Experiment Guide is aligned to national STEM standards and is appropriate for grade levels 5 to 9

#### Set includes:

- More than 470 parts plus a battery-powered motor for one student or a team of 2-3 students to build a working swing ride
- This kit can be used to build three projects: a swing ride, a Ferris wheel, or a boom ride (each can be built one at a time)

Cat. No.	Price
\$14015	\$51.00/Ea



**Forensics** 

**Blood Typing** 

EDVOTEK

## MyLab<sup>™</sup> Custom Kit – Forensics Blood Typing



Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

- Learn about basic forensic detection techniques
- Swab simulated crime scene samples to detect blood left at the scene
- Analyze the crime scene samples to determine suspect's blood type
- Understand presumptive versus confirmatory testing

Cat. No.	Price
S06464	\$42.75/Ea



How's your blood pressure today?

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



Cat. No.	Price
S24562	\$22.50/Ea

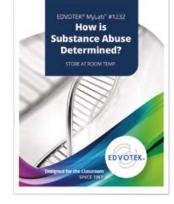
## MyLab<sup>™</sup> Custom Kit – How is Substance Abuse



**Determined?**Are you planning a virtual

Are you planning a virtual curriculum or looking for experiments ideal for distance learning? With the MyLab Custom Kits you can easily plan your curriculum. Each kit comes with instructions and materials for 2-3 runs of each experiment.

In this simulation, students test patient samples for illicit substances that can be detected in urine. Examples of substance abuse to enhance muscle mass for athletic performance



are readily available. A second group of substances often result in addictive behavior that destroys the lives of individuals and family members.

- · Learn how drug use alters the brain
- Discuss drug abuse and addiction
- Test for the presence of drugs in a simulated sample
- Includes samples and controls, colorimetric reagents A and B, tubes, pipettes

Cat. No.	Price
S06474	\$42.75/Ea

Please see STEM catalog Robotics and Engineering section for more construction sets.

Please see Laboratory Supplies & Consumables catalog for more remote learning products.



#### **STEM Lab & Makerspace**

#### 3D Printing

# **Compact FDM 3D Printers**





A compact FDM 3D printer is perfect for hobbyists, beginners, and enthusiasts. It offers superior printing size with a one-piece structure allows you to save space but build the world.

#### **Technical Innovations**

- Power cut protection functions

   meets the needs of fast heating, longtime printing, and resume prints, even after a power outage or lapse occurs
- High-precision printing quality – CNC machined Y-rail mounting grooves give your printer precise positioning and a stable frame

#### **Tech Specs**

- Print volume: 220 x 220 x 250 mm (8.6 x 8.6 x 9.8 in.)
- Nozzle diameter (standard): 0.4 mm
- Filament diameter: 1.75 mm
- Max traveling speed: 180 mm/s
- Power: 24V / 270W
- Max nozzle temperature: 255°C
- Layer thickness: 0.1 to 0.4 mm
- Precision: ±0.1 mm
- PicoSupport option
- On-boarding support: 1.5 credits which currently equals 1.5 hours of video support to get going

#### Ender-3 V2 (S4131933)

- Easy assembly 10 minutes and 20 screws is all it takes to get printing
- Printer weight: 8.6 kg (19 lb.)
- Extruder: Mk-10

- Interface: SD Card, USB
- Physical dimensions: 440 x 410 x 465 mm

#### Ender-5 Pro (S4131934)

- Modular design Allows the printer to be assembled to meet your needs
- Ultra-mute motherboard an upgraded motherboard produces less noise
- Metal extruding unit stable filament feeding and wear-resistance for better printing quality
- Double Y-axis control system with synchronous operation and stable output to avoid vibrations resulting from long-time printing
- V-slot profile and pulley for stable and smooth operation, low-noise, wear-resistance, and longer service life
- Printer weight: 11.8 kg (26 lb.)
- Interface: Online or TF Card
   Offline
- Physical dimensions: 552 x 485 x 510 mm

**WARRANTY:** Extended warranty option: in the event of machine failure within the course of a year we will fix the printer, including round-trip shipping.

ALERTS: Small Parts - Not recommended for children under 3 years old.

Cat. No.	Description	Price
S4131933	Ender-3 V2	\$350.00/Ea
S4131934	Ender-5 Pro	\$485.00/Ea

### **Delta 2040 3D Printers**



A reliable and versatile FDM printer that can alternate between FDM and LDM printing using the Add on WASPs Clay Kit!

The WASP Delta 2040 Pro is a reliable and versatile FDM printer. Add on WASPs Clay Kit to alternate between FDM and LDM (liquid deposition modeling) printing! Extend your warranty and add a support package for training, design/slicing consultation, and more.

- Print Volume: 200 x H 400 mm
- Layer Height Min: 50 micron
- Print Speed Max: 500 mm/s
- Movement Speed Max: 800 mm/s
- Heated Bed Temp Max: 110°C

#### **Physical Dimensions**

- Dimensions: 49 x 44 x 87 cm
- Machine Weight: 25 kg

#### **Configuration Tools**

- · WASP Spitfire Red Extruder
- Nozzle Diameters: 0.4 mm, 0.7 mm, 1.2 mm
- Usable Filament: 1.75 mm
- Materials: PLA, PETG, ABS, PA, and Carbon
- LDM WASP Extruder for ceramic materials
- Nozzle Diameters: 1.2 mm, 2 mm
- Materials: Porcelain, Clay, Stoneware, and Earthenware

#### Features

- Suspended Bowden: This makes it possible to unload the inertia on the suspension bands and exponentially improve the quality and speed of printing.
- Resurrection System: The system resumes interrupted prints in case of accidental shutdown or sudden power failure.
- Free Zeta System: Measures the height of your print where the printing stopped to restart from this height.



#### Mechanics

- Frame and Cover: Aluminum, Polycarbonate, PMMA
- Printing Surface: Ground Aluminum
- Wheel Movements: Nylon on anodized aluminum profiles - TPU belts with stainless steel core resistant to high temperatures
- Motors: Stepper

#### Software

- Operating Systems: Windows, Mac, Linux
- Compatible with all slicing software

#### Delta 2040 Hybrid (S4131941)

 Includes all features of the 2040 Pro, plus the ability to switch to Clay printing with the addition of the WASP LDM Clay Kit Extrusion System (S4131948)

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Cat. No.	Description	Price
S4131940	Delta 2040 Pro	\$4,218.00/Ea
S4131941	Delta 2040 Hybrid	\$5,267.00/Ea



# **LDM Clay Kit Extrusion** System 3.0



The LDM Clav Kit **Extrusion System 3.0** can be used to turn your FDM printer into a hybrid printer with LDM printing capabilities.

- Air compressor is necessary for WASP LDM Printing but is not included in Clay Kit Add On
- · Compatible with all air compressors with a minimum of 8 bar



#### Standard Configuration includes:

- LDM extruder
- Tank stand
- 1.2 mm and 2 mm diameter nozzles
- 3 L tank
- WASP gauge · Teflon tubing
- Nylon tubing

#### Compatible with the following printers:

- WASP 2040 Hybrid
- WASP 2040 Clav
- WASP 4070 Pro
- WASP 40100 Clav • WASP 60100 Pro

25 lb. porcelain

Manual

SD card

⚠ ALERTS: Small Parts - Not recommended for children under 3 years old.

Cat. No.	Price
S4131948	\$1.052.00/Ea

# Spitfire Red Extruder

The WASP Spitfire Red Extruder is a fast and accurate single extruder for WASP FDM printers.

- Single extruder for WASP FDM printers
- Fast and accurate printing in a variety of materials
- Expand your printing possibilities with additional interchangeable cartridges and nozzle diameters, with the simple turn of a screw

recommended for children under 3 years old.



Cat. No.	Price
S4131951	\$263.00/Ea

#### LDM Extruder 3.0

The WASP LDM Extruder 3.0 is a ceramic extruder used for the deposition of dense fluid material as clay mixture and experimental materials. It is equipped with a screw system capable of regulating the output flow of the material, allowing rapid flow interruption traction control.

#### Innovation:

- · Steel screw designed to triple the extrusion flow
- · Luer lock adapter

- · The screw eliminates air bubbles in the mixture
- · Extrusion controlling system with retraction option
- Outward pressure multiplier

#### Included:

- 1.5 mm steel nozzle ideal for accurate printing, medium difficulty, with the material up to 0.3 mm
- 2 mm steel nozzle ideal for fast printing, low difficulty
- 3 mm steel nozzle ideal for really low difficulty printing
- Adapter for Luer lock nozzles to also use a conical plastic nozzle

⚠ ALERTS: Small Parts - Not recommended for children under 3 years old.

Cat. No.	Price
S4131964	\$421.00/Ea

#### LDM Tank

#### A certified aluminum tank for LDM printing.



- Certified aluminum tank for LDM printing up to 40 bar
- · Newly designed for easy disassembly and loading
- WASP LDM tanks come in a variety of sizes for testing materials, or producing large LDM prints
- Safety release valve set at 7 bar

**ALERTS: Small** Parts - Not recommended for children under 3







## 3D PRINTING

BRING IDEAS TO LIFE

Visit **fisheredu.com** and search "3D printing" to find accessories, cartridges, and filaments.

### 3D Printers with WiFi

Ideal for STEAM curriculums' classroom instruction and activities.





- · Compatible with Google Chromebook and iPad
- Full enclosures are designed for safety and include HEPA filter
- Includes a 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).

#### 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

#### 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.

WARRANTY: Comes with an extended 2-year warranty

Cat. No.	Description	Price
S81379	Pro Smart Professional Grade 3D Printer with WiFi	\$2,360.00/Ea
S72787	3D Printer with WiFi	\$999.00/Ea

# MyStemKits E3 School Bundle

Deliver interactive and engaging STEM education using 3D printing to create manipulatives for over 180 hands-on STEM projects. The bundle includes projects for K-12 curriculums.



Includes a one-year subscription to the MyStemKits School Plan (maximum of 8 teacher account), (2) Robo C2 3D Printers, (10) 500 g rolls of filament, and 2 hours of online training.

Cat. No.	Price
\$72791	\$4,470.00/Ea

### Filament 10 Pack

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	Filament 10 Pack	\$200.00/Ea

### 3D Printing Materials Zero Waste Box<sup>™</sup>



Recycle 3D Printing Materials. Each box includes signage, a built-in liner, shipping to and from your location, and processing of the materials.

#### What You Can Recycle

- Accepted Waste: Please send us any printing spools and scrap printing material generated by your 3D printer including ABS, HIPS, Nylon, and TPU.
- Unaccepted Waste: Do not send in 3D printers, 3D printer parts, traditional printer cartridges, or 3D prints of any material other than ABS, HIPS, Nylon, and



TPU. Printing materials made from PP, PE, PS, and PTEG may be collected in our Plastic Packaging Zero Waste Box. Printing Materials made from PLA may be collected in our Biodegradable Plastics Zero Waste Box.

#### **How It Works**

- Order: Select a Zero Waste Box system and place your order
- · Collect: Collect the accepted items to fill the system
- Ship: Send it back to TerraCycle with the prepaid return label on your system
- Reorder: Order your next Zero Waste Box system to continue to recycle everything

#### What's Included?

- One Zero Waste Box
- One prepaid return label, affixed to your box
- · Processing and recycling of the materials
- Customer support from our team of experts

⚠ ALERTS: Not available in Hawaii, Alaska, and Puerto Rico.

Cat. No.	Capacity (Metric)	Dimensions (L x W x H)	Price
S88854135	39.66 L	11 x 11 x 20 in.	\$164.00/Ea
S88854136	79.31 L	11 x 11 x 40 in.	\$268.00/Ea
S88854137	136.42 L	15 x 15 x 37 in.	\$481.00/Ea

Please see the web for all of your 3D printing accessories as well as Installation and Service Packages.



**Robotics & Engineering** 

# STEAM Inventor with Accessories

A big, beautiful tube of inventing fun! Certified as an authentic STEM experience, students can enter into the world of LUX construction and learn how to build big working machines, creatures, or their own toys and inventions.



- Kit includes 223 pieces
- · Packaging: clear, 14 in. tube

riangle ALERTS: Set includes small parts which may present a choking hazard

Cat. No.	Price
S81700	\$70.50/Ea

# The Build Anything Bin

Kit contains
1,000 pieces,
allowing
students to
create virtually
anything!
Provides a
creative outlet to
help them learn
and retain the
perfect balance
of physical,
emotional,
and cognitive
information.



- Create a guitar, spaceship, castle, even a near life-sized boat!
- Connections are made through linking which provides kids the immediate experience in the world of kinematics
- Includes bags upon bags full of brilliant colors, all in secured in a durable storage tote
- Parents' Choice Gold Award Winner, named Top Toy by Autism Live
- · ABS Plastic is tested safe and presents no choking hazard

Cat. No.	Price
S81701	\$211.00/Ea

### IQ KEY Perfect 600 Robotic STEM Kit

For students to learn about engineering and its applications.

- Promotes creativity by encouraging students to design and build machines of their own.
- Includes plans to build twenty different machines
- Students can build separate simple machines that then can be integrated to transfer and transform energy



- Requires 2 AA batteries, not included
- · Includes teacher's guide

**CERTIFICATION:** CE

Cat. No.	Price
S13168	\$104.00/Ea

ELECTRONIC SNAP CIRCUITS

# **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)

# riangle ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.

Cat. No.	Description	For Use With (Application)	Weight	Price
S66934	Snap Circuits™ 300 Experiment	To build equipment such as AM radios, burglar alarms, flashlights, doorbells, and electronic games	3.1 lb.	\$102.00/Ea
S66934A	Snap Circuits™ Jr.™ 100 Experiment	To build electronic equipment such as radios, alarms, and flashlights	1.75 lb.	\$52.25/Ea



# **Elementary Snap Circuits Kit**

A great introduction to the world of electricity and electronics.

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



# 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

Cat. No.	Price
S68213	\$157.00/Ea

# Eisco<sup>™</sup> Series and Parallel Circuit Demonstration Board

Helps students to distinguish between series and parallel circuits.

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

Cat. No.	Price
S13003	\$81.00/Ea



Explore concepts in biology, chemistry, math, physics, engineering

and more. Lux
Blox STEAM
Accelerator
Deluxe
Classroom Set
Neutral Palette
brings STEAM
concepts to life.

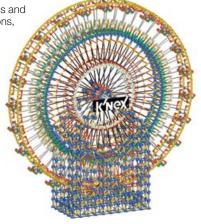
- Unlimited opportunities for creativity and imagination
- Great manipulative for younger students
- Includes laminated starter guide and extensive teacher's primer
- 800 Lux squares 200 each of black, gray, olive, and white
- 300 Lux trigons 100 each of black, olive, and white
- 40 large Lux multi-wheels, 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
- Comes in a durable plastic storage unit
- Made in the U.S.A.

Cat. No.	Price
S72519	\$455.00/Ea

### **6 Foot Ferris Wheel**

The ultimate K'NEX building challenge recommended for expert 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
- Switch on the powerful, plug-in motor to bring the hulking ride to life
- Requires 2 AA batteries, not included
- Product ships in 2 separate boxes



Cat. No.	Price
S81364	\$620.00/Ea

Please see Life Science catalog for bioengineering products.



#### **Bristlebots**

This Bristlebots pack includes everything needed to build BristleBots that help 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 to 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 Bristlebots against each other

⚠ ALERTS: Small Parts - Not recommended for children under 3 years old.

Cat. No.	Price
S81174	\$117.00/Ea

#### **Makerspace Supplies**

### **FormBox**

The Mayku FormBox is your very own desktop production line. Whether you're crafting by hand

or partnering with your 3D printer the FormBox fits perfectly into your workspace, so you can create a factory finish without the factory.

- The Mayku FormBox is your very own desktop production line
- Whether you're crafting by hand or partnering with your 3D printer, the

FormBox fits perfectly into your workspace, so you can create a factory finish without the factory

⚠ ALERTS: Small Parts - Not recommended for children under 3 years old.

Cat. No.	Price
S4131936	\$844.00/Ea

# Wire Stripper Tool

Highly functional and useful tool.

- Cuts, strips, and crimps 10–22 gauge wire
- Cushion grip
- 8 in. long (20.3 cm)



#### Sheets

Mayku Cast Sheets are transparent, non-stick, food-safe sheets for making reusable molds. Mayku Form Sheets are great for product packaging, prototyping and enhancing decorative craft projects.

#### Mayku Cast Sheets

- Transparent and food-safe 0.5 mm sheets for making reusable molds
- · The sheet's slight flex and non-stick surface ensures that your templates and casts can be easily removed
- Fully recyclable, partly made from recycled plastic waste

#### Mayku Form Sheets

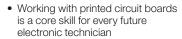
- A 0.5 mm versatile, easy-to-use white sheet
- · Great for product packaging, prototyping and enhancing decorative craft projects
- · Fully recyclable, partly made from recycled plastic waste

⚠ ALERTS: Small Parts - Not recommended for children under 3 years old.

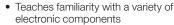
Cat. No.	Price
S4131937	\$42.25/Ea
S4131938	\$42.25/Ea

# **Practical Soldering Project Kit**

Practice good soldering techniques.







Provides dynamic results

Cat. No.	Price
\$65260	\$15.50/Ea

## Soldering Assist Tools



For use with a soldering tool kit with a digital multimeter.

Cat. No.	Туре	Includes	Price
S97692	Lead-free Solder Tube	Rosin core	\$6.60/Ea
S97693	Desoldering Pump	Anti static tip	\$5.25/Ea

# **Permoplast**<sup>™</sup> **Modeling Clay**

Non-hardening, stainless modeling clay.

- · Nontoxic, antiseptic and harmless
- · Retains plasticity for repeated use
- Can be squeezed, pushed, and pulled
- Four colors: gray, green, red, and brown

Cat. No.	Price
S17307	\$13.25/Pk













Description	Quantity	Cat. No.	Price
Fisher Science Education Cups			
Paper Cups, Waxed, 5 oz. (150 mL)	100/Pack	S05166	\$12.75
Paper Cups, 8 oz. (237 mL)	100/Pack	S04200	\$20.75
Plastic Cups, 7 oz. (207 mL)	100/Pack	S04202	\$39.50
Plastic Cups, 16 oz. (473 mL)	50/Pack	S04170	\$19.25
Plastic Cups, Translucent, 2.5 oz. (74 mL)	45/Pack	S04589	\$7.10
Plastic Cups, Translucent, 7 oz. (207 mL)	100/Pack	S04575	\$17.50
Fisher Science Education Office Supplies			
Colored Pencils	12/Pack	S04194	\$5.40
Paper, White, 8.5 x 11 in.	500/Pack	S05176	\$8.65
Pencil, Wax, Black	Each	S04191	\$1.75
Fisher Science Education Glass and Plasticware			
Polypropylene Beaker Set 50 mL, 100 mL, 250 mL, 500 mL, 1,000 mL	Each	S400563B	\$24.25
Plastic Zip Bags for Science Kits	100/Pack	S05254	\$12.50
Extended Science Classpack and Measure Set	Each	S02651	\$176.00
Poly Funnel	Each	S04580	\$2.70
Soil and Rock			
AquaPhoenix Scientific™ Aquarium Gravel, 5 lb.	Each	S06534	\$10.50
Fisher Science Education™ Unwashed Sand with Silt for Science Kits, 5 lb.	Each	S05365	\$4.50
AquaPhoenix Scientific Potting Soil, 5 lb.	Each	S05363ND	\$5.95

**fisher** science education



Description	Quantity	Cat. No.	Price
Fisher Science Education Wood Products			
Chopsticks	100/Pack	S04178	\$13.50
Wooden Craft Sticks for Science Kits	50/Pack	S05361	\$6.15
Dowel Rod, Dia. x L: 0.5 x 15 in.	Each	S04172	\$3.40
Miscellaneous			
Fisher Science Education Balloons	144/Pack	S04187	\$40.50
Fisher Science Education Cotton Twine for Science Kits, 420 ft.	Each	S05367	\$5.05
Fisher Science Education Rubber Bands for Science Kits	0.25 lb.	S05212	\$5.50
Fisher Science Education D-Cell Alkaline Batteries for Science Kits	8/Pack	S05148	\$8.05
Fisher Science Education Foam Tray	Each	S04188	\$0.50
Fisher Science Education Glass Marbles, Assorted Colors	16/Pack	S04581	\$8.35
Fisher Science Education Magnifying Glass, Dia.: 2.5 in.	Each	S04173	\$5.00
AquaPhoenix Scientific Masking Tape, 1 in. x 60 yd., 9 Rolls	Each	S30681	\$31.25
Fisher Science Education Pipe Cleaners, Assorted Colors	1000/Pack	S04193	\$98.00
Fisher Science Education Plastic Zip Bags for Science Kits, 7 x 8 in., 1 L	100/Pack	S05254	\$12.50
AquaPhoenix Scientific Reclosable Bags, 6 x 6 in.	100/Pack	S04588	\$13.00
Fisher Science Education Ring Magnet, Dia.: 1.14 in.	Each	S04585	\$2.45
Fisher Science Education Styrofoam Balls, Dia.: 1 in.	12/Pack	S04571	\$14.75
AquaPhoenix Scientific Styrofoam Head with Flat Face	Each	S20614	\$23.50
Fisher Science Education Waxed Paper for Science Kits, Roll	Each	S05379	\$4.80
Fisher Science Education White Vinegar	32 oz.	S04577	\$8.95

Visit **fisheredu.com** or contact your Fisher Science Education sales representative to access our full selection of products.





# **Primary Science** Sensory **Tubes**

Clear tubes nurture sensory development and science exploration.

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

⚠ ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.



#### Math

#### **Calculators**

### **TI-30X IIS Calculator**

Combines basic scientific and trigonometric functions. Students can broaden their exploration of math and science concepts.

- Two-line display shows entries on the top line and results on the bottom line
- 11-character display on the top line can be scrolled left or right - up to 88 characters
- 10-character display on the bottom line can include a two-digit exponent, fraction display capabilities, operation with mixed fractions and numbers, fraction/decimal conversion, and degrees/radians conversion
- Review and edit current or previous entries, and look for patterns using the scroll feature
- · Perform conversions and advanced calculations
- Can be powered by solar and battery

Cat. No.	Description	Price
S65241	TI-30X IIS Calculator only	\$24.50/Ea
S65241TP	Teacher's Kit – Includes ten calculators, one storage box, one keyboard poster	\$247.00/Pk



# TI-30Xa Calculator

Performs 54 commonly used scientific and 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



Cat. No.	Price
S40649	\$19.25/Ea

#### 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<sup>™</sup> panel (S66344) or TI-Presenter projection devices
- · Powered by four AAA batteries with lithium battery backup
- Automatic Power Down<sup>™</sup> (APD) capabilities

#### **Specifications**

- 64 x 96 pixel display with split screen
- 24K available memory, 480K flash ROM
- Clock
- I/O and USB ports

WARRANTY: One year limited



Cat. No.	Description	Price
S68601	TI-84 Plus calculator	\$135.00/Ea





#### YOUR STEM PROGRAM MAKE IT AMAZING!

fisheredu.com/STEM: Your source for products, professional development, resources and everything STEM.



# 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



### TI-108 Calculator

TI's most widely used school calculator.

- Takes standard classroom functions further with percent, square root, memory keys, and a
- · Bright, color-coded keyboard has hard plastic keys
- · Solar panel operates in low light and never needs batteries
- Slide case helps protect calculator

	' '	
Cat. No.	Description	Price
S43195	TI-108 Calculator only	\$14.25/Ea
S43195TP	Teacher's Kit – Includes ten calculators, storage caddy, poster, and instructional materials in English and Spanish	\$54.75/Ea

### **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 x 36 in. (72.5 x 90 cm)

• Pocket: 3.75 x 4 in. (9.38 x 10 cm)	
Cat. No.	Price
S40690	\$21.25/Ea



12345678.

DUS PETRUMENTS TI-108

#### Measurement

# United Scientific<sup>™</sup> Precision **Measuring Set**

**Contains four** high-quality instruments housed in sturdy plastic storage case.

#### **Kit Contents:**

- Micrometer caliper: 0 - 25 mm x 0.01 mm
- Knife edge square, 90°: 100 x 70 mm
- · Vernier caliper: 150 mm x 0.02 mm
- Steel ruler: 15 cm x 0.5 mm



Cat. No.	Price
\$43608	\$115 00/Fa

#### 12-in. Rulers

Made of shatter-resistant material.

- · Inch 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.	Product Type	Material	Price
S90532A	Ruler, Clearview	Shatter Resistant	\$9.00/Pk
S90532B	Ruler, Flexible	Shatter Resistant	\$17.00/Pk
S90532C	Ruler, Clear	Shatterproof	\$1.10/Ea

# **Eisco**<sup>™</sup> Single **Sided Meter** Sticks

**Single Sided Meter** Sticks are constructed from durable wood





- Dimensions: 100 cm x 2.5 cm x 6 mm
- Ideal for the classroom

**WARRANTY:** 1-year limited manufacturer warranty

Cat. No.	Quantity	Price
S88345	Each	\$7.40/Ea
S88346	10/Pk	\$73.50/Ea





NeuLog 🚺

# Flexible, Fast, and Simple

The NeuLog<sup>™</sup> 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 purchase
- Modular plug and play allows connection of sensors in any order with instant readings, minimal time, and no calibration



Visit **fisheredu.com/neulog** to learn more.



# Flexible, Fast, and Simple

#### **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.

Visit fisheredu.com/neulog for our full sensor listing.

#### 2. Hardware

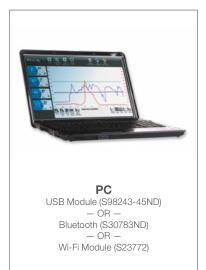
Determine the type of hardware to be used in your classroom and the devices your students will most commonly use, such as PCs, tablets, etc.

#### 3. Connection

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

Visit fisheredu.com/neulog for details.

#### **Options**









WIFI and Display units require a Battery Unit (S39112)







# Choose from over 20 NeuLog sensors.

### **NeuLog Modules and Displays**

Description	Cat. No.	Price
Wi-Fi Module	S23772	\$200.00
Panda Wi-Fi Module	S13942	\$224.00
Digital Graphic Display	S98243-43ND	\$207.00

Description	Cat. No.	Price
USB Module	S98243-45ND	\$67.00
Battery Unit	S39112	\$53.00
Bluetooth	S30783ND	\$137.00

### **NeuLog Sensors**

Description	Cat. No.	Price
CO <sub>2</sub> Logger Sensor	S98243-3ND	\$385.00
Force Logger Sensor	S98243-9ND	\$200.00
Force Plate Logger Sensor	S98243-12ND	\$361.00
Galvanic Skin Response (GSR) Logger Sensor	S98243-51ND	\$180.00
Heart Rate and Pulse Logger Sensor	S98243-15ND	\$95.00
Light Logger Sensor	S98243-20ND	\$85.00
Motion Logger Sensor	S98243-23ND	\$158.00
Oxygen Logger Sensor	S98243-8ND	\$341.00
Panda Multi-Sensor	S13941	\$418.00
Panda Wi-Fi Module	S13942	\$224.00
pH Logger Sensor	S98243-24ND	\$139.00

Description	Cat. No.	Price	
Photogate Logger Sensor	S98243-25ND	\$113.00	
Soil Moisture Logger Sensor	S98243-30ND	\$126.00 \$120.00	
Sound Logger Sensor	S98243-22ND		
Spirometer Logger Sensor	S98243-28ND	\$149.00	
Surface Temperature Logger Sensor	S98243-33ND	\$53.50	
Temperature Logger Sensor	S98243-31ND	\$70.00	
Voltage Logger Sensor	S98243-7ND	\$41.50	

Visit **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

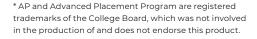


Backed by support

# Vernier Lab Books

Enhance your curriculum with award-winning Vernier 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 are essential instructor information (such as teaching tips), instructions for preparing solutions, suggested answers, and sample data.











Lab Book	Cat. No.	Price
Chemistry with Vernier	S16047ND	\$56.00
Biology with Vernier	S16045ND	\$56.00
Physics with Vernier	S16046ND	\$56.00
Middle School Science with Vernier	S15962ND	\$56.00
Vernier Chemistry Investigations for Use with AP* Chemistry	S16079ND	\$56.00
Advanced Biology with Vernier	S16096ND	\$56.50
Investigating Environmental Science through Inquiry	S16049ND	\$56.00
Advanced Chemistry with Vernier	S16119ND	\$56.00
Elementary Science with Vernier	S40807	\$55.75

Visit **fisheredu.com/vernier** for a full list of lab books.



# Getting Started with Go Direct Sensors

#### Why Choose Go Direct Sensors?

With over 50 sensors to choose from, the Vernier Go Direct® family of sensors offers an affordable, high-quality solution for your students to investigate scientific concepts. 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

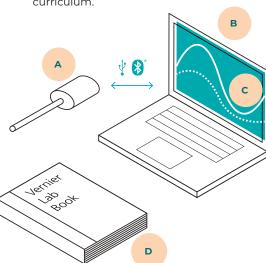
Go Direct sensors connect to a wide variety of devices, including Chromebooks, computers, and mobile devices.

#### C Vernier Graphical Analysis™

Our data-collection app facilitates student understanding with real-time graphs of experimental data.

#### 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	\$86.00
Go Direct Force and Acceleration	S39711	\$132.00
Go Direct Motion	S39717	\$126.00
Go Direct pH	S39725	\$121.00
Go Direct CO <sub>2</sub> Gas	S39703	\$239.00
Go Direct SpectroVis® Plus	S16260ND	\$472.00
Go Direct Gas Pressure	S39713	\$110.00
Go Direct Conductivity	S39705	\$132.00
Go Direct O <sub>2</sub> Gas	S39722	\$225.00

Visit fisheredu.com/vernier for a full list of sensors.





# Getting Started with LabQuest 3



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

#### **B** Sensors

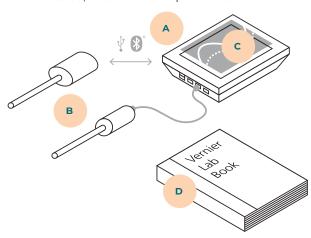
Compatible with all Vernier sensors, LabQuest 3 connects wirelessly to Go Direct® and LabQuest sensors.

#### 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	\$43.25	
pH Sensor	S16238ND	\$108.00	
Gas Pressure Sensor	S16052ND	\$101.00	
Dual-Range Force Sensor	S16050ND	\$131.00	
Motion Detector	S405904	\$109.00	
Current Probe	S16059ND	\$53.00	
Vernier Photogate	S16279ND	\$58.50	
Differential Voltage Probe	S16060ND	\$53.00	
CO <sub>2</sub> Gas Sensor	S16055ND	\$320.00	
O <sub>2</sub> Gas Sensor	S16069ND	\$228.00	
Voltage Probe	S16072ND	\$15.25	
Interfaces	Cat. No.	Price	
LabQuest 3	S1724327	\$411.00	

S39801

S16035ND

S16161ND

\$318.00

\$205.00

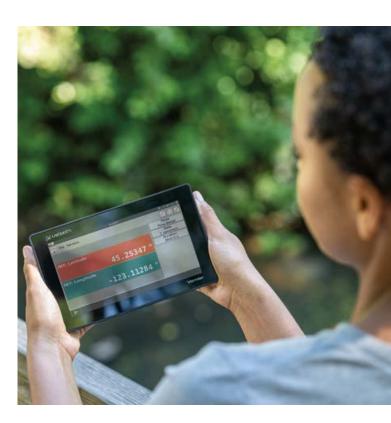
\$80.00

Visit fisheredu.com/vernier for a full list of sensors.

LabQuest Stream

Go!Link Interface

LabQuest Mini





# Wind Experiment Kits

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

KidWind 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	\$153.00
KidWind Advanced Wind Experiment Kit	S04798ND	\$199.00
KidWind Mini Wind Turbine with Blade Design	S04818ND	\$79.00
Solar Energy Exploration Kit	S40815	\$95.00
KidWind simpleGEN	S04824ND	\$79.00
KidWind 2V/400mA Solar Panel	S04828ND	\$25.25
Go Direct Energy Sensor	S39721	\$109.00



# Go Direct Spectrometers

### Fast. Compact. Easy to Use.

Go Direct spectrometers connect to your device via Bluetooth® wireless technology or USB. The free Vernier Spectral Analysis® app makes it easy to incorporate spectroscopy into your course experiments. The user-friendly software includes analysis features, such as curve fitting and data interpolation.

Spectrometer	Cat. No.	Price
Go Direct SpectroVis® Plus Spectrophotometer	S16260ND	\$472.00



Go Direct Emissions Spectrometer



Go Direct Fluorescence/ UV-VIS Spectrophotometer



Go Direct SpectroVis Plus Spectrophotometer



Go Direct Visible Spectrophotometer



Go Direct UV-VIS Spectrophotometer

# **English/Metric Meter Sticks**

#### Available with plain or metal ends.

- Front is ruled in metric units with millimeter increments on both edges Secretary and and an annual to
- 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 x 0.25 in. thick (2.54 x 0.63 cm)

Cat. No.	Includes	Price
S40625	Plain end	\$10.25/Ea
S40626	Brass end	\$8.25/Ea

# 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 1 cm grid for mechanical drawing or X/Y axis for graphing on

Cat. No.	Includes	Price
S94341	1 cm grid	\$48.00/Pk
S94342	X/Y axis	\$48.00/Pk

# **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 x 0.31 in. thick (2.85 x 0.8 cm)				
Cat. No.	Includes	Price		
S32051	Plain end	\$8.50/Ea		
\$32052	Metal and and hanging hole	\$14.00/Fa		

102 3 9 5 6 7 8

# **Eisco™ Plastic Vernier Caliper**

Columbus-type caliper with dual scale.

- Enables students to read inside. outside or depth measurements
- · With thumb wheel for easy motion of jaws
- 0 to 12 cm x 0.1 mm Imperial scale
- Available in plastic case

Cat. No.	Price
S12912	\$7.05/Ea

# **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

#### ⚠ ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.

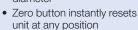
Cat. No.	Quantity	Price
S94316	100/Pk	\$8.50/Pk
S94317	200/Pk	\$5.75/Pk



# fisher brand Traceable™ Digital **Carbon Fiber Calipers**

#### Switch between inches and millimeters easilv.





- Greater-than or less-than results without calculations
- · Ergonomically designed
- No lubrication is ever required on the ultra-smooth slide bar
- Runs for 10,000 hours on the supplied battery
- Made of strong composite carbon fiber
- Resolution: 0.01 in. and 0.1 mm
- Accuracy: ±0.01 in. and ±0.2 mm

• Large digital display: 0.3 in. H (7.6 mm)

#### 4 in. (10.2 cm) Caliper

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

# 6 in. (15.2 cm) Caliper

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

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

Gat. No.	weignt (English)	weight (Metric)	Price
S90187A	0.062 lb.	0.02 kg	\$38.75/Ea
S90187B	0.12 lb.	0.05 kg	\$51.25/Ea



# **Eisco™ Vernier Caliper with** Case, Carbon Steel

This 6-inch Vernier caliper is perfect for measuring the length, inner diameter, and outer diameter of objects up to 6 inches. Case is included.

- Made from carbon steel for increased durability
- Features a dual scale to measure on the metric and imperial scales



- · Highly precise and accurate measurements up to 6 inches with a 1/128 in. (0.05 mm) Vernier scale
- · Laser-engraved graduations that will not fade over time
- Includes a locking screw to ensure precise measurements

Cat. No.	Price
S27639	\$28.75/Ea

# United Scientific<sup>®</sup> **Vernier Calipers**



#### Graduated in both English and metric.

Designed for monitoring outside, inside, depth and step measurements.

#### Stainless steel (S90343)

- Full length depth gauge
- · Friction ruler
- · Sliding lock for gauging
- Max. range: 5 1/2 or 140 mm
- Readability: 1/16 in. or 1 mm Plastic (S90344)
- Max. range: 6 in. or 150 mm
- Readability: 1/128 in. or 0.05 mm

Cat. No.	Capacity (Metric)	Material	Price
S90343	140 mm	Stainless Steel	\$7.65/Ea
S90344	150 mm	Plastic	\$12.00/Ea

### **Trundle Wheel** with Counter

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

- Each click indicates 1 meter; 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+



# 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 and liquid materials
- · Perfect for introductory measurement lessons
- · Ideal for use in classroom or laboratory

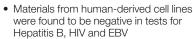
Cat. No.	Price
S80688	\$9.90/Ea

#### **Forensics**

#### **Evidence Collection**

# **Blood Typing Anti-Sera**

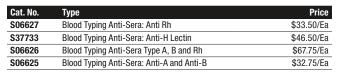
For blood typing using real human blood. 5 mL vials contain enough antisera for 75 students. Sample will keep over one year with proper refrigeration.



• 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.



# United Scientific™ **Ultraviolet Light**

Ideal for forensics or illuminating fluorescent and blacklight-reactive items. **United Scientific Supplies** Ultraviolet Light is handheld.

- Includes a built-in LED flashlight
- Requires 4 AA batteries (not included)
- · 6 in. 4w blacklight



55





# **Longwave UV Mini Light Source**

For use in crime scene search and forensic applications.

- Ideal for theft detection in viewing invisible stains, powders and pastes
- Fully portable, battery-operated longwave UV source housed in rugged ABS plastic
- Peak wavelength: 365nm



# "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. (78.7 cm)
- W x L: 3 in. x 1,000 ft. (7.5 cm x 300 m)

Cat. No.	Price
S69003A	\$31.75/Ea

# **Fingerprinting Supplies**

**UV Mini Light Source** 

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

#### Long-handle Brush

S99187

- 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 x dia.: 9 x 0.5 in. (22.9 x 1.3 cm)

#### 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 × 7.0 cm)

#### 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. (12 cm); feather L: 4.5 in. (11 cm)

#### Cleaner Towelettes

 Individual, napkin-size disposable-ink-cleaning towels for field or classroom

\$62.00/Ea

- 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. (59 cm) or 4 oz. (118 cm) quantities

#### Supremink™ Fingerprint Ink

- Easy to dispense, roll out and clean up

   Use just a few drops to roll a.
- 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. (59 cm) or 4 oz. (118 cm) 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 × 0.9 cm)

# 4 in. (10 cm) 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 x 8 in. (20.3 x 20.3 cm) 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. (59 cm);
   Net Wt. 0.7 oz. (21 cm)



**PFP601** 

# Redescent<sup>™</sup> Fluorescent

- 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. (59 cm); Net Wt. 0.8 oz. (24 cm)

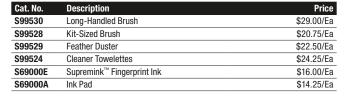
#### Fingerprint Pattern Wall Chart

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

#### Regular Black Magnetic Latent Print Powder

- Unique ballmilling process produces superior ferrous compounds
- Use on any nonferrous surface with magnetic applicators
- Volume: 2.43 oz. (68.9 cm)

Cat. No.	Description	Price
S99531	Powder Brush	\$8.75/Ea
S99521	Fingerprint Record Card	\$39.75/Pk
S99527	Fluorescent Print Powder	\$20.00/Ea
S99526	Latent Print Powder	\$12.50/Ea
S99522	Fingerprint Pattern Wall Chart	\$31.50/Ea
S99532	Regular Black Magnetic Latent Print Powder	\$13.00/Ea





# Regular Black Magnetic Latent Print Powder and Applicator

Uniform textured powder perfect for fingerprinting applications.

# Regular Black Magnetic Latent Print Powder

- Unique ballmilling process produces superior ferrous compounds
- Use on any nonferrous surface with magnetic applicators
- Volume: 2.43 oz. (68.9 g)

#### **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	Tex Magnetic Fingerprint Powder Applicator	\$9.25/Ea

# Bio-Foam<sup>™</sup> Impression Kit

Quick and easy-to-use system makes footwear impressions without damage or contamination.



#### How to use:

- Spray the Bio-Foam on a thin coating of Aerosol Dust & Dirt Hardener (sold separately)
- Mix and pour in Shake-N-Cast<sup>™</sup> ready-to-use casting material (sold separately, S99541)
- · Press shoe onto the surface

Cat. No.	Price
S99543	\$13.00/Ea

# Shake-N-Cast<sup>™</sup> 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



Cat. No.	Price
S99541	\$21.00/Ea

### PrintMatic<sup>™</sup> 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

Cat. No.	Price
S99191	\$33.75/Ea

# 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.	Price
S99534	\$31.75/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 iar
- Roll size: 2 in. x 30 ft. (5 cm x 9.1m)
- Wound on standard 1 in. core to fit lifting tape dispensers

Cat. No.	Price
S99535	\$12.00/Ea



#### **Activity Kits**

# Forensic Case Study: Murder At Eagle Nest Harbor

A murder in a quiet houseboat 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 handwriting evidence to help pinpoint 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.
 Price

 \$40780
 \$70.25/Ea

# Kemtec<sup>™</sup> 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 the case using deductive reasoning
- Grades 7-12
- Class size: 24 students (six groups of four)

#### Eight lab activities included are:

- Fabric analysis
- Handwriting

Fingerprint

· Analysis blood typing

Fiber analysis

· Personal information

Hair analysis

· Questions and comments

 Cat. No.
 Price

 S06743
 \$259.00/Ea

# Lyle and Louise: An Identity Crisis<sup>™</sup> DNA Typing

Introduces gel electrophoresis, Polymerase Chain Reaction (PCR) and Short Tandem Repeat (STR) DNA analysis.

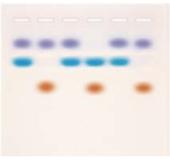
Two women have been identified post mortem as Louise Mondelo. Students determine who the real Louise is, and answer questions about her paternity and others at the scene.

- Students pour agarose gels, load DNA, run the gel and analyze results
- Gels use nontoxic BlueVis<sup>™</sup> buffer/stain solution formulated by Vandalia Science Education
- DNA can be seen as the gel runs, which provides a great visual aid to show DNA migration
- No need for hazardous stains, UV equipment or time-consuming staining procedures
- Class size: six groups of up to five students per group

Cat. No.	Price
S94583	\$190.00/Ea

# Whose DNA Was Left Behind? Experiment Kit

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



Introduces DNA fingerprinting and agarose gel electrophoresis basics.

- 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

Cat. No.	Price
S94591	\$76.25/Ea



# 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 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

Cat. No.	Price
S94586	\$153.50/Ea

Kemtec<sup>™</sup> Dusting for **Fingerprints** Kit

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 minutiae 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
- · Requires a special permit for international shipping
- Meets National Standards for grade levels 7 to 12

Cat. No.	Price
S27539	\$413.00/Ea

# **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

- 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

Cat. No.	Product Type	Price
S96790	Simulated Blood Typing Kit	\$56.00/Ea
S96790R	Simulated Blood Typing Refill	\$28.75/Ea

## **Finger Print Classification STEM Kit**

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

Cat. No.	Price
S29559*	\$63.25/Ea



# Kemtec<sup>™</sup> 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

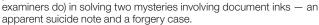
⚠ ALERTS: Warning: Cyanoacrylate fuming requires a chemical fume hood

Cat. No.	Price
S30807	\$166.00/Ea

# United Scientific<sup>™</sup> Ink Chromatography and Forensics STEM Kit

Introduces students to ink chromatography and its application in solving forensics cases.

Students gain experience in creating ink databases, identifying "ink tags" to "date" various inks, and then use them (as professional document



- Covers key concepts including: data analysis, chromatographs, inks and their composition, mixtures, compounds, mixtures, molecules, solubility, affinity, polar substances, R<sub>f</sub> values, capillary action, light energy, fluorescence and hypothesis testing
- Accents the scientific method and independent inquiry featuring hands-on learning materials and exciting interactive digital content that can be accessed on a computer, tablet or mobile device
- Provides access to digital PDF content such as: independent investigation inquiry suggestions, background information including content tables and concept, animations, PowerPoint concept presentation (and video version), and comprehensive glossary
- Special typewriter functionality in student activity PDFs allows students to take notes, record experimental data, answer analysis questions and e-mail their teacher
- · Correlated to the Next Generation Science Standards

Cat. No.	Price
S07360	\$87.00/Ea



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

Cat. No.	For Use With (Application)	Includes	Product Type	Price
S96793	For simulated ABO blood typing	4 simulated blood samples, 1 bottle simulated Anti-A serum, 1 bottle simulated Anti-B serum, 40 blood typing trays, Teacher's manual and student study guide copymasters	Blood Type Kit	\$48.25/Ea
S96792	For simulated ABO/Rh blood typing	4 simulated blood samples, 1 bottle simulated Anti-A serum, 1 bottle simulated Anti-B serum, 1 bottle simulated Anti-Rh serum, 40 blood typing trays, Teacher's manual and student study guide copymasters	Blood Type Kit	\$58.00/Ea
S96792R	For simulated ABO/Rh blood typing	Instructions, MSDS packet	Refill	\$35.25/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

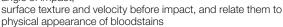
Cat. No.	Product Type	Price
S96791	Blood Typing Genetics Kit	\$55.50/Ea
S96791R	Blood Typing Genetics Refill	\$28.75/Ea



# **Blood Splatter Kit and Refill**

For crime scene investigation and criminal identification based on bloodstains.

- Bloodstain pattern analysis helps in identification of suspects and victims
- Students examine the effects of several factors such as height, angle of impact,



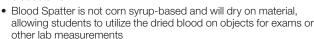
- Blood Spatter is not corn syrup-based and will dry on material, allowing students to utilize the dried blood on objects for exams or other lab measurements
- Teacher's manual and student study guide copy-masters included
- Contains material for 15 groups of students
- DOT: Non regulated

Cat. No.	Description	Price
S12833	Blood Splatter Refill	\$154.00/Ea

# Simulated Blood Spatter

For crime scene investigation and criminal identification based on bloodstains.

- Bloodstain pattern analysis helps in identification of suspects and victims
- 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
- · DOT: Non regulated

Cat. No.	Description	Price
S29560	Simulated Blood Spatter Refill	\$58.25/Ea

# Forensic Toxicology Experiment Kit

A student educational kit to analyze crime scene samples for the presence of drugs.



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

Cat. No.	Price
S42879	\$154.00/Ea

# Small Group Learning: Forensic Chemistry Of Unknown Substances



In this experiment students will use observation skills, senses, and chemical tests on a series of known substances, as well as two unknown substances, and then attempt to identify the mystery substances based on observations and recorded data.

Often when collecting evidence at a crime scene, investigators may recover substances they are unable to identify in the field. Along with evidence such as fingerprints, hair, fibers, etc., there may be traces of unknown chemicals or powders left behind by the perpetrator or perpetrators. Evidence like this is sent to a crime lab for identification.

- Activity includes a Teachers Manual, and Student Guide and Analysis copymasters
- Includes material for 5 groups
- Aligned to the Next Generation Science Standards (NGSS)
- Disciplinary core ideas: PS1.A; PS1.B
- Performance expectations: MS-PS1-2
- · Cross cutting concepts: Patterns
- Engineering practices: analyzing and interpreting data

Cat. No.	Price
S40748*	\$31.50/Fa

# **Physical Properties of Glass**

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

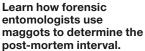


Police and crime scene investigators must use all available tools and evidence, working backwards to create the most likely scenario as to what might have occurred. Different types of evidence provide different pieces to the puzzle.

Cat. No.	Price
S96641	\$137.00/Ea



# Lyle and Louise: Nature's Witness<sup>™</sup> Forensic Entomology





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

Cat. No.	Price
S94587	\$245.50/Ea

# Forensic Drug Testing: A Simulated Immunoassay

In this activity, students will perform a simulated to detect the cocaine metabolite benzoylecgonine.

Drug testing comes in two forms: presumptive and confirmatory. Because of the cost associated with confirmatory testing, a presumptive test is often employed first. While there are



various forms of presumptive drug testing, two of the most common techniques are immunoassay testing and thin-layer chromatography.

- All urine samples and testing reagents are simulated to avoid the potential hazards of actual biological specimens while still providing realistic results
- Kit contains enough materials for 15 groups
- Teacher's Guide and student study guide copymasters are included
- Aligned to the Next Generation Science Standards (NGSS)
- Disciplinary core ideas: LS1.A; PS1.A; PS1.B
- Performance expectations: MS-LS1-3; MS-PS1-3
- Cross cutting concepts: systems and system models; structure and function
- Engineering practices: obtaining, evaluating and communicating information

Cat. No.	Price
S40778	\$48.75/Ea

### **Forensic Toxicology**

Students utilize different lab techniques to determine the presence of alcohol, illicit drugs and pain medications present in the simulated urine samples of suspected criminals.



- Various tests include the Marquis Test for Morphine, Simon's test for MDMA, THC Immunoassay, Cocaine Immunoassay, Marquis Test for Morphine, 6-Monoactylmorphine Test
- Kit includes enough materials for 30 students
- Teacher Manual and Student Study guide copy masters are included
- Aligned to the Next Generation Science Standards (NGSS)
- Disciplinary core ideas: PS1.A; PS1.B
- Performance expectations: MS-PS1-2; MS-PS1-3; MS-PS1-5; MS-LS1-8; HS-PS1-1; HS-PS1-2; HS-PS1-3
- Cross cutting concepts: Patterns; Energy and Matter; Structure and Function
- Engineering practices: obtaining, evaluating and communicating information; analyzing and interpreting data; developing and using models; planning and carrying out investigations

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Cat. No.	Price
S40770*	\$118.00/Ea





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Use this curated list of products to restock your anatomy and physiology classroom, and visit **fisheredu.com** to find even more science education products.







Description	Cat. No.	Quantity
Preserved Specimens		
Carolina™ Formalin Preserved Sheep Brain, Dura Mater Removed	S28069	Each
Carolina Formalin Preserved Sheep Brain, Dura Mater Intact	S28065	Each
Carolina Formalin Preserved Sheep Heart, Plain	S28067	Each
Carolina™ Formalin Preserved Sheep Brain, Dura Mater Removed	S81894	Each
Carolina Formalin Cats, Double Injected, L: 18+ in.	S37653ND	Each
Dissection Supplies		
United Scientific Supplies Large Dissecting Tray with Wax	S80769	Each
United Scientific Supplies Plastic Lab Trays	S04545	10/Pack
Science First Dissection Pan	S81136	Each
Eisco™ Dissection Tray	S14000	Each
Eisco Economy 7 Piece Dissecting Set	S14004	Each
Eisco 7 Piece Dissecting Set	S14005	Each
DR Instruments Mall Probe	S08106	Each
Eisco Disposable Forceps	S13946	12/Pack
DR Instruments Specimen Dissecting Forceps	S08101	Each
Models		
3B Scientific™ Muscle Torso with Head, Includes 3B Smart Anatomy	S17186	Each
3B Scientific Muscular Anatomy Model, 45-Part Master Series, Includes 3B Smart Anatomy	S17168	Each
3B Scientific Muscular Leg, Includes 3B Smart Anatomy	S171381	Each
3B Scientific Muscular Anatomy Model, 23-Part Master Series, Includes 3B Smart Anatomy	S17168A	Each
3B Scientific Muscular Arm, Includes 3B Smart Anatomy	S17136	Each
Skeleton		
3B Scientific Adult Human Skeleton, Includes 3B Smart Anatomy	S17133B	Each
3B Scientific Deluxe Human Skeleton, Includes 3B Smart Anatomy	S171563	Each
Eisco Human Articulated Painted Musculature Skeleton Model, Hanging	S13522	Each
3B Scientific Disarticulated Human Skeleton, Includes 3B Smart Anatomy	S17131B	Each
Cleaning Supplies		
Fisherbrand™ Sparkleen™ 1 Detergent	S701101	Each
Glassware Drying Rack	S47855	Each
Lab Drying/Sterilizing Ovens	S50172	Each
Innovating Science™ Laboratory Cleaner	S20715	32 oz.
O ,		

# **Forensic Analysis of Narcotics**

Teaches students about forensic chemistry by analyzing and identifying unknown substances. They can 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 plus a series of known controls
- By comparing the test results of the unknown substance to the controls, the most likely identity of the unknown substance will be determined
- Kit contains enough materials for 15 groups
- Teacher's Manual and student study guide copy masters are included

Cat. No.	Price
S27130***	\$95.00/Ea

#### **Health Science**

#### **Vet Tech**

## **Animal X-Rays**

Roylco<sup>™</sup> Animal X-Rays printed on clear, heavy duty plastic.

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



Cat. No.	Price
S40797	\$27.50/Ea

# Animal Foot and Leg Skeleton Specimen

For comparative anatomy and other studies.

 Genuine specimen from cow, pig (Sus scrofa), horse (Equus caballus), and domestic dog skeletons



Cat. No.	Туре	Price
S06789	Model, Dog Leg	\$263.00/Ea

# Veterinary Student Dissection Kit

For first year veterinary students.

- Contains instruments required for anatomy class
- Contains all necessary instruments required for learning anatomy of animals



Cat. No.	Description	Price
S07893	Veterinary Student Dissection Kit	\$35.25/Ea
S07892	Veterinary Student Dissection Kit, Deluxe	\$19.50/Ea

# VetPak-G<sup>™</sup> Dissection Instruments Pack

An all-in-one kit for veterinary students.

- Addison Brown forceps 4.5in.
- Dissection scissor, 5.5 in., bandage
- Kelly forceps 5 in., curved
- Mayo Hegar forceps, 5.5in.
- Dissecting stitching scissors, 4.5in.
- · Reflex hammer
- Pen light
- Thermometer
- · Instruments holster with waist belt
- Strong carrying case

 Cat. No.
 Price

 \$08087
 \$43.75/Ea



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#### **Instruments & Kits**

# Diagnostic Pen Light

For examining eyes.

- Reliable robust construction
- Bright illumination
- Compact size
- 5 in. length



# **Heavy Duty Cutter**

For cutting larger bones for cross sectional bone analysis.

- · Made of stainless steel
- Features single or double spring settings
- · With side cutting action
- Length: 17.7 cm (7 in.)



Cat. No.	Price
S08105	\$25.00/Ea

# Hemostatic Forceps, Curved

Feature offset tips for accessing hard-to-reach areas during dissection.



Cat. No.	Description	Price
S72120	Hemostatic Forceps, Curved	\$5.75/Ea

# Hemostatic Forceps, Straight



Feature stainless steel precision points.

Cat. No.	Description	Price
S72119	Hemostatic Forceps, Straight	\$5.75/Ea

# **Reflex Hammer**

DR Instruments Reflex Hammer is a proper tool for testing the integrity of the patellar tendon and other reflexes.



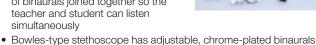
Cat. No.	Description	Price
S72118	Reflex Hammer	\$6.50/Ea

# United Scientific Stethoscopes

Listen to vital signs.

and PVC Y tubing

- Ideal for the classroom, especially in the study of respiration and circulation
- Teaching stethoscope has 3.8 cm Bowles chestpiece and two sets of binaurals joined together so the teacher and student can listen simultaneously

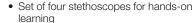


 $\triangle$  ALERTS: This item is intended for educational purposes only.

Cat. No.	Product Type	Includes	Price
S99444	Bowles Type	Adjustable chrome plated	\$13.50/Ea
	Stethoscope	binaurals, PVC Y-tubing	
S11008	Dual Earpiece-Teaching	3.8 cm Bowles chestpiece,	\$44.50/Ea
	Stethoscope	two sets of adjustable chrome	
		plated binaurals, PVC Y-tubing	

# **Stethoscopes Set**

Used to monitor heart rate or measure blood pressure.



Multiple colors

Cat. No.	Price
S81689	\$20.50/Fa

# Baseline<sup>™</sup> Fingertip Pulse Oximeter

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

- Compact
- Lightweight
- · Large, easy-to-read display
- Automatically shuts off when not in use
- Comes with wrist lanyard

Cat. No.	Price
S20764	\$69.75/Ea

# Eisco<sup>™</sup> Dial Type Blood Pressure Apparatus

Dial type apparatus with hook-and-loop fastening cuff.

- High quality inflammation rubber bulb
- Includes carrying case

Cat. No.	Price
S23638	\$34.00/Ea





# **Advanced Manual Inflate Large Cuff Blood Pressure Monitor**



### Fast and

accurate blood pressure measurement.

- Offers two innovative features, the Pressure Rating Indicator<sup>™</sup> and Irregular Heartbeat feature
- Pressure Rating Indicator provides a snapshot of your blood pressure classification based on the measurements, and eliminates the guesswork

Cat. No.	Price
S37585	\$67.50/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
- 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

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

Cat. No.	Description	Includes	Price
S98668A*	Urinalysis Using Simulated Urine Kit	Teacher's guide, student study guide copymasters, kit with simulated urine samples (250 mL each of patient X, patient Y, patient Z, control), Benedict's reagent (25 mL), biuret solution (25 mL), Sulkowitch's reagent (25 mL), pH test strips, microscope slides, coverslips, graduated plastic cups (30 mL), graduated pipets (1 mL)	\$76.00/Ea
\$37732	Simulated Urine Refill	4 x 250 mL each of simulated urine samples: Patient X, Patient Y, Patient Z, and Control	\$34.25/Ea

### **Glucose Test Strips**

Used in biological courses for detection of glucose concentrations.

- Used in osmosis and diffusion experiments, to identify differences in the diffusion of starch when compared to glucose, in a semi permeable membrane system
- Concentration ranges: 0, 100, 300, 1,000 and 3000 mg/dL



Cat. No.	Price
S80218	\$29.75/Ea

### **Artificial Urine**

#### Simulated urine.

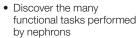
- · Quantity: 500 mL
- · To identify variety of physiological conditions with urine test strips; Exception: S07903 (Artificial Urine with Ketone) is not designed for use with test



Cat. No.	Product Type	Price
S07900	Artificial urine with Vitamin C	\$24.00/Ea
S07901	Artificial urine with Phosphates	\$24.00/Ea
S07902	Artificial urine with Albumin	\$24.00/Ea
S07903	Artificial urine with Ketone	\$24.00/Ea
S07904	Artificial urine with Glucose	\$24.00/Ea
S07905	Artificial urine Set of 4	\$97.00/Ea
	(Control, with phosphates, albumin, glucose)	
S07906	Artificial urine Control	\$16.00/Ea

# **Kidneys** and Blood **Filtration**

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



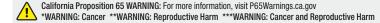
- · Students will create an artificial kidney model to filter simulated blood
- · Visually determine if filtration of the simulated blood has occurred
- · Chemically test the resulting filtrate to detect any waste material removed by the kidney
- · Contains enough materials for 15 groups

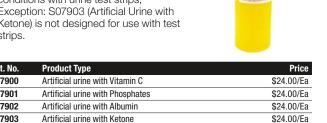
#### Kit Includes:

- · Simulated unfiltered blood (100 mL)
- 15 pipets (1 mL)
- · 30 salt test strips • 30 urea test strips
- · Dialysis tubing (15 pieces)
- 15 plastic cups

Cat. No.	Price
S98651***	¢65.75/E0







# Kemtec<sup>™</sup> Tallquist Hemoglobin Scale

Allows quick assessment of blood hemoglobin levels.

Apply blood and allow to absorb into one of the test papers. Compare the color scale to determine the percent and weight of hemoglobin in blood under normal and anemic conditions.

- Includes color chart and 150 test papers
- Grade 9-14

ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.



Cat. No.	Price
S06452	\$34.00/Ea

# Kemtec<sup>™</sup> Blood Typing with Saliva Kit

Students use their own saliva to determine their ABO blood type from the antigen secretors found in their saliva.

- 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
- Materials sufficient for up to 50 tests



- Grades 9-14
- Class size: 24 students

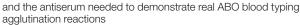
Materials must ship 2nd day air on ice in summer months. Reply card items are only shipped within the continental United States. Cells should be used within 20 days.

ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

# Kemtec<sup>™</sup> ABO Blood Typing Kit (with Red Blood Cells)

Learn the genetic inheritance patterns of blood types.

- This kit includes preserved red blood cells and eliminates the need to draw blood samples from students.
- Kit should be ordered two weeks before needed.
- Contains both red blood cells



- Students use real red blood cells provided, eliminating the need to draw blood samples
- Perform, compare, and contrast slide and test tube blood typing
- Red cells have a life expectancy of at least 20 days after arrival, but must be kept refrigerated
- Grades 9-14
- Class size: 36 students

 $\triangle$  ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

Cat. No.	Price
S17020	\$399.00/Ea

### **Blood Typing**

Learn about determining blood types.

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



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# The activity includes:

- Overview of blood typing
- Hands-on determination of simple simulation reactions for blood ABO typing
- Known and control samples 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

	•	·
Cat. No.		Price
S94671		\$76.25/Ea









# Kemtec<sup>™</sup> ABO Blood Simutype Kit

Use safe simulated human blood and antisera to study genetic inheritance of ABO blood types.



Blood typing has always been an important biology exercise because it introduces a number of key concepts. But the concern over AIDS, plus the general trend away from "invasive" laboratory work, has led to many schools to drift away from including this vital exercise. This kit provides an opportunity for schools to re-introduce blood typing studies.

• Students use genetic information to answer

paternity questions, determine genotypes and phenotypes of blood donors, and determine possible donors and recipients for blood transfusions

- Ideal for biology, immunology, genetics, or forensics study
- Grades 7-12
- Class size: 24 students (with multiple reuses)

ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

 Cat. No.
 Price

 \$19316
 \$147.00/Ea

# ABO/ Rh Blood Typing Tray

Contains depression wells to perform ABO and Rh blood-typing.

- Made of styrene
- Washable and reusable
- Quantity: 100/Pk.

ALERTS: DOT: Non regulated



# Kemtec<sup>™</sup> Anti-A, Anti-B, Serum Set, Lyophilized, 3-300 L

Lyophilized sera allow prolonged, stable storage and shelf life.

Sera are tested for HbsAg and HTLV-III (AIDS), however standard laboratory practices should be used when handling and all biological products should be treated as if capable of transmitting disease. Refrigerate after reconstituting to extend shelf life.



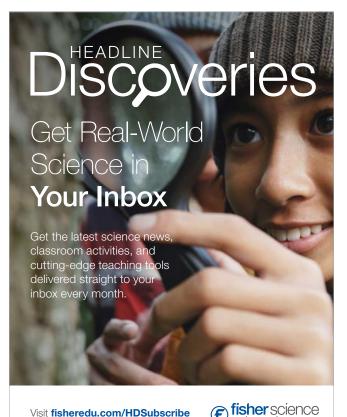
#### **Kit Contains:**

- Two droppers
- Vials
- Anti-A serum, lyophilized
- Anti-B serum, lyophilized
- Each set reconstitutes to 5 mL Anti-A serum and 5 mL Anti-B serum with addition of sterile or distilled water
- For grades 9 to 14

⚠ ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

 Cat. No.
 Price

 \$06449
 \$119.00/Ea





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education

# Kemtec<sup>™</sup> Anti-Rh, Anti-D Serum, Lyophilized

Lyophilized sera allow prolonged, stable storage and shelf life.

Sera are tested for HbsAg and HTLV-III (AIDS), however standard laboratory practices should be used when handling and all biological products should be treated as if capable of transmitting disease. Refrigerate



after reconstituting to extend shelf life.

- Each vial reconstitutes to 5 mL Anti-Rh serum with addition of sterile or distilled water
- For grades 9 to 14

#### Kit Contains:

- Dropper
- Vial
- Anti-D (Rh) serum, lyophilized

riangle ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

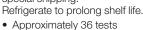


# Kemtec<sup>™</sup> Anti-Rh, Anti-D Serum Set (5 mL)

Highly specific monoclonal antiserum to Rh factor tested for HbsAg and HTLV-III (AIDS).

Standard laboratory practices should be used and all biological products should be treated as if capable of transmitting disease. Product is perishable and requires special shipping.

Refrigerate to prolong shelf



• For grades 9 to 14

#### **Kit Contains:**

- Anti-D serum
- Dropper

⚠ ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.



# Kemtec<sup>™</sup> Anti-A, Anti-B Serum Set (5 mL)

Highly specific monoclonal antisera tested for HbsAg and HTLV-III (AIDS).

Standard laboratory practices should be used and all biological products should be treated as if capable of transmitting disease. Product is perishable and requires special shipping. Refrigerate for prolonged shelf life.



- Approximately 36 tests
- For grades 9 to 14

#### **Kit Contains:**

- Two droppers
- Anti-A serum, 5 mL
- Anti-B serum, 5 mL

riangle ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

Cat. No.	Price
S06447	\$73.25/Ea

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

Use for blood typing of real human blood. Each vial contains enough antisera for 75 students. Refrigeration recommended until used. Materials from human-derived cell lines were found to be negative in tests for Hepatitis B, HIV and EBV.



- Available in 5 mL 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.	Includes	Price
S07802	Anti-A and anti-B	\$38.00/Ea
S07803	Type A, B and Rh	\$77.00/Ea
S07804	Anti-Rh	\$38.25/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
- In this activity, students will measure the total cholesterol level for four patients using test strips and simulated blood



- After analyzing their results and the lifestyles of each patient, students will recommend treatment plans to help the patients lower their cholesterol
- The cholesterol levels for each patient will be re-tested, 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.	Price
S27124	\$106.00/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
- In this activity students will perform white blood cell counts on five different patient samples and suggest possible diagnoses based on the white blood cell levels
- 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.	Price
S27125	\$41.00/Ea

# Blood-Based Cancer Diagnostics

Use specific cell surface protein markers of cancer cells for their identification.



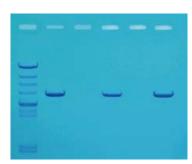
Cancer cells differ from normal cells by the combinations of proteins that are present on their surfaces. Antibodies against these proteins will specifically bind to cancer cells and not to normal cells. This allows early detection of cancer and potentially a way of delivering cancer therapies. In this simulation experiment the reaction of cancer cell markers and their corresponding antigens are demonstrated.

Cat. No.	Price
S94672	\$120.00/Ea

# Detection of Mad Cow Disease

Educate students about mad cow disease.

Bovine spongiform encephalopathy (BSE), better known as mad cow disease, is a fatal neurodegenerative condition in cattle that



can devastate the beef industry. One mode of BSE transmission throughout cattle populations is by the inclusion of infected cow or sheep parts in cattle feed, a practice that was banned in the United States in 1997.

- Examine simulated PCR products from several feed mills
- Determine any possible violations of the 1997 ban
- Does not contain human DNA

Cat. No.	Price
S95607	\$130.00/Ea



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### Kemtec™ AIDS Simutest Kit

Students run simulated ELISA tests for AIDS.



- Students experience the world of biotechnology and learn about HIV virus within this one hour lab investigation
- Students run eight patient samples in simulated ELISA to determine which patients may have contracted the HIV virus
- · Includes simulated patient serums, conjugate, chromagen, and reusable treated ELISA microtiter plates
- Safe for student use as it contains no blood serum or infectious diseases
- For grades 11 to 14
- Class size: 24 students

⚠ ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

Cat. No.	Price
S06451	\$388.00/Ea

### **How Does a Doctor Test for AIDS?**

#### Students perform simulated **ELISA** testing for AIDS.

- · Immunology-based diagnostic tests are used to detect various diseases
- Enzyme Linked Immunosorbent Assay (ELISA) tests for antibodies in the blood, which indicate infection
- Students perform a simulated ELISA test to identify "infected" samples and compare them to control samples
- Complete in 45 minutes
- No human blood or components are used in

this experiment	
Cat. No.	Price
\$94603	\$91.00/Ea

# What Is an Epidemic and How **Does an Infection Spread?**

Students develop skills for accurately transferring solutions using pipets.

This experiment contains solutions to demonstrate how an infection is spread in a population through contact with simulated body fluids.

- · Learn how infections are spread from one person to many others
- Transfer solutions from one tube to another
- · Test a solution for the presence of an acid or a



ALERTS: This

kit contains chemical(s) that may be harmful if used improperly. This kit is to be used by students only with teacher supervision.

Cat. No.	Price
S94602	\$91.00/Ea

### Kemtec<sup>™</sup> Dental Cavity **Potential Kit**

#### Kit promotes dental health.

Designed by Temple University's School of Dentistry, this kit allows students to quantitatively determine the bacterial content of their own mouths and to measure the rinsing capacity of their mouths.



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- Provides students with enough information to radically change eating habits in order to prevent tooth decay
- Grades 6-12
- Class size: 24 students

ALERTS: Choking hazard (1) Small parts. Not for children under 3 yrs.

Cat. No.	Price
S25001	\$262.00/Ea



#### **Human Charts & Models**

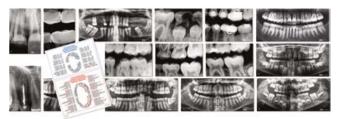
# Broken Bones X-Rays

Shows detailed real X-ray view of common breaks to a variety of human bones.



Cat. No.	Description	Price
S12883	Broken Bones X-Rays	\$37.50/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.	Price
S40793	\$25.50/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

\$38.50/Ea



### **Fixed Bone X-Rays**



# Ideal for young learners as well as secondary education science.

- 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.	Price
\$40789	\$25.75/Ea



# Healthcare Training and Education Supplies

Explore a complete range of healthcare education products to help prepare the nurses and allied health professionals of tomorrow.

### Nursing

Find a range of tools to develop basic knowledge and learn advanced skills.

- Clinical Classroom Facilities
- Infection and Spill Control
- Patient Care Training

#### Allied Health

Train for specialized fields, like audiology and laboratory science.

- Primary and Emergency Care Education
- Diagnostic Education
- Health Science Specialties
- Other Specialty Training

Visit **fisheredu.com/healthcare-education-products** to learn more.





# Flip Chart and Online Multimedia Lessons: Human Body

These multimedia kits can help students master key life sciences concepts.

- 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
- Each lesson features animated, narrated tutorials; interactive exercises and 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
- Flip chart set features 10 laminated, double-sided charts
- Includes a teacher guide with copymaster activities and review questions
- Grades 6-10



- 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 covers:
   Disease & the Body's Defenses; Inflammation; Immune Response; Illness; Immunity/Allergies; Skin; Male/Female Reproductive Systems; Fertilization & Fetal Development; and Systems Working Together

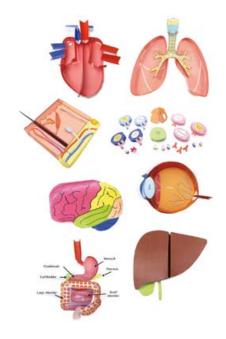
Cat. No.	Description	Price
S81114	Fuel & Transportation Flip Chart/Online Media Lessons	\$58.25/Ea
S81115	Maintaining the Human Body Flip Chart/Online Media Lessons	\$58.25/Ea
S81113	Moving & Controlling the Human Body Flip Chart/Online Media Lessons	\$58.25/Ea

# **Human Body 3D Model Kits**

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

- Gain a critical understanding of complex structures and 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 and evaluate their understanding of key scientific concepts
- Grades 6-10

Cat. No.	Description	Price
S81471	Human Brain 3D Model Kit	\$39.75/Ea
S81473	Human Eye 3D Model Kit	\$39.75/Ea
S81474	Human Heart 3D Model Kit	\$39.75/Ea
S81477	Human Lungs 3D Model Kit	\$39.75/Ea
S81470	Human Digestive System 3D Model Kit	\$39.75/Ea
S81476	Human Liver and Spleen 3D Model Kit	\$39.75/Ea
S81478	Human Skin 3D Model Kit	\$39.75/Ea
S81475	Human Immune System 3D Model Kit	\$53.00/Ea





# **Anatomy Models Set**

#### 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 (\$95867)

- 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 (9.75 cm) when assembled

#### Heart (\$95866)

- Features superior vena cava, inferior vena cava, right atrium, tricuspid valve, right ventricle, pulmonary valve, pulmonary artery, left atrium, mitral valve, left ventricle, aortic valve and aorta
- Opens when assembled so students can explore from the inside

• 29-piece model measures 5 in. H (12.7 cm) when assembled

#### Human Body (\$95868)

- 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 (11.4 cm) when assembled

#### 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 (23.4 cm) when assembled



#### ⚠ ALERTS: CHOKING HAZARD. Small parts. Not for children under 3 yrs.

		•	•	
Cat. No.	Туре	For Use With (Application)	Includes	Price
S95867	Anatomical Model, Brain	For deeper understanding of how the parts of the brain work together	Cerebellum, frontal, parietal, temporal and occipital lobes, corpus callosum, brain stem, hippocampus, ventricles, insula, corpus striatum, internal capsule and lentiform nucleus, fact guide and photo-illustrated assembly instructions	\$32.50/Ea
S95868	Anatomical Model, Human Body	Teacher resources and gain a hands-on understanding of how organs and systems interact	Brain, skull, heart, rib cage, lungs, liver, stomach, pancreas, kidneys, small intestine, large intestine and spine guide, photo-illustrated assembly instructions, step-by-step, photo-illustrated assembly instructions	\$32.50/Ea
S95869	Model, Human Skeleton	Teacher resources and gain a hands-on understanding of how organs and systems interact	Skull, rib cage, humerus, spinal column, radius, ulna, hand, pelvis, femur, tibia, fibula, foot and partial circulatory system, photo-illustrated instructions	\$32.50/Ea
\$95870	Model, Anatomy Set	Teacher resources and gain a hands-on understanding of how organs and systems interact	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	\$117.00/Ea

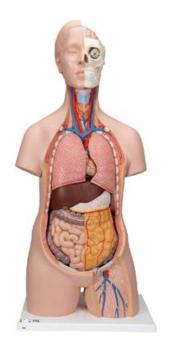
## **Deluxe Human Torso Models**

# Introduce your class to human anatomy with these economical and mounted life-size torsos – includes 3B SMART ANATOMY.

Introduce your class to human anatomy with this economical and mounted life-size torso.

- · 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
- Height: 34 in. (13.6 cm)

Cat. No.	Description	Size	Price
S17150H	Torso with Head, 12-Part	Height: 34 in. (13.6 cm)	\$858.00/Ea
S17150C	School Torso with Head, 14-Part	Height: 34 in. (13.6 cm)	\$991.00/Ea
S171454	Torso with Head, 18-Part	34 x 15 x 10 in. (85 x 37.5 x 25 cm)	\$1,149.00/Ea



## **Deluxe Human Torsos**

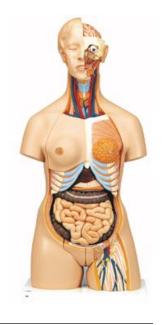
28- or 24-part models are precision-crafted and hand-painted – includes 3B SMART ANATOMY.

- 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

- 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
- 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
S17139	Model, Torso, Deluxe Dual Sex with Opened Back	\$1,924.00/Ea

# Eisco<sup>™</sup> Torso with Interchangeable Sex Organs Model, 24 Parts

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: 15 x 9.5 x 35 in. (38 x 24 x 89 cm)

Cat. No.	Price
S15533	\$1,207.00/Ea

# h English key 4 x 89 cm) Price \$1,207.00/Ea

# Muscle Torso, Two-Sex, with Pregnancy Insert

Has 31 removable parts - includes 3B SMART ANATOMY.

- · Head with nose and mouth cavity
- · Pharynx with skull base exposed
- Four-part brain half with arteries
- Six-part eyeball with optic nerve
- Deltoids, chest and belly with 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

Cat. No.	Description	Price
S17150F	Muscle Torso, Two-Sex, with Pregnancy Insert	\$4 103 00/Fa





## 33-Part Muscular Model

#### Comprehensive anatomy study - includes 3B SMART ANATOMY.

Make sense of human anatomy with this one-half life-size model featuring 33 parts and interchangeable reproductive organs.

- Anatomical details conform closely to the human body
- Shows superficial and deep muscles, vessels and nerves and internal organs
- Mounted on stand

- Removable arms, muscles, calvarium and thoracic cover
- Height: 33 in. (82.5 cm)

**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

Cat. No.	Description	Price
S17150D	33-Part Muscular Model	\$4,882.00/Ea



# Mini-Musculature Figure Model

#### One-quarter life-size with full-size value - includes 3B SMART ANATOMY.

Our Mini-Musculature Figure Model stands only 22.5 in. (56.3 cm) 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	\$1,005.00/Ea

# **Muscular Anatomy Model**

#### For anatomical studies - includes 3B SMART ANATOMY.

- 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

Cat. No.	Description	Price
S17168A	Muscular Anatomy Model, 23-Part Master Series	\$10,544.00/Ea
S17168	Muscular Anatomy Model 45-Part Master Series	\$11 333 00/Fa





## **Muscular Arm**

Six-part, three-quarter life-size left arm to study musculature – includes 3B SMART ANATOMY.

- 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 structure and attachments
- Height: 22.75 in. (57.8 cm)
- Includes stand

Cat. No.	Description	Price
S17136	Muscular Arm	\$909.00/Ea



# Eisco™ Muscular Arm Model, Six Parts

Dissectible muscular arm model for anatomical study.

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

Cat. No.	Price
S15589	\$430.00/Ea



# **Muscular Leg**

Nine-part left leg defines the muscular process - includes 3B SMART ANATOMY.

- Shows superficial and subjacent muscles, tendons, vessels, nerves and bones
- Three-quarters life size

- Height: 30 in. (76.2 cm)
- · Includes stand

Cat. No.	Description	Price
S171381	Muscular Leg Model	\$1.282.00/Fa



# Flexible Human Skeleton Model

Medical-grade, natural-cast skeleton suitable for instructional and chiropractic demonstrations – includes 3B SMART ANATOMY.

- 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 and dust cover

Cat. No.	Description	Price
S171562	Flexible Human Skeleton Model	\$1,040.00/Ea





## **Deluxe Human Skeleton**

Medical-grade skeleton works for both instructional illustration and chiropractic demonstration – includes 3B SMART ANATOMY.

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. (170 cm)
- · Includes: manual and dust cover

# Skeleton with Muscle Origins and Insertions (S07912)

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 accurate and realistic weight of around 200 bones
- Three part assembled skull
- Individually inserted teeth
- Removable limb
- Height: 67 in. (170 cm)
- Weight: 15.87 lb. (7.2 kg)

**WARRANTY:** Three years



Cat. No.	Description	Price
S171564	Deluxe Human Skeleton	\$1,560.00/Ea
S17138A	Skeleton with Muscle Origins and Insertions; Height: 66.9 in. (169.9 cm)	\$1,251.00/Ea
S07912	Skeleton with Muscle Origins and Insertions; Height: 75.8 in. (192.5 cm)	\$1,225.00/Ea
	3 2 2 2 3 2 2 3 2 3 2 3 2 3 2 3 3 3 3 3	* / * * * * * * * * * * * * * * * * * *

# Eisco™ Human Skeleton Painted Model

Shows muscle origins in red and insertions 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, 60 in. (152.4 cm) tall stand with free rolling wheels
- Includes key card calling out 167 muscle features

Cat. No.	Price
S15623	\$814.00/Ea



## **Adult Human Skeleton**

Premier line of skeletal models offers educators medical-grade quality – includes 3B SMART ANATOMY.

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

Cat. No.	Height	Description	Price
S17133B	70 in. (170cm)	Life-Size Skeleton on 5 ft. Stainless Steel hanging roller stand with 5 casters	\$579.00/Ea
S17137	33 in. (80cm)	Mini Skeleton on 5 ft. Stainless Steel hanging roller stand with 5 casters	\$720.00/Ea



## **Disarticulated Human Skeleton**

Supports individual study and authentic assessment - includes 3B SMART ANATOMY.

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 body's entire framework
- Examine individual bones, versus a fully assembled skeleton
- One hand and one foot are articulated with wire to show correct orientation of the bones
- The 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.

\$47.75/Ea



Cat. No.	Description	Price
S17131B	Disarticulated Human Skeleton (no painted parts)	\$730.00/Ea
S07911	Disarticulated Human Skeleton (with painted parts)	\$1,097.00/Ea

# Eisco<sup>™</sup> Human Skeleton Miniature Model With Stand

Miniature model for classrooms.

- Model gives general idea of bones
- · Mounted on stand

Cat. No. S15583

• Height: 51 cm (20 in.)



# United Scientific<sup>™</sup> Human Skeleton Model

Half-size model for demonstrating basic anatomic features of a human skeleton.

- The carpals and tarsals are fused, but the rest of the skeleton demonstrates natural joint movement
- Heavy metal base adds extra stability and the skeleton is constructed of rugged plastic
- Features unbreakable ribs, stainless steel screws, brackets and springs to resist corrosion
- Detailed key included

Cat. No.	Price
\$13132	\$95.00/Ea



# Eisco<sup>™</sup> Human Life Size Skull Color Coded Model

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

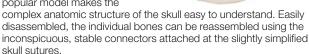
- Three parts, including calvaria, base of skull, and mandible
- Hand painted, color-coded to show the structures of the human skull
- · Mandible is articulated to demonstrate movement
- Model features realistic details, textures and bony landmarks
- Made of durable and sturdy plastisol polymer. This washable model is easy to clean and will hold up to years of handling.

Cat. No.	Price
S13501	\$109.00/Ea

# Beauchene 22-Part Adult Human Skull Model

Can be disassembled into 22 individual bones – includes 3B SMART ANATOMY.

The human skull consists of many individual bones that gradually grow together we develop and grow. This popular model makes the



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

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
S98673	Model, Human Adult Skull, Bone Colored	\$639.00/Ea
S98674	Model, Human Adult Skull, Didactic Colored	\$733.00/Ea

# Half of Head and Neck – includes 3B Smart Anatomy

See both internal and external features – includes 3B SMART ANATOMY.

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 is mounted on stand with base
- Dimensions: 9 x 7 x 18 in. (22.5 x 17.5 x 45 cm)

Cat. No.	Description	Price
S171061	Half of Head and Neck	\$640.00/Ea

# Eisco<sup>™</sup> Human Eye Model in Bony Orbit

Enlarged eye model for detailed anatomic studies.

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

Cat. No.	Price
S15546	\$242.00/Ea

# **Eisco™ Prehistoric Man Skull Set**

#### Set of six natural-sized replicas of prehistoric skulls.

- Natural-sized replica of prehistoric skulls
- Includes:
   Afarenis cranium,
   Africanus cranium,
   Habilis cranium,
   Erectus cranium,
   Neanderthalensis
   cranium and Steinburgen

Neanderthalensis cranium and Steinheim skull



Cat. No.	Price
S15607	\$343.00/Ea



# **Deluxe Flexible** Spine Model with **Femur Heads**

Used for anatomic study, and is flexibly mounted with movable femur heads for effective demonstration

- includes 3B SMART ANATOMY.
- · Sacral opening and exposed brain stem for further study
- Height: 32.7 in. (83.0 cm)
- Extremely good value and durability
- · Full pelvis and occipital plate
- Fully flexible mounting throughout spine
- L3-L4 disc are prolapsed on spinal column
- View the spinal nerve exits and cervical vertebral arteries
- Male pelvis

Cat. No.	Description	Price
S28476	Flexible Spine Model, Deluxe with Femur Heads	\$360.00/Ea



# **Functional Joint Models**

Life-size, vinyl plastic ligamented joint models that simulate actual joint movement - includes 3B SMART ANATOMY.

- · Medical-quality joints have ligaments that actually
- · Demonstrate abduction, anteversion, retroversion, internal and external rotation, and more
- · Shoulder Joint consists of the scapula with part of the clavicle and the top portion of the
- 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
S171341	Functional Elbow Joint Model	\$147.00/Ea
S171343	Functional Hip Joint Model	\$147.00/Ea
S171342	Functional Shoulder Joint Model	\$147.00/Ea
S171344	Anatomical and Cellular Human Functional Knee Joint Bio Model	\$147.00/Ea





Life-size human articulated hand bone model provides an incredible amount of realism and detail. The flexible wire assembly allows for full movement demonstration.

- · Life-size, anatomically accurate
- · Realistic details, textures, and bony landmarks
- Ideal for both student and patient educational demonstrations
- Made of durable and sturdy PVC plastic
- Held together with flexible wire to allow for full range movement demonstration of the human hand
- Washable

Cat. No.	Includes	Price
S27433	Left Side	\$30.00/Ea
S27432	Right Side	\$30.00/Ea

# Eisco™ Human Clavicle **Bone Model**



Life-size human clavicle bone model, commonly referred to as the collarbone, provides an incredible amount of realism and detail.

- · Life-size, anatomically accurate model
- Realistic details, textures, and bony landmarks
- Made of durable and sturdy PVC plastic
- Ideal for both student and patient educational demonstrations
- Washable

Cat. No.	Includes	Price
S27453	Left Side	\$8.05/Ea
S27452	Right Side	\$8.05/Ea

# **Classic Tooth Model Series**

Five representative types of adult dentition that are individually mounted on removable stands - includes **3B SMART ANATOMY.** 

- Two-part lower incisor with longitudinal section
- Two-part lower canine with longitudinal section
- · Lower single-root pre-molar
- Two-part lower twin-root molar with longitudinal section showing caries attack
- Three-part upper triple-root molar with longitudinal section and caries insert

Cat. No.	Description	Price
S90791	Classic Tooth Model Series	\$720.00/Ea

81



# Eisco™ Human **Lower Jaw** Model

Includes 16 extractable teeth and features a partial section of the jaw that can be removed for further study.

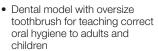
- · Anatomically accurate model
- Natural size and color
- · Realistic details, textures, and bony landmarks
- · Ideal for educational and medical demonstrations
- Made of durable, washable PVC plastic to withstand years of student and instructor use
- Use for individual study or as replacement for missing/damaged pieces to a full skeletal model set

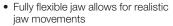
Cat. No.	Price
S27458	\$33.25/Ea

## Teeth Model with Brush

This large demonstration model is a great tool to teach adults and children proper oral hygiene skills. The upper

and lower half of an adult's dentition is shown and a flexible joint between the jaws allows for easy movement.





· Displays an upper and lower half of an adults dentition



# **Smokers Foul Mouth Display**

Displays a variety of harmful effects caused to the mouth by cigarette smoking.

- Handpainted model is hinged to demonstrate jaw movement
- · Details gum disease, tooth decay, lip cancer and more
- Includes two removable tongues one tongue depicts "hairy tongue" and other portrays leukoplakia and tongue cancer
- Mouth is mounted on handpainted model of the lit end of cigarette
- · Comes with simulated cigarette used as pointer

Cat. No.	Price
S12792	\$302.00/Ea

# Mr. Dip Lip

Shows the effects of dipping on inner lip, gums, and teeth.

- Mouth opens and closes from the rear and the flesh-like lips may be retracted
- · Comes with carrying case

Cat. No.	Price
S12795	\$234.00/Ea

# **Foot & Ankle Skeleton Model** with Ligaments

This model is mounted on a base and comes fully articulated to show the natural movement of the feet. All ligaments of the ankle are shown in detail. A great teaching aid for anatomy classes.





Cat. No.	Price
\$80993	\$48.25/Ea

# **Human Skin Model** from Scalp Section

This plastic model is enlarged 50x from a human scalp section.

- Enlarged 50x
- · This relief model displays contrasting colors of the three skin layers - epidermis, derm and subcutis. with nerves, sweat glands, hair roots and vessels
- · Labeled diagram







## Skin Model

Study hair, receptors, nerves, glands, and burn pathology.

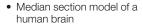
Durable plastic replica features six models in one to allow students to study hair, receptors, nerves, glands, and burn pathology.

- Details skin of the scalp, armpit, and sole of the foot, each magnified 75X
- · Lets students identify the epidermis, dermis, and subcutaneous
- Utilizes contrasting colors to show subcutaneous layers, including a network of blood vessels, sectioned hair follicles, arrector muscles, sebaceous glands, sweat glands, receptors and their nerve fibers, connective tissue, and fat
- Supplied answer key helps students understand 46 features of the skin
- Fully labeled reverse side details the progressive damage associated with three degrees of burns

Cat. No.	Price
S171254	\$751.00/Ea

# Eisco<sup>™</sup> Human Brain Model, Four-Part

Four parts support a deeper understanding of brain anatomy.





- Features are numbered
- Supported on base

Cat. No.	Price
S95928	\$122.00/Ea

# **Skin Cancer Model**

Vividly displays six different stages of malignant melanoma – includes 3B SMART ANATOMY.

- Enlarged eight times, this model shows great detail.
- Sides show the levels of melanoma invasion into the skin layers according to Clark (I-V), and the tumor thickness according to Breslow (in mm)
- Top view shows the individual stages of externally visible skin changes, allowing for an assessment according to the "ABCDE" criteria



- Five original color illustrations on the base show various types of malignant melanomas
- Dimensions: 5.6 x 4 x 4.6 in. (14 x 10 x 11.5 cm)

Cat. No.	Description	Price
S90793	Skin Cancer Model, Enlarged 8X	\$118.00/Ea



Different separations of the brain expose different levels of detail and complexity – includes 3B SMART ANATOMY.

- 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 12.7 cm)

#### Eight-Part Brain (\$17110)

- 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 a variety of brain systems

#### 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
- Removable base

Cat. No.	Description	Price
S17110	Eight-Part Brain	\$396.00/Ea
S17108	Two-Part Brain	\$205.00/Ea
S98678	Two-Part Brain	\$162.00/Ea

# Soft Foam Cross-Section Eye Model

# Open up nature for inner exploration.

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

Cat. No.	Price
S95872	\$24.00/Ea



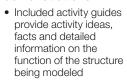


Visit us online at **fisheredu.com** to learn more about our programs, services and resources.



# **Cross Section Models: Plant/** Animal Cell, Human Heart/Brain

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





· Key structures are labeled on one half of the model, with the other half left unlabeled for testing purposes

Cat. No.	Description	Price
S90818	Model, Human Heart Cross Section	\$25.00/Ea
S90819	Model, Human Brain Cross Section	\$25.00/Ea

# Six-Part Eye Model

Dissects into sclera with cornea and eve muscle attachments, choroid with iris and retina, lens and vitreous humour. The model is three times full size for optimal viewing and accessibility. includes **3B SMART ANATOMY.** 

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

Cat. No.	Description	Price
S17118C	Six-Part Eye Model	\$178.00/Ea

# Eisco™ Human Eye Model, Seven-Part

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

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



Giant	Hand	ls-On	Eyebal	
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Six times larger than life with five removable parts.

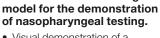
- · Easy to visualize and comprehend the structure of the eye
- Divides into hemispheres for detailed internal study
- Provides hand-numbered structures that are detailed in a two-page guide
- Mounted on a wooden base
- Dimensions: 6 x 6 x 6 in. (15.2 x 15.2 x 15.2 cm)



Cat. No.	Price
S17807	\$361.00/Ea

# Eisco™ Nasal Swab **Training Model**





- · Visual demonstration of a nasopharyngeal swab test used to test for many respiratory viruses and airborne diseases
- · Fully three-dimensional, with internal anatomy shown on cross-section
- Made of polyvinyl chloride (PVC) plastic for durability, and mounted onto a stand
- A great addition to a laboratory, a doctor's office, or a science classroom
- Designed by subject matter experts and hand-painted using vibrant, eco-friendly paint
- Model with stand measures 12 x 10 x 8 in.

Cat. No.	Price
S28932	\$189.00/Ea

# Four-Part Enlarged Ear

The complex structures of the ear are exposed - includes 3B SMART ANATOMY.

- · This rugged vinyl plastic model shows the outer, middle and inner
- Enlarged approximately three times life size
- Mounted on a board
- Dimensions: 13 x 7 x 7.5 in. (32.5 x 17.5 x 18.8 cm)

#### Separates into four parts:

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







# Two-Part Heart Model, 3/4 **Full-Sized**

The heart's major functions and structures are numbered for easy memorization - includes **3B SMART ANATOMY.** 

- 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 12 cm)



Cat. No.	Description	Price
S17153C	Two-Part Heart Model, 3/4 Full-Sized	\$115.00/Ea

# Eisco™ Hand **Painted Human** Heart Model -Life Size

A portion of the heart model can be removed for further study.

Numbered, hand-painted human heart model on a base. An identification key card is included.



Cat. No.	Price
S15622	\$76.00/Ea

# Master Series™ **Blood Circulatory System**

See a schematic presentation of blood circulation - includes **3B SMART ANATOMY.** 

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



Cat. No.	Price
S171262	\$549.00/Ea

# **Occluded Artery Model**

**Demonstrates effects** of high cholesterol.

- Tube represents an artery constricted by plaque, which forms on artery walls when there is excess cholesterol in the blood
- Blood in the artery slows or stops completely when model is turned over
- Demonstrates the importance of

keeping cholesterol under control	
Cat. No.	Price
S12789	\$108.00/Ea

# **Auditory Ossicles**

Life-size replicas of middle-ear bones.

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



NEW TOWN

Cat. No.	Price
S17835	\$112.00/Ea

# MICROanatomy™ Artery and Vein

14 times larger than life - includes 3B SMART ANATOMY.

- 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 the anterior segment to display the orifice of a feeder vein and two venous valves
- Relief of two veins illustrates the functional aspect of the venous
- Dimensions: 10.4 x 7.6 x 7.4 in. (26 x 19 x 18.5 cm)

Cat. No.	Price
S90777	\$521.00/Ea
	** ***



# MICROanatomy<sup>™</sup> Muscle Fiber Model

Magnified 10,000 times – includes 3B SMART ANATOMY.

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



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

Cat. No.	Price
S68279	\$455.00/Ea

# MICROanatomy<sup>™</sup> Bone Structure

Extremely detailed model shows a typical structure of a tubular bone enlarged 80 times – includes 3B SMART ANATOMY.

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 cross and longitudinal section planes 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
- Mounted on a base
- Dimensions: 10.1 x 7.4 x 5.7 in. (26 x 19 x 14.5 cm)

Cat. No.	Price
S90774	\$251.00/Ea

# MICROanatomy<sup>™</sup> Kidney

Extremely detailed model shows the morphologic/ functional units of the kidney – includes 3B SMART ANATOMY.

- 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 of the vascular supply

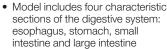


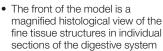
• Dimensions: 9.2 x 9.9 x 7.4 in. (23.5 x 25.5 x 19 cm)

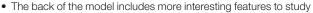
Cat. No.	Price
\$90780	\$471.00/Ea

# MICROanatomy<sup>™</sup> Digestive System

Illustrates the fine tissue structure of the digestive system – includes 3B SMART ANATOMY.







• Dimensions: 11.8 x 10.4 x 7.4 in. (29.5 x 26 x 18.5 cm)

Cat. No.	Price
S90778	\$477.00/Ea

# **Stay Connected with the**Fisher Science Education Team

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# Liver with Gallbladder, **Pancreas and Duodenum**

Anatomical, base-mounted model offers detailed look at bladder, pancreas and duodenum - includes 3B SMART ANATOMY.

Features include:

- Ducts
- Duodenum
- Vessels
- · Extra-hepatic ducts with gallbladder
- · Main pancreatic duct and other orifices
- Dimensions: 1.6 x 8 x 7.2 in. (4 x 20 x 18 cm)





Study the liver in detail - includes 3B SMART ANATOMY.

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

- The left portion highlights a liver section with several lobules
- The right portion is a magnified view of a lobule from the liver section on the left
- Dimensions:



S90779	\$478.00/Ea
Cat. No.	Price
6 x 10.4 x 7.4 in. (15 x 26 x 18.5 cm)	

# **Eisco™ Kidney Section Model**

The kidney section model is a set of three hand-painted models mounted to a board that demonstrate several anatomical features of the human kidney. The three models include a kidney cross section,



nephron and blood vessels, and glomerulus cross section.

- Kidney cross section 3X life size
- Nephrons and blood vessels 120X life size
- Kidney glomerulus cross section 700X life size
- 3 models mounted on same base
- · Supplied with English key card
- Dimensions: approximately 56 x 30 x 7 cm

Cat. No.	Price
S13492	\$174.00/Ea

# Heart, **Two Times** Life-Size

Twice the size of a real heart, this model helps students to fully grasp the complex nature of the organ - includes 3B SMART ANATOMY.

- · Constructed of durable vinyl plastic
- · Sectioned so both ventricles and atria open
- · Shows valves and major blood vessels



# Master Series<sup>™</sup> Lungs with Heart, **Diaphragm** and Larynx

Life-size model with many removable parts - includes **3B SMART ANATOMY.** 

#### Features of the thorax model:

- · Displays the viscera of the thorax
- · Durable vinyl construction
- Mounted on base for display
- Dimensions: 16 x 12 x 5 in. (40 x 30 x 12.5 cm)

#### Contains these removable parts for added anatomical detail:

- Two-part larynx
- Trachea with bronchial tree
- · Two-part heart
- Subclavian artery and vein

F-018

- Vena cava
- Aorta
- Pulmonary artery
- Esophagus
- Two-part lung (front halves removable)

Diaphragm

Cat. No. **Price** S17155 \$806.00/Ea



# Lung Demonstration Model

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

- · Housed within a partial vacuum
- Plastic construction to prevent breakage

⚠ ALERTS: Not a toy. Product intended for ages 13 and up. May contain latex!



Cat. No.	Price
S28099	\$34.75/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, durable, high-density polyethylene (HDPE) plastic and aluminum

#### Determine five different respiratory volumes:

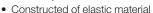
- Tidal Volume (TV)
- Inspiratory Capacity (IC)
- Inspiratory Reserve Volume (IRV)
- Expiratory Reserve Volume (ERV)
- Vital Capacity (VC)

Cat. No.	Product Type	Price
S65066	Student Wet Spirometer	\$1,108.00/Ea
S17046A	Mouthpiece	\$87.00/Pk
351071		ψ01.00

# CT Bronchial Tree Models

Created using computer tomography data of a human male – includes 3B SMART ANATOMY.

**S06777:** Created on the basis of computer tomography data of a human male, approx. 40 years of age. Natural spatial 3D relations and reciprocal location of segmental bronchi can be preserved and demonstrated in a realistic way.



 Larynx with hyoid bone, epiglottis, and trachea with primary and lobar bronchi are depicted in one color on bronchial tree model

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- Larynx is detachable at the level of second tracheal cartilage and divisible in the median plane
- Epiglottis is mounted flexibly

**\$68295:** This unique model preserved the natural spatial 3D 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: 8.8 x 7.2 x 14.8 in. (22 x 18 x 37 cm)

Cat. No.	Description	Price
S06777	CT Bronchial Tree	\$1,028.00/Ea
S68295	CT Bronchial Tree with Larynx and Transparent Lungs	\$757.00/Ea

# **Smoked Lung**

Shows the effect of cigarette smoking on lungs.

- 3D model of right lung with emphysema and cancer
- Opening at the top reveals grayish-white fibrous-feeling cancer
- Made from BIOLIKE<sup>™</sup> synthetic tissue
- Ideal for individual and group education

Cat. No.	Price
S12796	\$224.00/Ea





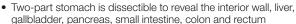
# **REMOTE LEARNING**ENGAGE YOUR STUDENTS

Find tools and materials to keep your students engaged at fisheredu.com/remotelearning.

# **Digestive System** Four-Part Model

A two-part model that reveals a stomach's interior walls - includes **3B SMART ANATOMY.** 

- Life-size, vinyl plastic model demonstrates the digestive tract from mouth to rectum
- · Nasal and oral cavities, pharynx, larynx with epiglottis and esophagus are sectioned medially



- · Model separates into four parts and is mounted
- Dimensions: 31 x 13 x 4 in. (77.5 x 32.5 x 10 cm)

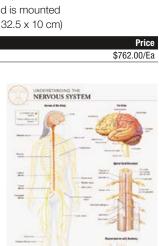


# Post-it<sup>™</sup> **Anatomy** of Nervous **System Chart**

An illustrated teaching aid that covers the key features of the human nervous system.

- · Features detailed drawings and identifications
- · Printed on heavy, quality stock paper, backed with 3M adhesive Post-It material - stick and re-stick to virtually any surface
- Can be repositioned without damaging the surface
- Pack of 10





# **Nervous System**

This nervous system relief model shows a schematic representation of the central and peripheral nervous systems - includes **3B SMART ANATOMY.** 

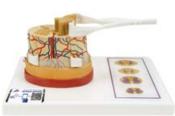
- · Securely mounted on a firm backing
- · Features a schematic presentation of human central and peripheral nervous
- · No removable parts, so it will remain intact for many years
- Approximately one-half life size -Dimensions: 32 x 13 x 2 in.



Cat. No. S171131 \$645.00/Ea

# **Spinal Cord Model with Nerve Endings**

Magnified to a scale of about 5:1 - includes 3B **SMART ANATOMY.** 



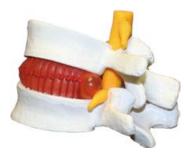
- The spinal cord is formed by a central channel surrounded by "gray matter," with an outer layer of
- The base features illustrations of various cross sections through the white and gray matter at the neck, torso, lumbar and sacral regions
- Dimensions: 10.2L x 7.5W x 5.2 in. H (26 x 19 x 13 cm)

Cat. No.	Price
S96427	\$383.00/Ea

# **Prolapsed** Invertebral **Disc Model**

This model consists of two lumbar vertebrae that shows a herniated intervertebral disc with the nucleus pulposus protruding through a weakened

section of the outer fibrous ring.



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- Consists of two lumbar vertebrae flexibly mounted with the spinal nerves and spinal cord shown
- Shows a herniated intervertebral disc with the nucleus pulposus protruding through a weakened section of the outer fibrous ring
- · Made exclusively from high-quality medical PVC

Cat. No.	Price
S80981	\$95.00/Ea



# Eisco<sup>™</sup> Lymph Nodes Model

Lymph nodes model with incoming and outgoing lymph vessels, germinal centre, sinus, capsule, trabecula, artery and vein. Mounted on a base, includes English key card.

- 3D model of lymph nodes, perfect for laboratory study
- Detailed anatomy includes incoming lymph vessel, germinal centre, sinus, outgoing lymph vessel, capsule, trabecula, incoming artery, outgoing vein
- Vividly hand painted
- Identification key card included (English)
- · Supplied with stand
- 24 in. tall, 15 in. wide, and 9.5 in. long

**WARRANTY:** 1-year limited manufacturer warranty





Free standing model representing major components of the human urinary system.

- Comes with four parts
- Right kidney is dissected to show cortex, medulla, pyramids, calyces, pelvis and origins of renal artery and vein
- Bladder can also be removed and opened for detailed learning
- Durable and great learning tool in all classrooms and laboratories
- Mounted on a 10.5 x 7.5 in. board
- Dimensions: 7.5 x 5 x 13.5 in. (19 x 13 x 34 cm)

Cat. No.	Price
S07149	\$88.00/Ea



# **Eisco™ Model Human Testis**

Model of human testis showing all details.

- · Mounted on base
- Numbered with English key card
- Size 13 x 13 x 27 cm approx.
- Weight 350 g approx.

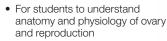


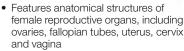
 Cat. No.
 Price

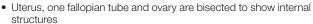
 \$15572
 \$66.50/Ea

# Eisco<sup>™</sup> Human Ovary Model

Anatomically accurate representation of female reproductive organs.







• Size: 30 x 14 x 21 cm (11.8 x 5.51 x 8.26 in.)

Cat. No.	Price
S15618	\$102.00/Ea

# **Pregnancy Series**

Eight-stage pregnancy models - includes 3B SMART ANATOMY.

The 14-part series includes depictions of placenta, umbilical cord, ovaries, fallopian tubes and cervix. Eight natural-size, vinyl plastic models show the uterus



- 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
- 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 x 5 x 9 in. (12.7 x 12.7 x 22.9 cm)

Cat. No.	Price
S17101	\$1,397.00/Ea



# Male Pelvis Master Series<sup>™</sup>

Male pelvis comes with removable parts – includes 3B SMART ANATOMY.

- 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 below) for comparative studies





Removable bladder and reproductive organs – includes 3B SMART ANATOMY.

- 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 above) for comparative studies

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Cat. No.	Price
S17143	\$352.00/Ea



#### Simulators & Medical Trainers

# Bandaging Simulator with Ostomy

Simulator with 14 different wounds to practice wound management, cleaning and bandaging techniques.

- Consists of a female torso with flexible, lifelike skin that realistically responds to adhesives and a range of of bandaging procedures
- Wound closures feature surgical staples and sutures that cannot be removed
- Supplied in a carrying case

#### Simulator features the following wounds:

- Thyroidectomy
- Mid-sternal split with chest tube drains (surgical staples)
- Mastectomy with simulated drain
- Cholecystectomy with simulated T-tube
- · Laparotomy (surgical staples)
- Appendectomy
- Colostomy



- Abdominal hysterectomy (surgical staples)
- Thoractomy (surgical staples)
- Nephrectomy (surgical staples)
- Laminectomy
- Sacral decubitus ulcer (stage II)

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 Leg amputation above-the-knee residual limb (surgical staples)

 Cat. No.
 Price

 S98685
 \$1,394.00/Ea

# Upper Stump Bandaging Simulator

Helps teach how to bandage the upper body.

- Upper torso with two arms: one amputated above elbow, other above wrist
- Slightly extended arms to facilitate bandaging
- Compressibility of material closely duplicates actual experience with patient







# Trainer for Wound Care and Bandaging Techniques

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

Students can practice wound care 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.

The torso features wounds and drain systems that patients often have after surgical procedures:

- · Wound after a thyroidectomy, center
- · Wound after a sternotomy (with drain), center
- · Wound after a mastectomy (with drain), right
- · Wound after a spleenectomy (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 residual limb), left
- Colostomy
- · Decubitus (grade 2), center; rear

Cat. No.	Price
\$27333	\$1,671.00/Ea

# Economy Suture Pad with Suction Base

Designed to be used to learn and practice 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.	Price
S72152	\$42.75/Ea



Designed by a physician, this kit includes everything needed to practice suturing skills, including a variety of wound types and needle sizes. The innovative plastic suture pad is durable and can be reused many times.



- Designed for practicing suturing skills
- Endorsed by professionals for medical, nursing and veterinary students, as well as for surgical, emergency and anesthesia residents
- Innovative suture pad is durable and does not tear, allowing each cut to be sutured multiple times
- Features a realistic texture and a variety of common cuts and lacerations, irregular wounds, and Y-shaped wound for corner stitches
- Eisco Exclusive: cuts with irregular widths to approximate a wound that has been cleaned of debris, dead skin, plus slits to practice securing chest tubes, catheters, drains, and central lines
- Dimensions: (6.5 x 5.75 x 0.5 in.)
- For practice and educational use only

Cat. No.	Product Type	Price
S27476	Practice Pad	\$29.75/Ea
S27477	Complete Practice Kit	\$58.00/Ea

# **Suture Practice Arm Dark Skin**

Arm with soft vinyl skin over foam enables hundreds of suture practice sessions.

- With three wounds, several cuts which can be placed all over arm, hand and fingers, and sutured several times
- Soft and pliable material guarantees that sutures will not pull out when tightened
- Comes with starter suturing kit that includes suturing needle and thread



Cat. No.	Price
S07958	\$333.00/Ea

# **Hemorrhage Control Arm Trainer**

Improve pre-hospital patient care training with instructional and hands-on training of hemorrhage control, including wound packing and tourniquet application.



- Trainer simulates full arm of adult male with realistic outer anatomy
- Skin is made of high quality SKINlike<sup>™</sup> silicone to simulate human skin and tissue haptics
- Deep laceration or stab wound (5 cm)
- Large caliber gunshot wound through and through (GSW) – Shows bony landmarks and palpable vessel damage
- · Junctional wound in the shoulder area
- Easy to clean and transport (bag included)
- Low-cost

#### Bleeding:

- Bleeding of each wound is controlled with manual blood pump system simulating venous or arterial pulsatile blood hemorrhage
- Trainer functions as a stand-alone simulator but can be worn by a volunteer for added realism, and in field training using carrying strap of bag
- Bleeding can be simulated realistically, including direct feedback (stop of bleeding) when trainee successfully manages the hemorrhage – Bleeding stops when tourniquet has been correctly applied
- Secure blood reservoir (2 L) with manual blood pump system simulating venous or arterial pulsatile blood hemorrhage

- No back flow during wound packing
- Contains 250 mL of artificial blood concentrate

#### Settings:

- Application of tourniquet can be made high and tight or 5 to 8 cm (2 to 3 in.) above the wound
- Each wound can be hidden with dedicated cover to offer modular injury scenarios
- Each wound bleeds independently
- No batteries needed

#### Uses:

- Suitable for Tactical Combat Casualty Care (TCCC) and Civilian Casualty Care training
- For realistic training of bleeding control and management of traumatic injuries on the arm
- Trainer for hemorrhage control on upper extremity with realistic wound and bleeding simulation
- Trainees gain confidence in managing difficult bleeding using tourniquets and wound packing
- For field use

**DISCLAIMERS:** Note: Tourniquet not included

 Cat. No.
 Price

 \$04752
 \$2,286.00/Ea

# **Suture Practice Arm and Leg**

Simulated limbs with soft vinyl skin over stitchable foam provide a life-like suturing experience for students.

- Realistic skin texture with wrinkles and pores
- Soft and pliable for easy sewing; sutures will not pull out when tightened

several times

- Each limb has three "wounds" that can be sutured repeatedly until surrounding skin wears out; then, new
- Over 100 cuts can be made on the trainer, and each can be sutured

Cat. No.	Product Type	Includes	Price
S06807	Suture Practice Arm	Starter suturing kit	\$333.00/Ea

# **Suture Practice Arm**

Offers realistic anatomy that enables complex suture training.



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

Cat. No.	Price
S27332	\$530.00/Ea





# Intramuscular Injection Simulator

Features palpable anatomical landmarks that help students identify the correct placement for intramuscular injections.

 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 provide an immediate or subsequent performance check under training conditions
- The life-like silicone skin is durable and easy to exchange as needed

#### Includes:

- 2 AA batteries
- Detailed instruction manual
- · Replacement skin
- 5 mL injection syringe
- 21 gauge (0.8 x 50 mm) injection needle

Cat. No.	Product Type	Description	Price
S27329	Intramuscular Injection Simulator - Upper Arm	Features all of the important anatomical palpable landmarks such as acromion and humerus	\$1,830.00/Ea
S27328	Intramuscular Injection Simulator - Upper Leg	Features all of the important anatomical, palpable landmarks such as patella and greater trochanter	\$2,364.00/Ea

# **I.V. Injection Arm**

# Realistic I.V. injection training for healthcare and medical teams.

Made of 3B SKINlike™ silicone, this injection arm is suitable for group instruction because of its high quality, stain resistance and soft, easy-to-clean material.

# Ideal for practicing:

- Intravenous injections (basilic vein, cephalic vein, median cubital vein and dorsal venous rete of hand)
- Correct puncture of peripheral veins for blood sampling
- Positioning of a venous catheter
- Dimensions:
   28.9 x 7.4 x 5.5 in. (74 x 19 x 14 cm)
- Weight: 6.2 lb. (2.8 kg)

Cat. No.	Price
S96636	\$1,284.00/Ea

# Advanced Four-Vein Venipuncture Training Aid

# Model permits the injection of fluids and withdrawal of blood.

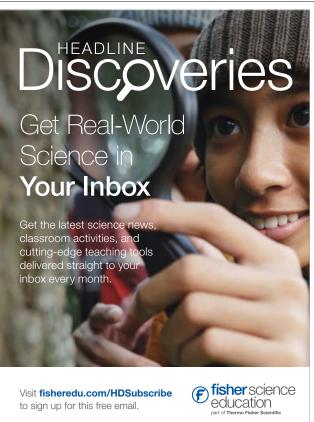
Allows user to improve competency and technique by progressing from easier, larger veins to the more difficult, smaller and deeper veins

 Four barely discernable blue veins in three different sizes, with the fourth vein deeply placed in a semi-transparent, tissue-like material



- "Pop" is felt as the needle enters the vein, followed by a realistic "flashback" of simulated blood, confirming the proper needle placement.
- Stain-resistant Dermalike<sup>™</sup> material offers 50% less needle drag when accessing the underlying veins, improved tear resistance to allow twice as many "sticks," no "oily/sticky" surface and requires no baby powder
- The blue veins are made of Dermalike V<sup>™</sup>, a material with properties more similar to real veins, as you do not use excessive force to access the veins compared to the latex tubing still being used by other manufacturers
- Size: 5 × 10 × 1.5 in.

Cat. No.	Description	Price
S07960	Dark Pigmentation	\$399.00/Ea
S07959	Light Pigmentation	\$399.00/Ea





# Twin Stim<sup>™</sup> Digital Electrotherapy Unit

A TENS and EMS combination for muscle stimulation and pain relief. The unit is a battery operated pulse generator that sends electrical impulses via electrodes to the body to reach the nerves and underlying muscle group.

- Choice of five modes of TENS and two modes of EMS—synchronous and alternate
- Dual channel with isolation between channels
- Asymmetrical, bi-phasic square pulse wave form
- · Stores 60 sets of operation records
- Adjustable pulse amplitude: 0 to 100mA peak into 500 Ohm load each channel
- Adjustable pulse rate: from 2 to 150Hz (1Hz/step)
- Adjustable pulse width: from 50 to 300 microseconds (10µS/step)
- Adjustable on time: 2 to 90 seconds (1 sec./step)

- Adjustable off time: 2 to 90 seconds (1 sec./ step)
- Adjustable ramp time: 1 to 8 seconds (1 sec./ step)
- Total recorded time: 999 hours
- Voltage: 0 to 50V
- Adjustable timer: from 5 to 60 minutes or continuous (adjustable in 5 minutes each step);
   Treatment time countdown automatically
- Dimensions (L x W x H): 10.1 x 6.1 x 2.45 cm

WARRANTY: Three years.

**DISCLAIMERS:** Note: Requires prescription.





# **Patient Care Manikin PRO**

#### Developed for scenario-based patient care training.

- Simulates an adult, life-size patient, with interchangeable genitals
- The flexible joint design allows users to place the manikin in a range of treatment positions
- Made of durable, unbreakable, and water-resistant plastics that can withstand everyday training

The following clinical nursing and patient care skills and competencies can be trained and evaluated:

#### Patient and personal care:

- Transfer skills: lifting, carrying, and moving
- Bed care
- · Position changing and alignment
- Bathing (genital care)
- Hair care (washing, combing, drying)
- Care and cleaning of eyes, ears and nose
- Personal hygiene and mouth denture care (partially removable prosthesis)
- Bandaging (includes amputation residual limb)
- Wound treatment and care (surgical staple seam, laceration and abrasions)
- Communication skills, especially step-by-step explanation of care measures

#### Medical care:

- Prevention of bedsores (decubitus)
- Decubitus evaluation (stages 2-4)
- · Decubitus care
- · Prevention of muscle cramps
- · Prevention of pneumonia
- · Prevention of blood clots (thromboses)
- Prevention of healthcare associated infection (HAI) by measures of medical asepsis and clean techniques

- Inhalation therapy
- Oxygen inhalation
- Use of ventilation bag (mouth to mouth and mouth to nose)
- · Artificial respiration, oxygen treatment
- Care of tracheostomy
- Care of diabetic foot syndrome (DFS)
- · Ostomy care (colostomy)
- Irrigation of eyes and ears
- Intramuscular injections (buttocks)
- · Subcutaneous injections (upper arms and thighs)
- · Subcutaneous infusions

# The PRO version includes removable organs for these additional patient care training features:

- Enema administration
- Male and female catheterization CH14
- Gastric (stomach) lavage
- Intestinal irrigation
- · Irrigation of the bladder
- · Irrigation of the vagina

Cat. No.	Description	Price
S07108	Patient Care Manikin PRO	\$4,293.00/Ea





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# Cardionics SAM II™ Student Auscultation Manikin

Used for teaching heart, lung, and bowel sounds.

#### **Product Features:**

- 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
- A laptop is included and can be connected to the manikin for access to lessons and other helpful
- 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 and portable
- It has the largest library of sounds (24 sounds) and videos (36 videos)
- · 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.	Color	Price
S27941	Dark Skin	\$15,441.00/Ea
S27940	Light Skin	\$15,441.00/Ea

# Cardionics SAM Basic™ Student **Auscultation Manikin**

Used to teach heart, lung, and bowel sounds.

#### **Product Features:**

- 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
- Students will hear sounds through the SimScope as they place it over the heart, lungs and bowels
- · Uses include: individual learning, group lectures, and for viewing phonocardiograms

#### **Delivery content:**

- The SimScope software and site license
- USB cable
- · One SAM t-shirt
- User's manual

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

- Lightweight and 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
- for

<ul><li>A portable SAM Basic Male Auscultation Torso</li><li>One SimScope stethoscope</li></ul>		<ul> <li>The SimScope Wi-Fi upgrade allows remote selection of sound scenarios</li> </ul>
Cat. No.	Color	Price
S27945	Dark Skin	\$4,100.00/Ea
S27944	Light Skin	\$4,100.00/Ea



# Cardionics SAM 3G™ Student Auscultation Manikin

The world's most innovative auscultation product currently on the market. **Product Features:** 

- 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

#### How is SAM 3G Student Auscultation Manikin different?

- It is lightweight and portable
- It has a new and user friendly software program
- Phonocardiogram
- It has the largest library of sounds (24 sounds) and videos (36 videos altogether)
- It has the complete Lesson Guide
- It can be used with any stethoscope
- It has a palpable carotid pulse, ECG videos and waveform for heart sounds
- Users can create and save own case
- Users can setup password protected lectures for student assessment

Cat. No.	Color	Price
S27939	Dark Skin	\$24,990.00/Ea
S27953	Light Skin	\$24.990.00/Ea

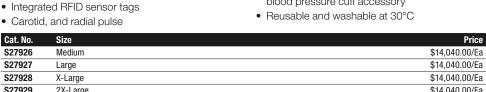
# **Bionic Hybrid Auscultation Simulator (BHS)**

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
- · Responds in real time to diagnosis and treatment with direct feedback
- · Can be worn by students and/or manikins

- Features 5-wire E kg 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™ Wi-Fi
- Includes SimScope<sup>™</sup> Wi-Fi, tablet and blood pressure cuff accessory

Cat. No.	Size	Price
S27926	Medium	\$14,040.00/Ea
S27927	Large	\$14,040.00/Ea
S27928	X-Large	\$14,040.00/Ea
S27929	2X-Large	\$14,040.00/Ea





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SAM



# Cardionics PAT Basic<sup>™</sup> Pediatric Auscultation Trainer without Wi-Fi

Uses a SimScope stethoscope to simulate pediatric heart, lung, and bowel sounds.

- The PAT Basic trainer SimScope stethoscope uses sounds library technology to simulate pediatric heart, lung, and bowel sounds
- Using the provided SimScope stethoscope, users are able to access a large variety of pathological conditions in order to customize scenarios
- Students will hear sounds through the SimScope as they place it over the heart, lungs and bowels
- PAT Basic consists of a Male Manikin, a SimScope, SimScope software, site license, USB Cable, SAM T-Shirt, and user's manual

Cat. No.	Color	Price
S27947	Dark Skin	\$2,400.00/Ea
S27946	Light Skin	\$2,400.00/Ea



## Cardionics PAT Pediatric Auscultation Trainer

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 bm and 90 bm)
- 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
- With programmable and password-protected lectures, many institutions find value in having numerous instructors utilize PAT

Cat. No.	Color	Price
S27943	Dark Skin	\$15,441.00/Ea
S27942	Light Skin	\$15,441.00/Ea



# **Airway Management Trainer with Stand**

Ideal for practicing airway management skills.

- · Realistic size and anatomy
- Realistic anatomy includes mouth, tongue, oral pharynx, larynx, epiglottis, vocal cords, trachea, and esophagus
- · Separate lungs for auscultation
- Inflatable stomach bladder that indicates esophageal insufflation
- Practice suctioning and oral and nasal intubation techniques
- Includes a stand to mount the head

Cat. No.	Product Type	Price
S07965	Infant Airway Trainer	\$1,046.00/Ea
S07966	Child Airway Trainer	\$1,203.00/Ea



# **CPRLilly PRO+**

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.

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, rate, and 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 desobstuction
- · 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 Wi-Fi connection and intuitive App interface
- Practical carrying bag with training mat for comfortable practice
- Dark skin mannequin available

#### Includes:

- 1 CPRLilly PRO+ training mannequin
- 1 tablet (S27323 only)
- 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+	\$2,978.00/Ea
S30514	CPRLilly PRO+ without Tablet	\$2,753.00/Ea

# Cardionics SimScope<sup>™</sup> The Hybrid Simulator without Wi-Fi

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

- SimScope plays the programmed heart, breath and bowel sounds specific to each correct anatomical location enabling a realistic standardized patient encounter
- 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, 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

Phone 1-800-955-1177



Cat. No.	Price
S27952	\$6,181.00/Ea



# **Basic Life Support** Simulator, BASICBilly+

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™.

#### Solid and Compact Manikin for **Effective Training:**

- 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
- · Visible chest rise when the lungs are
- Force required for effective chest compressions has been carefully studied to offer a realistic training approach
- Operation requires (2) AA batteries, not included

#### The CPR Apps 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 quidelines of the American Heart Association (AHA) and the European Resuscitation Council (ERC)

#### Overview of the 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



- 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 (1022626) is available to equip previously purchased BASICBIlly manikins with the AHA required direct feedback functionality

Cat. No.	Color	Price
S27925	Dark Skin	\$437.00/Ea
S27924	Light Skin	\$437.00/Ea

# **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
- 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
- specialist medical training

#### Includes:

- · Base body
- Vertebral bar
- LOR insert (loss-of-resistance)
- · 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





# **Gynecologic Skills Trainer P91**

# Adult-sized lower torso designed to provide hands-on training of gynecologic skills.

Trainer will be useful for demonstrating the following procedures:

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

#### Additional Features:

- SKINlike<sup>™</sup> high-quality silicone offers a realistic look, feel and texture
- Four different uteri modules with externally palpable abnormal pathologies are easily interchangeable and can be completed with 6 different cervices
- Adult-sized female lower torso with accurate anatomy, including ischial spines, pubic bones and sacrum
- The torso is in an examination position, and adding the examination wedge can further simulate a gynecologic exam chair position
- · Bladder can be simulated full or empty
- · Offers realistic flexibility of the vaginal canal wall

- Seamless, flexible skin for practice of speculum placement
- Labia can be separated
- Urethra built for catheterization simulation with CH14 catheter
- Abdominal wall can be removed quickly and without any tools to change the uterus and the cervix
- Latex free

#### Includes:

- Gynecologic Skills Trainer P91
- Uteri set (4):
- Normal uterus
- · Bicornate uterus
- Uterus with 3 removable myomas structures
- · Enlarged uterus
- 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.
 Price

 \$27320
 \$1,494.00/Ea

# **Episiotomy and Suturing Trainer**

Provides training for managing and closing injuries associated with vaginal births.

- · Median, mediolateral, and lateral episiotomy
- Vaginal tears
- Labial tears

# 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

- 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

#### Includes:

- Silicone insert
- · Base and stand





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# **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.	Price
S27319	\$1,984.00/Ea

# **P90 Birthing Simulators**

Provides training for normal and complicated deliveries, plus obstetric emergencies.

# Fetal positioning assessment and manipulation:

- The probability of delivery complications is less likely when abnormal fetal positions are detected before labor begins
- Students will learn fetal position detection methods, manual delivery techniques, and emergency intervention protocols

# Delivery skills and techniques covered:

- 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)
- · 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 articulated fetus with open mouth, tiltable head, shoulder blade, and anatomically-accurate fontanelles
- Life-sized adult female lower torso, anatomically-accurate 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 descent, 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 articulated fetal baby
- Umbilical cord
- Placenta

Cat. No.	Description	Price
S27321	Birthing Simulator PRO	\$1,889.00/Ea
S27314	Birthing Simulator - Basic	\$1,311.00/Ea



# **Episiotomy Suture Training Module**

Training Module for use with P90 Birthing Simulator

Cat. No.	Description	Price
S27316	Episiotomy suture training module	\$240.00/Ea



# **Postpartum Hemorrhage Trainer P97 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 CH14 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.
 Price

 \$27315
 \$829.00/Ea

# Postpartum Hemorrhage Trainer – PPH Trainer P97

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<sup>™</sup> 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 CH14 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.
 Price

 \$27317
 \$1,403.00/Ea





## **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

#### 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.
 Price

 S27326
 \$226.00/Ea

## **P93 PRO Catheterization Simulator Set**

Procedures can be realistically demonstrated, practiced and assessed. Set has suprapubic catheter which students can use with the trainer.

- Female and male catheterization with realistic resistance
- · Three levels of adjustable narrowing of urethra
- Soft and movable foreskin and labia
- · Anatomically realistic pelvic structure
- Liquid outflows if catheterization is successfully carried out
- Transparent bladder can be checked, and the abdominal wall can be removed
- Includes suprapubic catheter for practicing, cleaning and caring
- Stands securely on table with the help of non-slip feet
- Magnetic connectors for quick set-up and dismantling
- Easy to clean, maintain and can be completely taken apart
- Sponge present inside prevents build-up of moisture

WARRANTY: 3 Year



 Cat. No.
 Price

 \$37619
 \$1,538.00/Ea

# **P93 PRO Male Catheterization Simulator**

Procedures can be realistically demonstrated, practiced and assessed. Simulator has suprapubic catheter which students can use with the trainer.

- · Male catheterization with realistic resistance
- Three levels of adjustable narrowing of urethra
- Soft and movable foreskin
- · Anatomically realistic pelvic structure
- Liquid outflows if catheterization is successfully carried out
- Transparent bladder can be checked, and the abdominal wall can be removed
- Includes suprapubic catheter for practicing, cleaning and caring

- Stands securely on table with the help of non-slip feet
- Magnetic connectors for quick set-up and dismantling
- Easy to clean, maintain and can be completely taken apart
- Sponge present inside prevents build-up of moisture

WARRANTY: 3 Year





## **Bowel Care and Enema Trainer P16**

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.

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.

# 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 feces (DRF)

#### Faaturas

- Simulates the buttock of a patient with femoral stumps, anus and bowel in left lateral recumbent position
- Upper buttock is soft and flexible; 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<sup>™</sup> sturdy silicone to simulate

human skin and tissue haptic during DRE and DRS

- Anus stays closed and remains impenetrable after the removal of the catheter
- Contains two 3D hemorrhoid models to demonstrate complication or contraindication:
- One displaying a rectum frontal section with hemorrhoids, anal fissures and fistulae
- An external view with swollen anal prolapse and hemorrhoid knots
- 3D models are attached with magnet so the model can be passed from student to student
- 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
- Secure fluid reception reservoir
- 1 DRE, 1 DRS and 1 DRF insert
- 2 magnetic 3D anatomical models of Hemorrhoids
- 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.
 Price

 \$27325
 \$1,220.00/Ea

# **Decubitus Trainer**

Allows students to learn about professional wound assessment (examination, measurement and description), wound care and bandaging techniques for various stages of decubitus.

Flexible material provides realistic training in changing and applying 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.





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# **Buttock Injection Simulator**

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

#### **Features**:

 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 21 g/0.8 injection needle and 5 mL syringe



 Cat. No.
 Price

 \$27327
 \$2,364.00/Ea

## **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.
 Price

 \$27331
 \$186.00/Ea









**Description** Cat. No. **Personal Protective Equipment** Ultraspec<sup>™</sup> 2000 and 2001 Eyewear S43186 Ultraspec 2000 and 2001 Eyewear S43187 Fisherbrand™ Powder Free Nitrile Gloves S79585S Fisherbrand Powder Free Nitrile Gloves S79585M Fisherbrand Powder Free Nitrile Gloves S79585L Fisherbrand Powder Free Nitrile Gloves S79585XL 3M™ N95 Particulate Respirators 8210 S47062A S27422 Eisco™ Disposable Pleated Face Masks Eisco Disposable Pleated Face Masks S27423 TerraCycle™ Disposable Masks Zero Waste Box™ System S88854115 First Aid North Bulk First Aid Kits S98414B S25053 Fisherbrand Latex-Free Cohesive Flexible Bandages, Assorted Colors S72160 DR Instruments Bandage Scissors, Stainless Steel BD Disposable Alcohol Swabs S17032 Stat Strip<sup>™</sup> Adhesive Bandages S47527C Stat Strip Adhesive Bandages S47527D North Bulk First Aid Kits S98414B **School Emergency Kits** LifeSecure™ SchoolGuard™ Hi-Visibility Teacher and Staff School Emergency Kit S29690 LifeSecure SchoolGuard Hi-Visibility Classroom Evacuation and Lockdown Kit S29692







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Laboratory Furniture	
Diversified Spaces™ Tall Storage Cabinet with Glass Doors	S14213
Diversified Spaces Mobile Storage Cabinet with Maple Top	S42457
Diversified Spaces Hot Water Mobile Station	S47366
Fisherbrand Vinyl Stool without Back Chrome - Desk Height with Casters in Grade A Vinyl	S0100775
Educational Models	
3B Scientific™ Consequences of An Inactive Lifestyle 3D Display	S00282
3B Scientific The Consequences of Obesity 3D Display	S00279
3B Scientific The NEW Heart of America PLUS with Coronary Bypass Vessels	S00280
Biohazard Waste	
Bel-Art™ SP Scienceware™ Biohazard Disposal Bags with/without Warning Label	S43258
Bel-Art SP Scienceware Biohazard Disposal Can	S96727
Facility Safety	
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# Notes



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