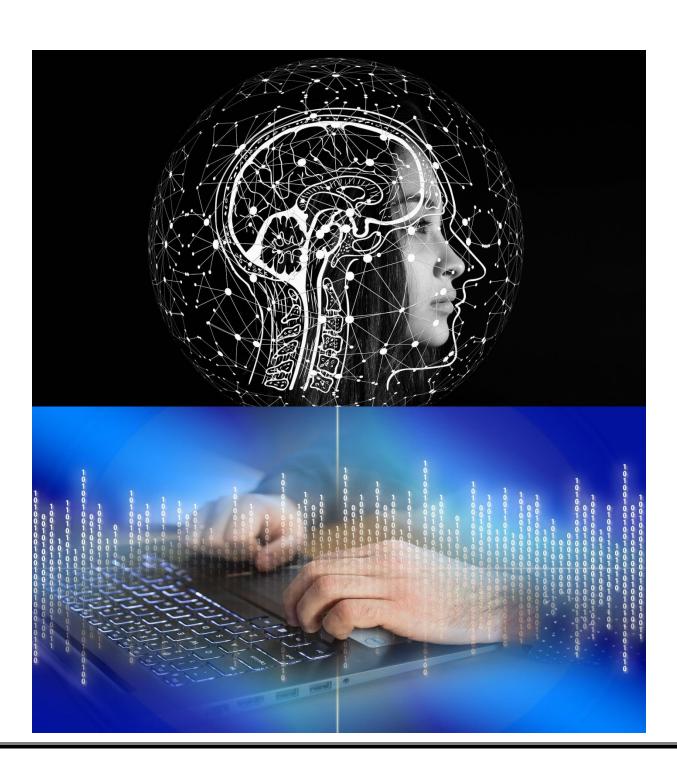
# Science, Technology & Learning Kits and Education Programs Price List (Ages 16 - Adult)

Scientifics Direct: Science, Technology & Learning Kits and Education Programs Price List



### '65 Ford Mustang V8 Engine Deluxe Kit





### One Word: LEGENDARY

An officially licensed product by Ford Motor Company, this deluxe '65 Mustang V8 deluxe motor kit was developed using the original, vintage factory blue prints. At nearly 1:3 scale, this transparent 200-piece replica of a 289 K-Code V8 features a sound box with a real 'Stang recording. Precision interlocking plastic components require no tools or glue. All parts move exactly as they do in the life size model.

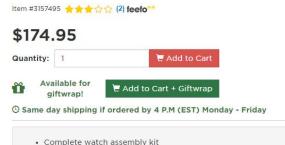
Includes elaborate full-color 100-page handbook including illustrated assembly instructions along with engine & car history, stunning full color photos and tons of Ford archive material. Approximately 2-3-hour assembly time. Scale 1:3. Assembled size:: 12" x 10.5" x 8".

Requires 3 AA batteries (not included). For ages 14+.

| More Infor  | mation     |
|-------------|------------|
| Age Range   | Teens      |
| Age Range   | Adults     |
| Price Range | Over \$100 |

### Watchmaking Kit - Galileo





- · Hand wound (battery free)
- · Over 40 hour power reserve
- · Lifetime warranty & 24/7 support
- · Includes specialized watchmaking tools
- · Detailed online assembly guide with video
- Sapphire glass case with clear case back



(Hover over image to zoom in)



#### Take the Time to Actually Make Time

For serious hobbyists with a gentle hand and plenty of patience, these DIY mechanical watch kits will truly teach you the fundamental skills behind watch assembly. Each kit includes the specialized precision watch waking tools and a pair of nitrile gloves necessary to build your own fullyfunctional wrist watch. Illustrated on-line assembly instructions and a stepby-step assembly video walk you through the intensive process. The vendor provides online support as well. Your finished battery-free watch is powered by hand winding or by kinetic movement and is 5 ATM waterproof. Leather wrist strap is included. Approximate 3 hour build time. Lifetime warranty & 24/7 support.

### Style: GALILEO

The Galileo possesses a rich blue reminiscent of the Cosmos. What better compliments a dreamer than a watch that captures the mystique of the stars, a fascination that has entranced humankind for millennia.

#### Specs:

- · Colors: blue and gold
- · 44mm case diameter size
- · Sapphire glass case with clear case back
- ETA 6497-1 style movement
- · 17 jewel fully mechanical movement
- · Hand wound and battery free
- · 40 hour power reserve (running time)
- · Genuine leather straps
- Glowing lume hands

| More Infor  | mation     |
|-------------|------------|
| Age Range   | Adults     |
| Price Range | Over \$100 |

### Astroscan® Helion 10 x 50 Binocular



\$44.95

Quantity:

Available for giftwrap!

Same day shipping if ordered by 4 P.M (EST) Monday - Friday

Perfect for either star-gazing or terrestrial views
Features fold-down objective lens caps and removable eyepiece caps
Includes soft carry case with straps
Improved optics -now with 10x magnification





### All-Purpose Binocular for Terrestrial and Celestial Viewing

Powerful, portable and easy-to- use, you will find the Astroscan® Helion Binocular perfect for stargazing, moon viewing, comet tracking as well as bird watching, hunting, travel, sports and more! This high quality binocular is made of aluminum alloy features BK7 glass prisms with 10x magnification.

Includes fold-down objective lens caps, removable eyepiece caps, straps and a soft carry case.

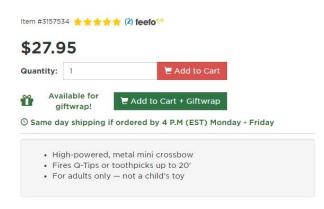
### Specs:

| Chassis Material    | Aluminum Alloy |
|---------------------|----------------|
| Prism Glass         | BK7            |
| Magnification       | 10x            |
| Objective Lens      | 50mm           |
| Diameter            | SOTTILL        |
| FOV: FT/1000YDS     | 400 ft         |
| FOV: M/1000M        | 133 m          |
| FOV: Angle Degree   | 7.6            |
| Exit Pupil          | 4.83 mm        |
| Exit Relief         | 17.8 mm        |
| Min. Focusing       | 6 m            |
| Distance            | 0 111          |
| Eye Cup             | Fold Down      |
| Water/Fog Proof     | No             |
| Tripod Apaptable    | Yes            |
| Optical Coating     | Multi-coated   |
| Relative Brightness | 23.04          |
| Twilight Factor     | 22.36          |

| More Informa | tion      |
|--------------|-----------|
| Age Range    | Teens     |
| Age Range    | Adults    |
| Price Range  | \$25-\$50 |

### Bowman Mini







### Become the Archer of Your Office

Want to refine your archery skills but don't have the time to go to the range? Try the Bowman Mini — the ultimate everyday carry mini crossbow. Great for testing your accuracy from inside an office cubicle, its compact size makes the Bowman Mini ideal for firing small projectiles like Q-Tips or toothpicks at inanimate objects or bull's eye paper targets. Made of metal, it's accurate up to 20' away!

Measures 4.5" x 4" x .25".

Warning: Point away from people and animals while using the product.

KEEP AWAY FROM CHILDREN, MAY CAUSE SERIOUS INJURY.

For responsible adults 21+

| More Informa | tion      |
|--------------|-----------|
| Age Range    | Adults    |
| Price Range  | \$25-\$50 |

### LED Magnifying Loupe Glasses



Sad.95

Quantity:

Available for giftwrap!

Add to Cart + Giftwrap

Same day shipping if ordered by 4 P.M (EST) Monday - Friday

Magnifying loupe glasses with LED illumination

4 sets of interchangeable lenses (10x, 15x, 20x or 25x)

Requires 6 LR1130 batteries (included)



#### LED Illuminated Magnifying Glasses

These high powered LED magnifying eyeglasses are a great tool when working with very small objects at very close range. View currency, stamps, coins, and gemstones in a new light with these illuminated loupes. Featuring 4 sets of interchangeable lenses (10x, 15x, 20x or 25x).

The lenses are located close to the eyes which helps to avoid extra light from aside, and can also be turned up. Both right and left lenses have built-in light diodes so you can direct their light exactly to the object of study.

Requires 6 LR1130 batteries (included). For ages 8+.

### See DOCUMENTS TAB for Manual

Please note: these are NOT intended to be used as binoculars nor are they 'readers'. These are essentially hands-free loupes mounted onto plastic eyeglass frames.

These frames can be worn over the top of most prescription eyeglasses.

| Lens diameter (dimensions), mm | 21 (8 pcs.)  |
|--------------------------------|--|
| Magnification, x               | 10/15/20/25  |
| Optics material                | optical plastic                                    |
| Body material                  | plastic  |
| Handle material                | plastic  |
| Illumination                   | LED  |
| Power supply                   | 6 LR1130 batteries (included)                      |
| Additional                     | 4 sets of interchangeable lenses, 2 lenses in each |
| Usage                          | illumination - 2 LED lights                        |
|                                | General use product.                               |
| Design                         | head magnifier, glasses                            |
| Illumination                   | yes  |

| More Informa | tion      |
|--------------|-----------|
| Age Range    | Teens     |
| Age Range    | Adults    |
| Price Range  | \$25-\$50 |

### Watchmaking Kit - Eiffel



• Detailed online assembly guide with video

(Hover over image to zoom in)

### Take the Time to Actually Make Time

For serious hobbyists with a gentle hand and plenty of patience, these DIY mechanical watch kits will truly teach you the fundamental skills behind watch assembly. Each kit includes the specialized precision watch waking tools and a pair of nitrile gloves necessary to build your own fully-functional wrist watch. Illustrated on-line assembly instructions and a step-by-step assembly video walk you through the intensive process. The vendor provides online support as well. Your finished battery-free watch is powered by hand winding or by kinetic movement and is 5 ATM waterproof. Stainless Steel wrist strap is included. Approximate 3 hour build time. Lifetime warranty & 24/7 support.

### Style: EIFFEL

Iconic yet simplistic, the Eiffel is the convergence of classic watch elements and a modern, lustrous sheen. Elevate any outfit with this distinguishing accessory.

#### Specs:

- · Colors: black and gold
- · 40mm case diameter size
- · Sapphire glass case
- · Miyota 8215 Automatic movement
- · 21 jewels and date setting feature
- · Hand wound and battery free
- · Over 40 hour power reserve (running time)
- · Stainless steel straps

| More Infor  | mation     |
|-------------|------------|
| Age Range   | Adults     |
| Price Range | Over \$100 |

### Wheelson Build & Code Your Own Al Self Driving Car



\$149.95

Quantity:

Available for giftwrap!

Same day shipping if ordered by 4 P.M (EST) Monday - Friday

Completely assemble your own self-driving car in 4 hours

Use the most advanced technology available

Program the robot to maneuver small roads and identify objects

See what the car sees with the camera and LCD display



### Create a Self-Driving Car of the Future

Self-driving cars aren't a new concept, but Wheelson is. Build and program a self-driving car ready to handle any road you put ahead of it. See the future first hand as you assemble this wheeled robot using the most advanced technology available. Assemble your own robot, learning every step of the way. Then you'll be able to program it to drive on its own.

Connect the car to your computer and program it to maneuver small roads as you begin to understand computer vision, how computers understand digital images and videos. Learn more about robots as your robot learns how to recognize objects with its camera. Master how to calibrate your robot's camera and see what your creation sees with the LCD, full-color display. Even use it to scan a QR code!

Just like an electric, slef-driving car, Wheelson uses microcomputers and 4 electromotors to nagivagate and drive. Powered by a Li-Po (lithium polymer) battery, recharging is easy. Wheelson can also hook to WI-FI and has Bluetooth capabilities so you can connect your new friend to other devices. It even has headlights so you can keep going after dark!

| More Infor  | mation     |
|-------------|------------|
| Age Range   | Teens      |
| Price Range | Over \$100 |

### **Electronics Tool Pack**







### Great for Beginners and DIY'ers On-the-Go

We know that getting into electronics can be intimidating so we have you covered! This all-in-1 bundle contains everything you need to get started: USB soldering iron (heats in 15 seconds), USB power brick (for powering the USB iron on-the-go), metal soldering stand, solder, solder sucker, standard 2mm Phillips screwdriver, needle nose pliers, diagonal cutter pliers, and a USB cable (for powering the soldering iron). For ages 14+.

### Features:

- USB Soldering Iron heats up in 15 seconds! Features a capacitive touch sensor which only works when you hold it in your hand to avoid injuries - perfect for beginners)
- USB Power Brick frees you up when access to USB power ports are unavailable
- Diagonal Cutter Pliers are ideal for cutting off pin headers, wires and small plastic components

| More Inform | nation      |
|-------------|-------------|
| Price Range | \$50 - \$75 |
| Age Range   | Teens       |
| Age Range   | Adults      |

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

### Deluxe Magnifier Kit



\$49.95

Quantity: 1 Add to Cart

Available for giftwrap! Add to Cart + Giftwrap

Same day shipping if ordered by 4 P.M (EST) Monday - Friday

Set of 3 quality magnifiers (1 of each):

SureGrip Reader

LED RimFree

LumiLoupe

(Hover over image to zoom in)



#### This Complete Magnification Kit includes all 3 of the following:

### SureGrip Reader -Your New 'Go-To' Magnifier for Reading

Designed specifically with reading in mind, this hand and stand magnifier offers both hand-held or hands-free use! The rubberized soft handle is angled to provide a more natural viewing position for reading. The dropdown legs stow easily inside the handle. The 2x glass lens includes a 11.5x spot magnifier for detailed views.

Lens Diameter: 3.3" x 2". Includes a soft case for storage.

AND

#### LED RimFree -Lightweight Acrylic Both Enlarges & Illuminates

This 3.5" rim-free, crystal clear acrylic lens offers sharp distortion free viewing. A light is built into the handle makes it the perfect 2.5x magnifier in any light. Plus the built-in 5.5x spot magnifier really brings in the details. Best of all the fold-out stand allows for hands-free reading of pill bottles, sewing or removing splinters. Requires 2AA batteries (not included).

PLUS

#### LumiLoupe - For More Powerful Viewing of 3D Objects

This powerful 7x magnifier is perfect for revealing details you've never seen before in items you look at every day. Pre-focused dual lenses allow for close-up examination while the transparent glass base permits ambient light for bright, clear viewing. Designed for maps, graphics, fabrics, fine print, insects, etc. Measures 3" x 3" x 2.5".

| More Informati | tion      |
|----------------|-----------|
| Age Range      | Teens     |
| Age Range      | Adults    |
| Price Range    | \$25-\$50 |

## STEM V8 Model Engine Kit



(Hover over image to zoom in)



- Learn about the 4 stroke cycle as you assemble your own working V-8 engine model featuring lights and sound
- Includes 270 components and illustrated instructional manual
- Approximately 7" x 6.5 "x 9" once assembled
- Requires 3 AA batteries (not included)
- · Demonstration operates for approximately 30 seconds

● Description 日 Videos ☆ Reviews

### Build Your Own Working Model of a V-8 Engine

Learn everything you need to know about the heart of a vehicle and how it provides the power for a car to run. Building this 270-piece plastic model of a combustion engine will allow you to see the inner workings of an engine. Turning your STEMNEX engine on, you will see and hear how a real V8 operates.

A detailed illustrated instructional manual included. Approximately 7"x 6.5"x 9" once assembled.

Requires 3 AA batteries (not included). For ages 12+.

| More Information |             |
|------------------|-------------|
| Price Range      | \$50 - \$75 |
| Age Range        | Teens       |
| Age Range        | Adults      |

### Arduino Essentials Learning Kit



Item #3155100



- Includes step-by-step start up instructions (for Windows, Mac or Linux) and 3 printed lessons: Blinking an LED, Blinking 6 LEDs, and LCD Display
- Additional online instructions and programs are easily accessible as well as an online community to share, build and post questions
- Just download the necessary Arduino software and you are ready to begin
- Case measures 14" x 9" x 3"



### Self-Contained Kit for Learning Electronics, Microprocessors, and Programming

This Arduino-based prototyping kit will enable you to learn the fundamentals of electronics and programming in an easy to use "plug and play" system that requires no soldering or previous electronics experience. Delivered pre-assembled in a protective metal carrying case that holds all of its component parts securely, the Essentials learning kit includes step-by-step startup instructions (for Windows, Mac, or Linux) and 3 printed lessons: Blinking an LED, Blinking 6 LEDs, and LCD Display. Additional online instructions and programs are easily accessible as well as an online community to share, build, and post questions with other enthusiasts and view video demonstrations and instructions for numerous projects. Just download the necessary Arduino software and you are ready to begin.

Note: You can view the Arduino download instructions by opening the **DOCUMENTS** tab (above).

Learn how to read and gather data from input sensors (such as an accelerometer, CDS cell, or temperature sensor), process this data and interact with various other output devices (such as LEDs, Liquid crystal displays, and the serial port on your computer). When these skills are combined, the number of projects and ideas are virtually limited only by one's imagination

Included are components and modules that will allow for detection and interaction with the environment and others around you like Light Emitting Diodes, Relays, a Buzzer, a Wireless Transceiver, Light, and sound sensors. With the components and documented projects, you will be able to build and modify many projects such as...

- Motion and light detection / alarms
- · Various data recorders
- · Infrared signal decoder and signal repeater
- · LED Color fading/changing devices
- · Digital combination security device
- · Countdown timer
- · Infrared remote controlled devices
- Memory games
- · Binary and digital alarm clocks
- Digital battery tester

#### Additional Requirements (not included with kit):

· A computer (with Windows, Mac, or Linux)

#### General Parts List

- IR Sender
- IR Decode

| More Information |            |  |  |
|------------------|------------|--|--|
| Age Range Teens  |            |  |  |
| Age Range        | Adults     |  |  |
| Price Range      | Over \$100 |  |  |
|                  |            |  |  |

### Raspberry Pi3 Learning Kit







Designed for those with basic knowledge of Raspberry Pi and electronics, this intermediate skill level microcomputer will deepen your understanding of how to utilize Raspberry Pi programming. Featuring an RFID module and dozens of electronic components, this learning kit with plug-n-play connectors requires no soldering.

Create your own projects using LEDs, buzzer, LCD display RF communication, clock modules and much more. The RPiKit is AC powered and broadcasts its own unique Wi-Fi connection so you can utilize your own computer, keyboard or tablet (not included) for programming the Raspberry Pi microcomputer.

Includes illustrated 102-page printed manual with code examples in C and Python for interacting with components all contained in a protective metal briefcase. For ages 15+,

RC522 RFID Module

⊕ Description 
☆ Reviews

- RFID ID card/Tag
- LCD1602
- PS2 Joystick Module
- Ultra Sonic Distance Sensor Module
- Triaxial Accelerometer Sensor Module(ADXL345)
- DHT-11(Digital Temperature & Humidity Sensor)
- ADC0832
- · Stepper Motor
- Stepper Motor Driver Module(ULN2003A)
- L9110 motor driver
- DC Motor
- · 4\*4 Matrix Keyboard
- Breadboad Power Supply Module
- · Light Sensor(Photoresistor)
- · Analog Temperature Sensor(Thermistor)
- Relay
- · Active Buzzer/Passive Buzzer
- 7-Segment Display
- 4-bit 7-segment Display
- LED Bar Graph Display
- Dot-Matrix Display
- · 74HC595 Shift Registers
- · Tilt Switch
- Switches
- RGB LED
- Various 5mm LED's
- · Potentiometers(10k
- Capacitors (104)

Item #3156286

\$359.95



- Intermediate level kit for those who already have introductory
- knowledge of Raspberry Pi programming

  Create your own projects using LEDs, buzzer, LCD display RF communication, clock modules and much more
- AC powered and broadcasts its own unique Wi-Fi connection so you can utilize your own computer, keyboard or tablet (not included) for programming the Raspberry Pi microcomputer Includes illustrated 102-page printed manual
- · Contained in a protective metal briefcase

| More Information |            |  |
|------------------|------------|--|
| Age Range        | Teens      |  |
| Age Range        | Adults     |  |
| Price Range      | Over \$100 |  |

### Micro:Bot



Item #3157095

### \$149.95

Quantity: 1 Available for

Add to Cart + Giftwrap

Excellent introductory robot for learning programming

Same day shipping if ordered by 4 P.M (EST) Monday - Friday

- Easy to understand, step-by-step downloadable instructions
   No need to download Arduino. You'll code directly in your
- computer browser!
- Includes both Bluetooth module and an infrared remote control















#### You Can Do It! Learn Real Robot Programming

The Micro:Bot is a small programmable robot designed for learning coding and robotics using Block code and Java script. Block code makes programming easier to learn by using shape blocks that snap into place. Then take your new knowledge and your robot to the next level by programming with Java script. Don't Be Intimidated! The downloadable activity guide makes learning easy by providing step-by-step learning activities that leverage the Micro:Bot's capabilities.

Includes ultra-distance sensor, 6 LED lights, line tracking sensor, Bluetooth module and an infrared sensor so you can control it with the included remote! Measures 3" x 3.125" x 3.5" assembled. Requires 3 AAA batteries (not included). For ages 8+ (Yes, even you can do this!).

### What makes this 'Bot special?

Micro:Bot runs on the microprocessor platform called Micro:Bit - this is very exciting, because unlike Arduino, you can code directly in your computer browser at makecode.org !! This eliminates a lot of compatibility issues with Windows/Mac, and the user doesn't have to worry about updates!

But wait- there's more! This item also supports Python, in addition to the JavaScript and Block Code. Python is an OO (Object Oriented) language, and a bit more complex than JavaScript, so this robot will grow with you as your programming skills improve.

#### About Micro:bits:

A micro:bit enables you to do an amazing variety of functions while introducing you to the connection between hardware and software. These pocket-sized computers allow you to control, manipulate and code on different platforms to take control of this futuristic device.

This kit comes with 1 micro:bit for you to code and explore, allowing you to get started immediately! You may be able to code another micro:bit to serve as a controller. If you already have an extra micro:bit, you'll just need to reprogram it, or you can purchase one elsewhere. Note: we do not sell individual micro:bits.

| More Information   |            |  |  |
|--------------------|------------|--|--|
| Age Range 8 And Up |            |  |  |
| Price Range        | Over \$100 |  |  |

### Multi-Purpose UV Sterilizing & Charging Box







### Completely Sterilizes Your Gadgets in 3 Minutes

Designed to simultaneously accommodate your smartphone, wireless earbuds and smartwatch, this device will safely sterilize your gadgets in 3 minutes with its internal UV light. Close the lid and the UV light turns on. Open the box and the UV light automatically turns off, preventing any damage to your eyes. While your electronics are sterilizing, this box wirelessly charges their batteries, too! Charging and disinfection can be done separately. USB powered with included adapter. Measures 8" x 8" x 1.5". For ages 14+.

Easy to use, convenient and safe, this sterilization box feature both red and blue light indicators

- · Ultra Violet light disinfection lamp inside a white case
- Accommodates several gadgets at once including smartphones, wireless earbuds and many smartwatches
- · Also serves as a wireless charger
- · Magnetic lid seals tight
- · Accommodates several gadgets at once
- · 2W UV output

| More Information        |        |  |
|-------------------------|--------|--|
| Price Range \$50 - \$75 |        |  |
| Age Range               | Teens  |  |
| Age Range               | Adults |  |

### Walking Puppy Wood Kit







### **Build Your Own New Best Friend**

You'll feel like a living Geppetto as you assemble your own toy puppy and then magically bring her to life with this advanced wood kit. Precision laser cut wood pieces connect without glue. You'll even make a dog toy for your new beagle to play with!

Powered by gears and rubber bands (included). No batteries required. Assembled size: 11.2" X 6.8" x 3.7". 246 parts. For advanced hobbyists ages 14+.

| More Information |           |  |
|------------------|-----------|--|
| Age Range Teens  |           |  |
| Age Range        | Adults    |  |
| Price Range      | \$25-\$50 |  |

### Tool Kit Pro for Metal Model Series



\$19.95

Quantity:

Available for giftwrap!

Add to Cart + Giftwrap

Same day shipping if ordered by 4 P.M (EST) Monday - Friday

For use with 'Time 4 Machine' metal models

### **Precision Tools for Precision Modeling**

This tool kit is specifically designed to meet the precision demands of assembling the 'Time 4 Machine' metal models.

Included are two stainless steel needle nose pliers (standard and extra long nose) plus a rasp and tweezers.

#### For use with 'Time 4 Machine' metal models:

Dazzling Streamliner (Locomotive) Kit (Item #3157070)

Heavenly Hercules (Sea Plane) Kit (Item #3157071)

Royal Voyager (Auto) Kit (Item #3157072)

Marvel Tank 2 Kit (Item #3157073)

Mysterious Timer 2 Kit (Item #3157074)

Starbreeze Explorer Kit (Item #3157412)

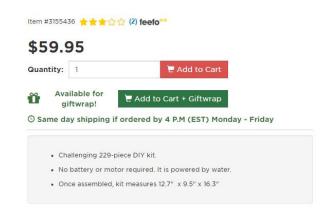
Chrome Rider Kit (Item #3157413)

Medieval Hockey Kit (Item #3157414)

| More Information |           |  |  |
|------------------|-----------|--|--|
| Age Range Teens  |           |  |  |
| Age Range        | Adults    |  |  |
| Price Range      | \$10-\$25 |  |  |

### Hydraulic Arm Kit







### The Perfect STEM Experience Featured All in One Kit

Take total command of a robotic arm using the science principles of a hydraulic system and its application with this challenging 229-piece DIY kit. Includes easy to follow instructions with detailed graphic illustrations. Features six-axis of varied movements, an integrated braking system, and a unique suction apparatus.

No batteries or motor required. It is powered by water! Once assembled, kit measures 12.7" x 9.5" x 16.3". For ages 12+

With **HydroBot Arm Kit**, command six-axis of varied movements: the gripper to open and close up to 1.89", wrist rotation of 180 degrees, wrist mobility of 98 degrees, elbow range of 44 degrees, base rotation of 270 degrees, and shoulder motion of 45 degrees. With a vertical reach of 16.35", horizontal reach of 12.42", and lifting capacity of 50g, your robotic friend is ready for your genius to erupt. With the removal of the gripper, you can activate the suction apparatus. This feature enables the user to elevate objects with a larger surface area (like a small mobile phone). Another prodigious attribution is a braking system that is integrated into the lever controllers to execute all commands accurately.

| More Information        |       |  |  |
|-------------------------|-------|--|--|
| Price Range \$50 - \$75 |       |  |  |
| Age Range               | Teens |  |  |

### StratoLauncher IV Deluxe





Item #3156402

### \$99.95

Quantity: 1 Available for ₩ Add to Cart + Giftwrap

O Same day shipping if ordered by 4 P.M (EST) Monday - Friday

- · Uses pressurized water and air to propel a soda bottle up to
- · 120 degree tilting ball head allows terrain adjustments and wind compensation

Add to Cart

- · Assembly & tools required
- · You supply two empty 2 liter plastic soda bottles, water, and air source (bicycle or foot pump or air compressor)

### Use Advanced Physics to Launch a Rocket Up to 350 Ft!

This one-of-a-kind water rocket launcher kit uses pressurized water and air to propel a soda bottle up to 350 feet with gentle recovery! Squeeze the brake lever to release the rocket from a safe distance of 10 ft. and out of the splash zone. The 120 degree tilting ball head allows terrain adjustments and wind compensation. The perfect combination of physics and fun, this outdoor STEM demonstration will exceed your wildest expectations with every launch! NOT a toy. Adult supervision highly recommended. For ages

Assembly & tools required (adjustable wrench or 14 mm wrench, 4 & 5 mm hex wrench plus Phillips-head screw driver). You supply two empty 2-liter plastic soda bottles, water, and air source (bicycle or foot pump or air compressor). Features 19 components with aluminum, stainless steel and brass parts, 160 PSI air pressure gauge, 125 PSI safety valve and complete instructions.

| More Information         |        |  |  |
|--------------------------|--------|--|--|
| Price Range \$75 - \$100 |        |  |  |
| Age Range                | Teens  |  |  |
| Age Range                | Adults |  |  |

#### Features:

- · Screw-on 'StratoFins' rocket fins
- · Durable 1/4" ABS launch pad
- · 160 PSI air pressure gauge
- · Launcher supports air pressure as low as 15 PSI to 120 PSI
- · Metal Q-Release connector
- · Aluminum 0-120 degree tilting ball head

### Atlas Rocket with Mercury Capsule Model Kit



Same day shipping if ordered by 4 P.M (EST) Monday - Friday

Classic model kit with historical significance
Commemorates John Glenn's successful orbiting of the Earth
Requires model glue (not included)



### "Everything is GO!. Repeat. Everything is GO!"

Made from the original 1960's Revelle-brand molds, this historical kit commemorates NASA's first manned orbital mission of the Earth. Includes 150 molded gray plastic parts, comprehensive decals sheet, detailed instructions and an educational booklet about the history of John Glen. Measures 12.75" L x 20.5" high (1/110 scale). Requires standard model glue (not included). For skilled hobbyists age 12+.

### Historical Background:

On February 20, 1962, John Herschel Glenn, Jr. piloted the Mercury Atlas "Friendship 7" spacecraft on America's first manned orbital mission of the Earth. After Launching from Kennedy Space center in Florida, Glenn successfully completed a three-orbit mission around the Planet. The Mission lasted 4 hours, 55 minutes, and 23 seconds from launch to impact, and during it Glenn reached an orbital velocity of 17,500 miles hour and a maximum altitude of approximately 162 miles. The flight was received with great enthusiasm and relief in the United States and many other countries, it also gave the United States even more hope of someday reaching the Moon.

| More Information |           |  |  |
|------------------|-----------|--|--|
| Age Range Teens  |           |  |  |
| Age Range        | Adults    |  |  |
| Price Range      | \$25-\$50 |  |  |

### Pathogen Protection Education Kit



(Hover over image to zoom in)

¢00.0F

| \$99     | .95                       |  |
|----------|---------------------------|--|
| Quantity | r: 1                      | ₩ Add to Cart                            |
| ~ A      | vailable for<br>giftwrap! | ₩ Add to Cart + Giftwrap                 |
| © Same   | day shipping i            | f ordered by 4 P.M (EST) Monday - Friday |

- Teach yourself (and others) the science behind pathogen protection
- Safely gain understanding specifically about SARS-CoV-2 and COVID-19
- An interactive kit that safely demonstrates how germs are being spread
- Includes lung breathing model
- · Designed for classroom use. Teacher's guide included.

#### Perhaps the Most Important Kit We've Ever Offered

Educate yourself as to how diseases spread with this safe, high-school level biology kit. Using the included lab equipment and teacher's guide, you'll gain true scientific understanding as to how viruses spread in the air after a cough or a sneeze and use models to visualize how real-world pathogens affect the body and pass between people.

Using the scientific method, you'll learn specifically about SARS-CoV-2 and COVID-19 and apply your understanding to design a tool that could stop or minimize the spread of the disease. For ages 14+.

### You provide the following materials:

Water, hand sanitizer gel, paper towels, pencil, ruler, drop cloth, plastic sheet, facial tissue, hair dryer, oil and dish soap

#### Included components:

- · Lung breathing model
- Stethoscope
- · Glow-germ lotion
- · Handheld blacklight
- · Plastic test tube
- · 1ml plastic bulb dropper
- · 3 tempera paint colors
- · 2 disposable masks
- · Paper confetti
- · Ping pong ball
- Lung volume bag
- · Disposable breathing tube
- · Drinking straw
- Stopwatch
- · 4 disposable cups
- · 6 sheets of printer paper
- · Complete teacher's guide

**NOTE:** This safe, educational kit focuses on learning about the importance of preventing the spread of pathogens. You do not perform any

| More Information         |        |  |  |
|--------------------------|--------|--|--|
| Price Range \$75 - \$100 |        |  |  |
| Age Range                | Teens  |  |  |
| Age Range                | Adults |  |  |

### Watchmaking Kit - Eiffel + Free Freehand Magnifier



Item #3157645 ★★★★★ (1) feefo\*\*\* \$199.95 Quantity: 1 😾 Add to Cart Available for ₩ Add to Cart + Giftwrap (9) Same day shipping if ordered by 4 P.M (EST) Monday - Friday · Complete watch assembly kit • Hand wound (battery free) · Over 40 hour running time · Lifetime warranty & 24/7 support · Includes specialized watchmaking tools · Detailed online assembly guide with video

(Hover over image to zoom in)





### 2 Great Adult Hobbyist Products for the Price of 1!

Purchase the Watchmaking Kit - Eiffel and get a FREE Freehand Magnifier! This exclusive combo contains 1 of each of the following:

#### Take the Time to Actually Make Time

For serious hobbyists with a gentle hand and plenty of patience, these DIY mechanical watch kits will truly teach you the fundamental skills behind watch assembly. Each kit includes the specialized precision watch waking tools and a pair of nitrile gloves necessary to build your own fullyfunctional wrist watch. Illustrated on-line assembly instructions and a stepby-step assembly video walk you through the intensive process. The vendor provides online support as well. Your finished battery-free watch is powered by hand winding or by kinetic movement and is 5 ATM waterproof. Stainless Steel wrist strap is included. Approximate 3 hour build time. Lifetime warranty & 24/7 support.

### Style: EIFFEL

Iconic yet simplistic, the Eiffel is the convergence of classic watch elements and a modern, lustrous sheen. Elevate any outfit with this distinguishing accessory.

#### Specs:

- · Colors: black and gold
- · 40mm case diameter size
- · Sapphire glass case
- · Miyota 8215 Automatic movement
- · 21 jewels and date setting feature
- · Hand wound and battery free
- · Over 40 hour power reserve (running time)
- · Stainless steel straps

| More Information |            |
|------------------|------------|
| Age Range        | Adults     |
| Price Range      | Over \$100 |

# **Home Science Kits**



### Thames & Kosmos Chem C3000

\$279.95 \$254.90

Pay in 4 interest-free payments of \$63.73 with PayPal. Learn m

Perform more than 300 experiments with this deluxe, handson chemistry set! The Chem C3000 from Thames & Kosmo

Out of Stock, Expected to Ship: 8/23/2022

Enter your email address to be notified when this item is back in stock.

 $_{\square}$  Also keep me up to date on news and exclusive offers.

### **Product Description**



### SKU: KT-CHEM3K

If your student has an increasing interest in chemistry and is always hoping for additional experiments, delight him or her with the Thames & Kosmos Chem C3000 kit. With more than 300 experiments, the ultimate chemistry set covers a broad range of chemistry topics, making it ideal for older kids doing middle or high school level chemistry; all of the elements inside provide excellent preparation for even higher level chemistry courses.

This Chem C3000 kit includes all of the lab equipment and supplies from the Thames & Kosmos Chem C2000, plus dozens of additional tools and chemicals, and 100 additional experiments, for a total of more than 333 experiments.

### With this engaging and advanced chemistry set, curious learners will:

- · conduct water electrolysis
- · make potassium permanganate lose its color
- · test for starches, create precipitates
- · do flame color tests
- · make chromatograms of leaves and chemicals
- · generate electricity from a test tube
- · set off time-delay and redox reactions
- · break down sawdust into glucose
- · and even depolymerize a yogurt container!

Because the chemistry lab projects and scientific explanations in this kit are quite thorough, this Chem C3000 kit can even be used as its own chemistry course!





### **Product Description**



#### SKU: KT-MICCHEM

Microchemistry (microscale chemistry) is a physical science that is ideally suited for homeschooling or home labs: In addition to reducing lab costs, you'll spend less time preparing and use smaller amounts of the chemicals, making disposal much easier.

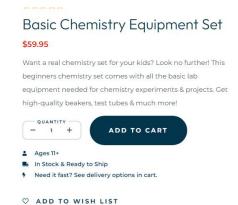
An **excellent resource for homeschool parents**, this microchemistry set can be used as a stand-alone lab course or in conjunction with any high school chemistry course or curriculum.

# The MicroChem kit has 17 lessons, each with an experiment to demonstrate a chemistry concept:

- · chromatography,
- melting points,
- conductivity of solutions,
- mole ratios,
- · double replacement reactions,
- · oxidation-reduction reactions,
- · decomposition,
- Charles' Law,
- Boyle's Law,
- hydrated salts,
- pH and pH indicators,
- titration,
- molar mass,
- buffer solutions,
- concentration and reaction rates,
- · temperature and reaction rates,
- and galvanic cells.

The kit includes a complete 119-page lab manual with solutions in the back, 22 chemicals, safety goggles, and





### **Product Description**



#### SKU: CE-KIT01

Save time on shopping and comparing items -- get what you need with this quality beginners chemistry set for kids 11 & up, all at an unbeatable price. Get ready for the fun and discovery that comes with doing hands-on chemistry experiments with your students! This beginners chemistry set is the perfect gift for the aspiring chemist in your life.

Want all the basic chemistry lab equipment in one set? This basic beginners chemistry set has everything needed for hands-on chemistry projects and labs.

### Inside, you'll find real and high-quality labware, glassware, and tools:

- durable glass beakers
- graduated cylinders for measuring liquids
- a flask
- wickless alcohol lamp and stand
- · test tubes and test tube rack
- thermometer
- · tubing pinch clamp
- glass tubes
- rubber stoppers
- pH papers & more.

This is the perfect beginners chemistry kit for building your lab! This is a great kit to order with a boxed chemistry set, so middle school and high school students can gain the experience of working with real chemistry lab equipment (instead of just a few plastic cups and tubes)! Its companion, our Intro to Chemistry Kit (order separately), enhances



### Rock Study Kit, 15 specimens

#### \$17.95

Hey there, rock hounds! Use this 15-specimen Rock Study Kit for endless hands-on testing and observation. Inside, you'll find number-coded, 1" specimens of igneous, sedimentary, and metamorphic rock.



- Ages 7+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



SKU: RM-RKSTUDY

This **15-specimen Rock Study Kit** is an excellent choice for rock lovers. Conduct hands-on tests and use a small magnifying glass to observe the number-coded, 1" specimens of igneous, sedimentary, and metamorphic rock inside.

### This Complete Rock Study Kit Includes:

- A rock identification key for the included basic rock types
- · Descriptions that provide helpful information and great introductions to each rock specimen
- A magnifier for up-close examinations of the rocks' physical properties
- A 5 x 7" display box for your rock collection

Not quite ready to add this Rock Study Kit to your shopping cart and checkout? Take a look at the customer reviews below for more information; there's a reason this kit has **almost 5 stars**!

Here are some related products you may also love!

- Our 15-Specimen Mineral Study Kit
- Our Rock Hound's Backpack Kit (a great introductory kit for any rock lover; includes a rock pick, rock & mineral
  test kit, goggles/safety equipment, and more!)



### **Product Description**

#### SKU: EL-KITBASC

This Introduction to Electricity Kit teaches about:

- parallel and series circuits
- · current flow
- · positive charge and negative charge
- · electrical energy
- · current electricity
- electric charge
- electric circuits
- electric fields
- light bulbs, insulators, resistors, diodes, and motors
- and so much more!

Similar to our Investigating Electricity Kit (EL-KIT01) but without a solar cell, this economical introductory kit provides everything you need to learn the basics of electricity and Ohm's law. Learn about electrical circuits, electrical power, magnetic fields, static electricity, electrical current, direct current, and alternating current with this hands-on, power-charged kit! Measure electric current and ponder the potential difference in energy with this unique kit.

A study guide teaches you how electricity works with six experiments that gets you started with the important concepts related to each component, but we believe the best way to learn about electricity and how it is proportional to electric potential energy is through hands-on trial and error. That's why this kit offers the freedom to design your own circuits, learn about electric power, and figure things out for yourself. All the materials for the

### Electricity Science Kit

#### \$24.95

This Introduction to Electricity Kit teaches about parallel and series circuits, light bulbs, resistors, diodes, and motors.



O ADD TO WISH LIST



BEST SELLER



### Intermediate Dissection Kit

#### \$49.95

Study the anatomy of seven different preserved animal specimens as you work through the hands-on animal dissections in this kit. It's a unique & memorable way to see how internal organs fit together!



- ♣ Ages 11+
- In Stock & Ready to Shi
- Need it fast? See delivery options in cart.

### **Product Description**



#### SKU: DE-KITINT

Equip your middle school and high school students to study life science and the anatomy of seven different animals!

This animal dissection kit for students will deepen their understanding of the life cycle and physical science.

This complete animal dissection kit includes all of the dissection supplies you'll need, including: a 17-piece tool set (containing scalpel handle, 3 scalpel blades, dissecting scissors, teasing needles, stainless steel forceps & more), 7 large-size preserved animal specimens, a reusable dissection tray, and "How to Do a Dissection" guides for each of the 7 dissection specimens.

### The 7 specimens in this animal dissection kit include:

- A Clam
- · A Fish (perch)
- A Crayfish
- A Starfish
- A Grasshopper
- An Earthworm
- A Frog

All of the animal specimens in this animal dissecting kit are plain without latex injection in the veins. This animal dissection kit includes all seven specimens conveniently packaged together in one bag, which also cuts down on your cost. We love win-wins!

 $Note: Specimens \ are \ initially \ preserved \ with \ a \ formal dehyde \ solution, the \ best \ tissue \ fixative. \ The \ formal dehyde \ is$ 



### Microscopic Discovery Kit

#### \$289.95

Pay in 4 interest-free payments of \$72.49 with PayPal. Learn more

Studying the unseen world with a microscope is like traveling to another universe. And the Microscopic Discovery Kit is the vehicle to get you there. With our #1 bestselling microscope & microscopic slide set, this complete kit is the whole package.



ADD TO CART

- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



SKU: KT-MICDISC

NOTE: For a limited time, you'll get a free Microscope Starter Kit (\$33 value) when you purchase this microscope!

The free kit will automatically be added when you add the microscope to your cart.

Our Microscopic Discovery Kit is an **excellent Biology science kit for students of all ages!** Get everything you need to explore the microscopic world that's invisible to the naked eye - including one of our top-selling biological microscopes.

Sometimes a new microscope can seem overwhelming—first-world problem, we know! But this beginner microscope kit changes that. With our #1 selling microscope, prepared slides, plus slide-making supplies & instructions, this microscope set makes it easy to get started. In fact, there's so much you can do, the problem won't be knowing how to start, but where!

With this high-quality microscope kit, the ordinary becomes extraordinary. Use the included compound microscope to discover how a still drop of pond water is actually teeming with microorganisms, find bacteria lurking everywhere, view professionally prepared slides, and learn to make blank slides into your own observable creations! Kids will love how this microscope kit helps them to explore the materials all around (and even inside) them!

### About the Included Home LED Microscope

Our Home LED Microscope is an excellent value! This student microscope is **built to HST's exacting standards & represents high-quality from top to bottom:** from its eyepiece & monocular head, to its high power 40, 100 & 400x magnification settings & zoom, to its LED light, metal arm, overall glass optics & beyond! With it, you'll get the same quality and features as other fine high-school-level student microscopes, but at a very affordable price. Plus, **this Home Science Tools LED Microscope comes with a lifetime warranty** - because you deserve to make a purchasing



### Electrolyte Challenge Sensor Kit

#### \$29.95

Use this electrolyte challenge sensor kit to discover whether or not sports drinks really do provide more electrolytes than other beverages. You can even use what you learn to invent your own hydrating beverage!



O ADD TO WISH LIST

### **Product Description**

### $\in$

#### SKU: SB-ELCTRLY

If you've ever been to or watched sporting events, you've probably seen several sports drinks on the sidelines. Why? Sports drinks are filled with electrolytes, which your body loses as you sweat; it's important to replenish them!

Do sports drinks really provide more electrolytes than other drinks, such as orange juice? Use this **electrolyte challenge** sensor kit to find out!

With this electrolyte test kit, middle school and high school students can learn all about electrolysis and how to measure electrolytes' concentration in a solution. This electrolyte challenge sensor kit **comes with all the materials**needed to build your own electrolyte sensor - an engaging, hands-on, DIY science activity!

- Orange Juice vs. Sports Drink: Does Gatorade have more electrolytes than orange juice?
- How many electrolytes are in coconut water, the latest sports drink fad?

No need to go to Google to find out! Discover the answers to these questions yourself, then **test solutions and** experiment with different recipes to create your own sports drink!

### Looking for new science project ideas?

This electrolyte project kit follows the procedures in the Science Buddies chemistry project Electrolyte Challenge, and is filled with excellent free science fair project ideas! Use this kit as your guide, or use similar ideas for your science fair project, NGSS science school projects, or home science projects - but perhaps with a twist of your own!

Instructions for this hands-on science kit are available online. See below for links to the instructions and more.

To do all of the science experiments in this electrolyte challenge sensor kit, you'll need a few additional items



### Bristlebot Robotics Classroom Kit

#### \$157.50

Pay in 4 interest-free payments of \$39.38 with PayPal. Learn more

A fun, easy way to bring robotics to the classroom! With these wacky robots & lesson plans, it's easy to explore science & engineering. No experience needed! Classroom set has parts for 20 robots (household items not included).



ADD TO CART

- ▲ Ideal for Grades K+
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



#### SKU: SB-CLBRISB

#### Ignite student interest in STEM with robotics!

Designed to engage students with simple, yet amazingly captivating robotics projects, this classroom set lets you do hands-on explorations covering engineering, problem solving, electrical circuits, friction, mass, and recycling. Students will explore these concepts as they imagine, build, and test their own robotic creations. No previous robotics experience needed.

Classroom set includes 5 **Bristlebot Robotics** kits–enough supplies to build 20 robots. Have students work in groups of 2 or more to build three kinds of robots: ArtBot, JunkBot, and BristleBot robots. Recommended for 20 students, Grades 2-8.

Start with the Bristlebots to introduce students to circuits and engineering, then challenge students to create their own Junkbots using recycled materials!

### Comprehensive teacher's guides provide materials to support all experience levels

Lesson plans aligned to NGSS and key state standards guide you step-by-step through doing the activity with students:

- Bristlebot Lesson Plan Ideal for grades 2-5
- Junkbot Lesson Plan Ideal for grades 2-8.

Plus, we've created extensive Teacher Tool's for extra support in the classroom, including: how-to videos, instructional Powerpoint slides, science background, printable quick reference guide, student worksheets, and ideas for lesson variations.



### BlueBot 4-in-1 Robotics Kit

#### \$99.95

Build a robot that can follow a black line or react to motion, light, or touch. This BlueBot 4-in-1 Robotics Kit is perfect for a budding robotics enthusiast - no prior experience with robotics or electronics needed!

#### Out of Stock, Expected to Ship: 8/6/2022

Enter your email address to be notified when this item is back in stock.

Email Address

Also keep me up to date on news and exclusive offers.

WOTHEN ME

### **Product Description**



#### SKU: SB-BLUEBOT

This introductory BlueBot 4-in-1 Robotics Kit provides hands-on STEM projects and lets you **build up to four different** robots, one at a time, with radically different behaviors.

Use the materials inside this educational robot kit to make a DIY:

- Guard Bot—a robot that springs into action when an intruder arrives.
- Light-tracking Robot—a robot that follows a flashlight the way a cat might stalk a moving light.
- Line-following Robot—a robot that can follow a black line path.
- Obstacle-avoiding Robot—a robot that can find its way through a crowded room.

No previous experience with robotics or electronics is needed to dive into this BlueBot 4-in-1 Robotics Kit! Step-by-step online instructions guide you through the building of the robot as well as the designing of the circuit that controls the sensor. This robotics kit makes a great gift and is ideally suited for 11-year-olds and up (grades 6+).

Curious learners will have a lot of fun as they engage with each robotics project or STEM activity inside this kit; they will explore the fundamentals of robotics engineering: building circuits, powering motors, and learning how robots capture and respond to information about their surroundings.

This kit is perfect for a budding robotics enthusiast and can grow as your knowledge builds. Add it to your robotics collectibles! If you want to build more advanced robots, you can always add a microcontroller, like an Arduino (not included in the kit), to the basic robot and begin programming more complex behaviors.

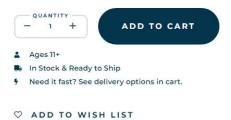
Instructions for this kit are available online; see below for links to the instructions and more.



### Wind Turbine Science Kit

#### \$37.95

How do we solve the modern energy crisis? The answer may be blowing in the wind! Use this science-fair friendly kit to build your very own wind turbine & discover how it works!



### **Product Description**



#### SKU: KT-WINTURB

How can the breeze blowing across your face become the power that lights your home? Since wind is unpredictable, can we rely on it to operate machines? Answer these questions and more with the Wind Turbine Science Kit for students in middle school or high school.

This hands-on science set is excellent for developing a science fair experiment or school project, or for exploring just for fun! You'll get to build your own model wind turbine or windmill, investigate how it works, and see it create and store power.

### Here's just some of what you can do with this wind turbine kit for students:

- harness energy to make a colored light glow or motor spin
- work with wind turbine generators & electrical circuits
- find out how a super-capacitor stores wind energy like a battery
- design and test your own wind turbine blades

#### This HST Wind Turbine Kit for Students:

- · Offers a complete wind turbine science fair project
- Contains everything to design, test & analyze wind power
- Provides DIY fun in a one-box kit for students
- Includes an easy-to-read explanation booklet

Unlike many wind turbine science kits, ours encourages both creativity and invention! How is this wind energy kit different from other one-and-done kits? It includes four blade patterns, ideas for alternate materials, and **extra** 





### **Product Description**



#### SKU: KT-APDVENI

The Apprentice Doctor Venipuncture Course and Kit provides valuable phlebotomy practice for current and aspiring medical professionals alike. Venipuncture or *phlebotomy* is the process of obtaining access to blood vessels. This phlebotomy practice kit course introduces the art and science of intravenous (IV) techniques, IV injections, and blood sampling. The venipuncture training in this kit allows you to practice and master these skills before encountering a real patient, while five true-story case studies demonstrate key principles.

The 29-piece phlebotomy practice kit offers an illustrated hands-on course (viewable online only here), including all the authentic medical items you'll need when practicing 30+ step-by-step projects. Included is a fully functional mini arm ideal for practicing phlebotomy, IV, blood sampling, and related skills. Because the kit is lightweight and portable, this venipuncture training kit allows you to practice lab simulations almost anywhere!

The objectives of the course are to assist students in mastering basic injection, blood drawing, phlebotomy, and IV skills through hands-on practice. The kit provides information on the theory and practice of phlebotomy, setting up an IV line, and associated techniques. The course covers topics such as collecting samples for the laboratory, donating blood, injecting local anesthetics, and much more.

The Apprentice Doctor® Venipuncture course and phlebotomy practice kit contents allow students to practice various IV skills on a revolutionary artificial section of an arm, called the Venipuncture Trainer. With a real-to-life feel when the needle penetrates the vein, this kit provides a perfect simulation of clinical phlebotomy procedures to practice arterial blood sampling.

This kit supplies basic information regarding other specimens (excluding blood) received by the medical technology lab (e.g., urine, sputum, and pus). Additionally, you'll learn how to recognize and deal with common and less common



### **Electricity Essentials Set**

#### \$44.95

This electricity circuit kit contains the foundational equipment to create your own fun electronics science experiments. Includes alligator clip leads, a digital multimeter, resistors, a motor, light bulbs & more!

QUANTITY +

ADD TO CART

- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart

ADD TO WISH LIST

ARE O Y

### **Product Description**



SKU: KT-ESSELEC

Set up your own electricity lab and create your own science fair projects with this engaging Electricity Essentials starter kit!

Far beyond just an educational toy, this electric circuit learning kit comes with the foundational equipment to set up electrical circuits and make your own simple devices. Kids as young as 11 years old can use this electricity set to experiment on their own, or they can use it to supplement a curriculum. Truly, this kit is an excellent resource for middle or high school students who want to explore science electricity.

# This Electricity Set includes the following electricity equipment and gadgets:

- · digital multimeter for measuring DC/AC voltage, DC current, and resistance
- battery holders and a 2-pack of D batteries
- pack of wire and alligator clips for easy connection
- · resistors (to effect current) measured in ohms
- a motor, switch, buzzer, and light bulbs with holders.

Instructions aren't included (so you truly get to explore), but here are some science projects to get you started:

- Make a Homemade Galvanometer to detect electrical current
- **DIY Electroplating**: copper-plate a key

Need more ideas for a science fair project? Look into ways to make your own light bulb, an electric motor, and more!



### Classroom Frog Dissection Kit

#### \$154.95

Pay in 4 interest-free payments of \$38.74 with PayPal. Learn more

This classroom frog dissection set contains 10 doubleinjected, extra-large preserved frogs, 10 illustrated dissection guides & 10 sets of dissection tools. It's perfect for small classrooms or for student groups to share!



ADD TO CART

- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O SHIPPING RESTRICTIONS

### **Product Description**



#### SKU: DE-CLSFROG

Bring biology class to life with a frog dissection! This classroom frog dissection kit includes everything needed for your class to dissect a frog.

Dissection labs provide excellent hands-on learning and lab activities for elementary, middle school, and high school students. As they closely investigate the frog anatomy of a real frog, kids will more fully grasp the complexities of an animal's body systems and inner workings.

### Inside this dissecting kit, you'll find:

- 10 extra-large, double-injected preserved frogs
- 10 illustrated dissection guides
- 10 sets of high-quality dissection tools/instruments (including dissecting trays)

This economy classroom frog dissection kit pack is a great choice for smaller classrooms, or can even be used in bigger classrooms for students to share.

Home Science Tools recommends using disposable gloves for biology dissections. Get the size and quantity of **disposable gloves** you need for your classroom.

**Note:** Specimens are initially preserved with a formaldehyde solution, the best animal tissue fixative. The formaldehyde is then displaced first with water and finally with a glycol solution to produce a moist, low-fume specimen which will not decay over time.



# Rocks & Minerals Earth Science Collection, 75 specimens

# \$79.95

This Earth Science rock collection of 75 number-coded, unmounted specimens is a valuable tool for demonstrating physical properties, major rock-forming minerals & more. It's the perfect rock kit for any rock hound!



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



SKU: RM-ROCK75

This premium Earth Science rock & mineral collection is one of our best sellers! Guaranteed to engage and educate rock lovers and enthusiasts, this rocks and minerals set comes with 75 rock samples, all of which are number-coded, unmounted, and 3/4"-1" in size. Test each specimen in this rock science kit to examine and discover its unique physical properties!

# This 75-Specimen Rock Kit Includes:

- 9 of the 10 hardness levels from the Mohs scale (all but diamond)
- Sturdy Compartmented Storage Box
- Streak Plate
- Magnet
- Magnifier
- · Rocks, Minerals and Gemstones: an Introductory Study Guide

The 16-page *Rocks, Minerals, and Gemstones* guide includes basic rock identification information on many of the specimens inside this mineral kit. This rock specimens guide is organized into sections on:

- · mineral properties;
- · metallic minerals;
- · nonmetallic minerals;
- · rock-forming minerals;
- · igneous rocks;
- · sedimentary rocks;



Thames & Kosmos Mega Cyborg Hand

Explore hydraulics, pneumatics & robotics as you build your very own GIANT hydraulic hand! With this Cyborg robotic hand kit, you can simulate movements of the human hand; can adjust to fit virtually all hand sizes.



- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- ADD TO WISH LIST

**Product Description** 

SKU: KT-CYBHND

# Explore hydraulics, pneumatics, and robotics with your very own GIANT hydraulic hand!

Using over 200 plastic pieces and piston tubes that you fill with water, build an awesome mechanical hand that uses hydraulic power to simulate the movements of the human hand--no motors, batteries, or electricity required!

Once assembled, the mega cyborg hand slips onto your own hand like a glove, with mechanical fingers that you operate with your own fingers and that can grip objects with enough force to lift them. Challenge yourself to pick up and hold a variety of items like bottles, pencils, small items--anything with reach!

This Cyborg robotic hand kit from Thames & Kosmos can be configured in three ways:

- 1. left hand
- 2. right hand
- 3. claw-like, with the thumb in the center

Adjust your cyborg hand to fit virtually all hand sizes! The 40-page, full-color manual inside this robotic hand kit guides model building and experimentation and provides engaging scientific information about how pneumatic and hydraulic systems are used in industrial robots to assist with a variety of tasks in our modern world.

This Mega Cyborg Robotic Hand kit from Thames & Kosmos was a 2020 ASTRA Best Toys for Kids Winner (Science & Discovery category)!



# Veggie Power Battery Kit

#### \$59.95

Did you know you can produce electricity and make a battery from a potato? Use this Veggie Power Batter Kit to create your very own potato battery, and put different produce to the test to see which generates the most power!



ADD TO CART

- Ideal for Grades 4+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

O ADD TO WISH LIST

**Product Description** 



SKU: SB-VEGPOWR

# Complete multiple science experiments with this hands-on Veggie Power Battery Kit!

With this battery science kit, elementary (Grades 4+), middle, and high school students can **build and explore two** different types of batteries:

- 1. A saltwater battery
- 2. A simple battery using potatoes (or other produce of your choice)

There is no better way to learn how batteries work than by building one yourself! **Online Science Buddies project instructions guide you through the building**, so you can quickly dive into the science fun and begin learning all about batteries, voltage, electrical current, resistance, energy sources, electrical circuits, and more!

While there are many different types of batteries, all rely on a chemical reaction of some kind to generate electricity.

In Science Buddies' words: "The chemical reaction typically occurs between two pieces of metal, called **electrodes**, and a liquid or paste, called an **electrolyte**. It turns out that the moisture inside a potato works pretty well as an electrolyte, so you just need to add some metal electrodes to a potato, and you have a battery......Yes, you can actually use fruits and vegetables as part of an electric power source!"

Making a veggie and fruit battery is possible, and it works! Pretty amazing, isn't it?

# This Veggie Power Battery Kit is designed for DIY science



# Thames & Kosmos Robotics, Smart Machines

\$134.95 \$129.90

Pay in 4 interest-free payments of \$32.48 with PayPal. Learn more

The Tharmes & Kosmos Robotics: Smart Machines kit is an interactive, fun way to introduce kids to robotics & programming. Build & program 8 different robot models & program them using your tablet or smart phone.

QUANTITY

ADD TO CART

Ages 8+

In Stock & Ready to Ship

Need it fast? See delivery options in cart.

**Product Description** 

Θ

SKU: KT-ROBOTIC

# The Thames & Kosmos Robotics Smart Machines kit is an interactive, fun way to introduce kids to robotics and programming!

After building their own robot, kids can program it using a tablet (like an iPad) or smart phone to perform defined actions. The ultrasonic sensor inside this kit even allows the robot to respond to its surroundings! With this engaging robotics smart machines kit, kids can build, program, and learn from 8 different robot models.

The **programming app can be downloaded for free,** is available for both iOS and Android systems, and connects with the robot via Bluetooth. Visual programming, which includes bright colors and shapes, is used to provide a user-friendly programming experience that doesn't distract from the excitement of controlling the robot.

**The Robotics: Smart Machines** kit from Thames & Kosmos includes more than 230 pieces, plus a full-color, 64-page manual. All you have to provide are some AAA batteries and the tablet or smart phone.

Robotics is a vast, thrilling, and sometimes overwhelming interdisciplinary field involving physics, engineering, and computer science. This robot kit gives kids a **simple, fun, and customizable introduction to robotics** that lets them build 8 motorized machines controlled by programs and an ultrasound sensor.

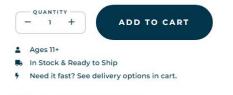
Kids code the programs using an easy, visual programming app on a tablet or smartphone, which connects to the robot models via a wireless Bluetooth connection.



# Crime Scene Investigation Kit

#### \$74.95

This engaging forensics for kids kit is the perfect hands-on learning tool! Use the materials inside to become a crime scene investigator & solve the case of the disappearing diamonds. Use 7 labs to solve the crime!



SHIPPING RESTRICTIONS

# **Product Description**



# SKU: KT-CRIMSCI

Kids become crime scene investigators with this hands-on forensics for kids crime scene kit! Using the materials inside, students get to use real lab experiments and fingerprinting to solve the case and discover who stole the diamonds. This complete one-box evidence collection kit has everything kids need for authentic crime scene investigation tests, including a step-by-step experiment manual and case file.

# This Crime Scene Investigation Kit Includes:

- · Glass slides and superglue for fingerprint fuming;
- a beaker, isopropyl alcohol, and filter paper for chromatography ink tests;
- a watch glass and fabric samples for fiber analysis;
- · synthetic blood samples for simulated blood test;
- a magnifier;
- · a complete activity/case manual;
- · and more!

With this crime scene kit, kids will learn how science helps solve mysteries. First, meet four suspects and read their police statements. Do any of the suspects have a clear motive? What about an alibi? Next, students examine the crime scene documentation and physical evidence found at the crime scene. They can read scientific explanations for each activity and follow the instruction manual/case file with helpful charts. This is the perfect forensics science kit for kids!



# Chemistry of Food Experiment Kit

## \$48.95

If you are what you eat, what makes up your food? Show the connections between chemistry & nutrition for a meaningful STEM activity.



ADD TO CART

- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- SHIPPING RESTRICTIONS

# **Product Description**



## SKU: KT-CHEMFD

Looking for **engaging, tasty science kits for kids**? Few activities capture and keep kids' interest like those involving food. By conducting **food chemistry experiments** with this kitchen chemistry kit, 11+-year-olds finally get rewarded for playing with their food!

With this food science experiment kit, **kids can create their own home science labs** and discover how to test for protein! As they conduct the science activities and experiments inside this kitchen science kit, they will **begin connecting the dots between life science and nutrition**. Using its lab-grade chemicals, labware, and instructional manual, your scientific explorers will have a blast testing different foods for protein, vitamin C, and more!

Whether in elementary, middle school, or high schools, students will love learning about the chemistry behind everyday foods. This food science kit is much more than an educational toy; it allows them to perform qualitative DIY tests (indicating presence) for chemical components, such as:

- Glucose, a simple carbohydrate
- Starch, a complex carbohydrate
- Protein, made up of amino acids
- Vitamin C, also called ascorbic acid

Even reluctant students and parents become confident food chemists as they test food for proteins, fats, and simple & complex carbohydrates. Use this food science kit to **put different foods and treats to the test**, such as lollipops, oranges, ice cream, potatoes, and more. This science experiment kit **promotes discovery through hands-on labs** and gives kids familiarity with essential procedures, such as:



# Biology Microscope Slide Set

#### \$59.9

Take a close-up look at these specimens to make your biology studies come alive! The 25 professionally-prepared microscope slides in this set include a variety of specimens commonly studied in high school.



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



# SKU: MS-SETBIO

Take a close-up look at these specimens to make your biology studies come alive! The prepared microscope slides in this set include the **plant, animal, and anatomy specimens** most commonly studied in high school. Contains **25 high-quality glass slides** in a plastic storage box.

# A note about slide quality:

The biology microscope slides in this set are **hand-prepared by experts**, providing you with specimens that are carefully sliced, dyed, and arranged on the slide to give you an optimum view. We work directly with the factory to import these slides, so you'll save a significant amount off the normal retail value.



# How to Examine Patients Course & Kit

## \$89,95

Develop practical medical skills with this fascinating kit by
The Apprentice Doctor! The "How to Examine Patients
Course & Kit" provides students with a thorough introduction
to medical science & examination principles.



- Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

**Product Description** 

 $\Theta$ 

SKU: KT-APDEXAM

# Develop practical medical skills with this fascinating kit by The Apprentice Doctor!

An excellent learning resource for future doctors, this "How to Examine Patients Course and Kit" **provides middle and high school students with a thorough introduction to medical science** and examination principles.

Whether you are a teenager or adult interested in medical school and a medical career, or a parent that simply wants to better understand how to examine a sick child, you will enjoy and benefit greatly from this course.

Much more than a quick "how-to" experiment kit for kids, this is a complete course covering the basics of medical principles and patient examination. Learn by reading, watching, listening, and actually doing it yourself through videos, special audio files, and practicing the medical techniques using the hands-on instruments included with the course. Follow along with the Free Online Course here as you complete the activities in the kit. You can review and practice any section of the course repeatedly until you master both the concepts and practical techniques.

This thorough and complete introductory course develops knowledge of medicine and the human body while teaching practical applications of how to examine patients.

# The following major sections comprise The Apprentice Doctor course:

- · Introduction: sterility and asepsis, medical history
- · Principles of Examination: sound/hearing, light/vision, medical instruments, patient examination
- The Human Body Systems: all 11 systems including skin/covering, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive
- Diseases: diagnosis of diseases, water and electrolyte balance, trauma, specific diseases
   Medical Chapters: six flash drive chapters (compatible with Windows and Mac) and 14 online chapters on cardiology, airways, safety aspects, neurosurgery, gastroenterology, and more
- · Careers in medicine and further opportunities

If your child dreams of becoming a doctor or having another medical career, this course teaches the theory and helps her practice and master the basic techniques of medical examination, while preparing her for a fulfilling lifelong career in medicine. The eLearning flash drive alone is worth more than twice the price of the complete course; add in the included tools, and this Apprentice Doctor How to Examine Patients Course and Kit is an exceptional value. You provide two AAA batteries.

The Apprentice Doctor How to Examine Patients Course and Kit **includes more than 50 projects** to apply what you have learned. Sometimes, these involve listening to audio files of the digestive systems, heart, lungs, and more to discern "normal" and "abnormal" sounds. Other times, these projects involve using the various instruments to develop and hone hands-on examination techniques.



# Crime Scene Science Classroom Kit

## \$149.95

Pay in 4 interest-free payments of \$37.49 with PayPal. Learn more

Use hands-on science to solve the Mystery of the Disappearing Diamonds! Engage your students with this hands-on classroom crime scene kit, containing materials for up to 30 students working in up to 5 groups.



ADD TO CART

- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

**Product Description** 



SKU: KT-CRIMECR

# Use hands-on science paired with critical thinking to solve the Mystery of the Disappearing Diamonds!

This engaging Classroom Crime Scene Kit takes students into an intriguing short story and exploration of forensics. It contains materials for up to 30 students working in up to 5 groups, and most items can be reused.

Looking for memorable ways to educate and engage your science class?

Forensic Science lesson plans are a popular and fun way to get your class interested in science! We've all seen the crime scene movies and shows with the murder mystery, caution tape, evidence bags, and crime-fighting heroes... but how often do we get to play the hero role ourselves??

Using the materials inside this classroom crime scene kit, middle school and high school students will have a blast becoming police officers, crime scene investigators, and forensic scientists as they perform seven detailed science experiments. Their goal? To analyze each type of evidence and determine which of four suspects is responsible for stealing diamonds from a jewelry store!

# The 7 crime scene activities inside this classroom crime scene kit include:

- dusting & fuming for fingerprints (print lifting)
- fingerprinting analysis
- chromatography & ink analysis
- blood type analysis (using simulated blood samples)



# Deluxe Chemistry Glassware & Labware Set

#### \$284.95

Pay in 4 interest-free payments of \$71.24 with PayPal. Learn more

Get the glass labware you need for even complex chemistry projects (like distillations and titrations) with this chemistry glassware set. This deluxe glassware kit includes 119 pieces of labware for all your chemistry needs!



ADD TO CART

- ▲ Ages 12+
- 🛼 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



# SKU: CE-KITDLX

Create a well-stocked lab with this **Deluxe Chemistry Glassware & Labware Set,** containing all the lab glassware and lab supplies needed for even complex experiments - like distillations and titrations.

If you or your child are regularly conducting chemistry experiments, or if you find yourself looking for the right laboratory glassware and tools, this high-quality chemistry lab glassware set is the perfect way to equip yourself. Chemistry experiences are much more enjoyable when you have the perfect tool for every need - and this high-quality chemistry glassware set is a long-term investment that will <u>truly last</u>, unlike much cheaper plasticware.

# You'll get 119 pieces of labware in this comprehensive glass chemistry set, including:

- 7 glass beakers
- 7 flasks
- 6 stirrers
- A Liebig 300 mm condenser
- · A 50 ml burette with clamp
- 24 test tubes
- 3 graduated cylinders
- 10 bottles
- 16 rubber stoppers
- A burner and stand
- · Safety equipment



# Thames & Kosmos Wind Power 4.0

## \$44.90

Convert wind to energy! This Thames and Kosmos Wind Power kit contains all the parts needed to explore wind power, build a 3-foot tall wind turbine and more. Find more product details in the description below!



ADD TO CART

- Ages 8
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



SKU: KT-WINPOW3

# A Hands-On Renewable Energy Science Kit for Kids 8 and Up!

\*This Thames and Kosmos Wind Power 4.0 model was released in the Summer of 2020.

Wind is one of the most promising sources of clean, renewable energy available today. With this Thames and Kosmos Wind Power kit, kids can build wind turbines and explore wind power with a number of hands-on science experiments.

# This engaging, kid-friendly experiment kit teaches and equips your curious learners to:

- Assemble a realistic wind turbine (complete with electric generator and adjustable rotor blades that are designed with complex aerodynamic curves to look and work like modern-day wind turbine blades);
- Conduct experiments to optimize the turbine's performance by adjusting the angle of the blades;
- · Discover how to use the wind turbine to light up an LED and charge a rechargeable battery;
- Convert the generator into an electric motor and assemble a small electric car to demonstrate a tangible application for the stored electricity;
- And more!

The **full-color, 32-page manual** offers illustrated, step-by-step instructions and scientific information that explores the different types of wind turbines and windmills, the history of this technology, and how wind energy can be used to power homes and electric cars.

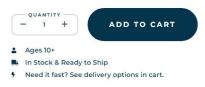
All you need to do is provide rechargeable AA battery and some household supplies. An excellent kit for ages 8+.



# Rocks & Minerals Project Kit

#### \$54.9

This science kit makes an excellent introduction to the world of rocks and minerals.



O ADD TO WISH LIST

SHARE () y ()

# **Product Description**



# SKU: RM-RKMINKT

This science kit makes an excellent introduction to the world of rocks and minerals! Get 10 hands-on science projects, plus 30 unique specimens with this set. Kids of all ages can identify rocks and minerals, crack open a geode, grow crystals on a rock, make a sedimentary rock, and much more. The instruction manual includes information on the rock cycle, crystal formations, and geodes. Kids will also learn to recognize minerals of all kinds, as well as know the three types of rocks: igneous, sedimentary, and metamorphic. This kit is sure to provide hours of exploration.



# How to Suture Wounds Course & Kit \$84.95 Have you or your middle or high-schooler dreamed of becoming a doctor and learning how to suture wounds? If so, this suture kit for kids and adults is the perfect practice kit for you! ADD TO CART Ages 11+ In Stock & Ready to Ship

Need it fast? See delivery options in cart.

O ADD TO WISH LIST

# **Product Description**

SKU: KT-APDSUTR

Have you or your child dreamed of becoming a surgeon and learning how to suture wounds?

This fascinating hands-on course and suture kit for kids and students ages 11+ (by The Apprentice Doctor on How to Suture Wounds) teaches students to tie the various suturing knots and when to apply them in a variety of suturing techniques.

Whether you are a teenager or adult interested in a medical career, you will enjoy and benefit greatly from this suture practice kit and course.

# This suturing kit is comprised of the following major sections:

- · Introduction: suture tools and materials, how to use the tools, how to use the practice pad
- Basic Knots: square knot, surgeon's knot, tying knots with the tools
- Suturing Techniques: wound care, suture complications, subcutaneous sutures, interrupted sutures, buried knots, continuous sutures, interlocking sutures, mattress sutures, subcuticular sutures, how to remove sutures, and more
- Suture Videos: laparoscopic surgery, eye surgery, microsurgery
   Tests and Games

This is not just a quick "how-to" experiment kit for kids, and it's much more than a first aid kit! Rather, it's a **complete** suturing practice course that teaches the techniques of stitching up wounds.



# Control Bleeding Training Kit

#### \$99.95

This Apprentice Doctor Stop the Bleed simulation lab kit teaches students how to stop a bleed & prevent death! Includes access to an NGSS-aligned online course, as well as an arm model, synthetic blood, and other materials.

- 1 +

ADD TO CART

- Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



# SKU: KT-APDSTB

The Apprentice Doctor Control Bleeding Training Kit is a simulation lab that teaches students how to stop a bleed and prevent death.

This educational kit contains all the materials necessary for anyone to practice stopping a bleeding arm/leg including:

- an arm model
- synthetic blood
- gauze
- forceps
- a tourniquet
- bandages
- and more!

Also included is access to an NGSS-aligned Online Control the Bleed Course: The Future Doctors Academy Control Bleeding. This course will help students learn to stop the bleed like no other!

These training materials are accessible to anyone whether or not you have a medical background. In addition to learning potentially life-saving skills, those who are exploring or in the medical field can practice skills to prevent bleeding, shock, and more.

# This Apprentice Doctor Control Bleeding Training Kit is great for:

- Instructors
- Medical professional students (aspiring and current)



# Thames & Kosmos Genetics & DNA

## \$34.90

Dive into an in-depth investigation of genetics & DNA with this Thames & Kosmos Genetics & DNA kit. Conduct 20 different experiments with the full-color, 48-page manual, and learn about inheritance, DNA structure & more!



Need it fast? See delivery options in cart.

O ADD TO WISH LIST

# **Product Description**



SKU: KT-GENDNA

Head into the lab for an in-depth investigation of genetics, the branch of biology focused on heredity and variation in organisms, and DNA - the acid that holds the blueprints for life.

# With the Thames & Kosmos Genetics & DNA kit, you will:

- See genetic material with your own eyes as you isolate the DNA from a tomato in a test tube
- Investigate inheritance and learn how traits are passed down from parents to children
- · Learn about dominant and recessive genes and play inheritance games to determine how traits will be expressed
- Learn about the biology of reproduction, the components of cells, and how chromosomes are combined and copied
- Assemble a model to see the elegant double-stranded helical structure of DNA, and then crack the genetic code and find out how the different parts, called nucleotides, fit together
- Analyze DNA evidence to identify suspects and solve a crime
- · Breed your own bacteria colony to experiment with survival of the fittest
- Read about how mutation affects genes and how scientists clone plants and animals

Conduct **20 different experiments** with the **full-color, 48-page manual** in this Thames & Kosmos Genetics & DNA kit. Intended for **ages 10+**. This biology kit is not to be used by children unless under adult supervision.



# Bath Bomb Science Kit

#### \$44.95

Have you ever taken a refreshing bath using a fizzing bath bomb? Science made it possible! Discover acid-base reactions with this hands-on Bath Bomb Science Kit, and reward yourself with a fizzy bath afterwards.



# **Product Description**



#### SKU: SB-BATHBOM

Did you know that science is the mastermind behind bath bombs?

It's true! Not only do these popular collectibles look beautiful, smell delicious, and create the best bath times, but they're also the result of some fizzy, unique chemical reactions that we can learn from. Creating your very own using this **bath bomb kit** is the perfect way to gain a little understanding of Chemistry - and to have a whole lot of fun in the process!

With this hands-on bath bomb kit, kids create DIY fizzy bath bombs while also learning about the chemical reactions behind them! A bath bomb is basically a science experiment, and each contains several ingredients that are mixed and molded into a shape. Once it hits the water, the fabulous fizzing chemical reaction begins!

Use the supplies in this Bath Bomb Science Kit to make your own homemade bath bombs. We even include a raspberry fragrance and a vanilla fragrance, so kids can prepare their bath bombs for a luxurious bath time. With this bath bomb science kit, kids (and perhaps adults, too) will experience the fun side AND the relaxing side of science!

From our Resource Center: bath bomb science fair project

**Explore different recipe options** and different sizes, and discover how changing the amounts of the different bath bomb ingredients affects the fizz factor! Once you've perfected your recipe, your relaxing, fizzy bath awaits. Keep them for yourself, or give them away as gifts!

**Step-by-step instructions for this kit are available online**. Find the links to the instructions, a list of included items, customer reviews, and more below!



# Science Buddies Bacteria Discovery Kit

## \$69.95

The Science Buddies Bacteria Discovery Kit teaches kids all about bacteria: the good, the bad & the yummy(?!). Although they're everywhere, microbes mostly go unnoticed. Until now! Learn how to safely culture & study common bacteria from your midst.



- ▲ Ideal for Grades 6+
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



# SKU: SB-BACTDIS

With the Science Buddies Bacteria Discovery Kit, kids learn all about bacteria. Discover what they are, how they grow, the conditions that make them flourish, and the ones that make them perish.

Bacteria are weird. On the one hand, you want to take precautions with food prep to make sure their growth is inhibited. Like in the **Minimizing Bacteria in the Thawing and Cooking of Meat** project. On the other hand, some foods rely on live culture bacteria—and the more the merrier! Like in the **Is That Really Bacteria Living in My Yogurt?** project.

**Please note:** Depending on the bacteria project you're doing, it may take several days to see significant bacteria growth. Place your Petri dishes in a dark, warm place, and don't be discouraged if it takes 4-6 days for your bacteria to grow.

Instructions for this kit are available online. See below links to the instructions and more.

Use the Bacteria Discovery Kit with the following projects, found online at Science Buddies:

- Is That Really Bacteria Living in My Yogurt?
- Germ Invasion
- How Well Do Disinfectants Work?
- · Minimizing Bacteria in the Thawing and Cooking of Meat
- How Do Food Preservatives Affect the Growth of Microorganisms
- Learn How to Disinfect Contaminated Water
- How do Bacteria Produce Power in a Microbial Fuel Cell



# Electronic Sensors Kit

#### \$69.95

How do smart devices, such as your cell phone or video game controller, know how to respond to color, light, touch or other external conditions? It's all about the sensors! With this kit, you can build & test your own electronic "sensing" devices.



# **Product Description**



#### SKU: SB-SENSOR

Electronic sensors are in smart devices all around you, such as your cell phone or video game controller. Sensors create the critical link between the physical world and computers by allowing computers to detect changes in color, light, magnetism, moisture, and more! In order to build automated devices, it's important to understand how sensors work and how to interpret a sensor's output. This kit lets you imagine, build, and explore a variety of "sensing" devices – the perfect introduction to the world of electronic sensors.

To get you started on your exploration of electronic sensors, Science Buddies scientists have created 11 projects that utilize the three core sensors included in this kit. With each project, you will learn to build a circuit for your sensor, measure the results, and put your sensor to work in an experiment. We've used quality electronic components that will stand up to repeated use, so you can choose to build and test all of the different sensors we've come up with, and even go on to invent your own real world applications!

Instructions for this kit are available online. See below for links to the instructions and more.

## You will also need from home:

Depending on the sensor you choose to build, you will need some additional supplies. Please consult the instructions for each project for a complete list of additional materials.



# Calorimeter Kit

#### \$49.95

Use this Calorimeter Kit for an engaging, hands-on exploration of Chemistry. Build your own calorimeter, and test your favorite snack foods to see which ones store more chemical energy - also known as calories!



ADD TO CART

- Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



# SKU: SB-KTCALOR

# Build your own food calorimeter and discover the science behind burning calories!

Have you ever wondered how nutritionists measure the calories in a certain food? With a little math and a device called a calorimeter, you can compare the amount of energy or amount of heat stored in your favorite snacks. This calorimetry kit provides you with the key supplies to build a simple, double can calorimeter for testing a variety of food samples in real-time.

Science Buddies scientists thought long and hard about the materials to use in this calorimeter and settled on parts that can be easily and safely assembled at home. This homemade calorimeter is uniquely designed to provide data that can be used to compare the caloric content of different foods. The different sized cans nest perfectly for efficient and specific heat transfer from the chemical reaction of burning foods, which results in more robust calorie readings. Easy-to-follow online instructions make assembly a breeze, which means you can focus on the thermodynamic experiment and doing your best scientific work!

Instructions for this kit are available online. See below for links to the instructions and more.

**Note:** For added convenience, we pre-drilled the holes on both cans and removed the bottom of the large can, so the parts are ready for assembly right out of the box.

# You will also need from home:

Household items, including aluminum foil, digital scale, food items, and long matches. Please consult the instructions for a complete list of required materials.



# Lab Chemistry Hardware Set

# \$54.95

Get high-quality chemistry hardware & lab supplies! This 12piece chemistry starter kit includes a support ring, a test tube rack, beaker tongs, a pinchcock clamp, a clay pipe-stem triangle, a burner tripod stand & more!



ADD TO CART

- . Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.



# **Product Description**



## SKU: CE-LABKIT

Get the high-quality chemistry hardware and lab supplies that you'll use for your general chemistry labs again and again!

This 12-piece chemistry hardware assortment set makes an excellent starter kit for any lab. It gives you the lab equipment you need to perform many chemistry experiments, including:

- · a support ring,
- a test tube rack (made of high-quality plasticware),
- · beaker tongs,
- · a pinchcock clamp,
- a clay pipe-stem triangle,
- · a burner tripod stand,
- and more!

Simply provide an **alcohol lamp** or **burner** to complete your set up.

You can also **complement this chemistry hardware set with additional chemistry supplies!** Browse our **chemistry lab equipment** selection to find an assortment of best-selling products, new products, and even obscure items, such as beakers, burettes, rubber stoppers, boiling and volumetric flasks, evaporating dishes, laboratory aprons, mortar & pestle, litmus test paper, filter paper, test tube brushes, and so much more!



# Product Description

# Laboratory Binocular Microscope with Plan Optics

\$995.00 \$769.95

As low as \$38.45/mo with PayPal. Learn more

HST's laboratory binocular microscopes for sale include this professional microscope with plan objectives. Provides 95% flatness of field & superb clarity for less than a comparable microscope with achromatic objectives!

## Out of Stock, Expected to Ship: 8/5/2022

Enter your email address to be notified when this item is back in stock.

Email Address

 $\ \square$  Also keep me up to date on news and exclusive offers.



# SKU: MI-6000BIN

NOTE: For a limited time, you'll get a free Microscope Starter Kit (\$33 value) when you purchase this microscope!

The free kit will automatically be added when you add the microscope to your cart.

Overwhelmed by all of the professional binocular microscopes for sale? No need to look further; this bestseller is an excellent choice.

Unmatched plan optics and the finest mechanics comprise the ergonomic engineering of this professional lab microscope. The Siedentopf binocular head with two comfortable viewing 20 mm eyepieces affords an expanded field of view and 360° rotation. Dual diopters compensate for discrepancies between your eyes while 55-75 mm interpupillary adjustment allows each user to achieve a custom fit. Its DIN standard plan objectives provide flawless clarity, 95% flatness of field, and true color from a magnification range of 40x to 1000x.

This compound microscope's effortless coaxial fine and coarse focusing and low-position stage controls allow continuous accuracy with fingertip precision. Compare slides side-by-side on the extra-large 50 x 75 mm integrated mechanical stage. Includes 1.25 N.A. Abbe condenser, an iris diaphragm, and premium 20-watt extra bright variable-intensity halogen light source for ideal contrast control. This professional biological microscope is proficient in all biology, medical or veterinary laboratory applications. Other industry-standard features include: ball-bearing, double-layer mechanical stage; swing-out filter holder with blue, green, and yellow filters; and 100-240 volt AC universal power supply. Complete with instructions, dust cover, spare bulb, immersion oil, and a lifetime warranty.



# **Product Description**

# Investigating Electricity Kit

What is electricity? What's a circuit? Ohm's Law? Discover these answers & more with this hands-on electricity kit! With it, kids 11 and up can build a motor, connect circuits, conduct



ADD TO CART

Ages 11+

In Stock & Ready to Ship

Need it fast? See delivery options in cart.

O ADD TO WISH LIST



# SKU: EL-KIT01

Kids will love investigating electricity with this STEM electricity science kit! Far more than an educational toy, this electricity and circuits kit allows middle and high school kids to explore electricity with 9 step-by-step experiments, learn how to read a circuit schematic, use the Scientific Method, and more!

Even young children will enjoy learning about electrical power with adult guidance. Plus, parents at every scienceliteracy level can teach electricity using the easy-to-follow experiment guide inside.

# How to use this Electricity Kit:

The one-box electricity experiment kit guides students through nine DIY experiments. This top-rated electricity kit is one of our best sellers, and it's intended for one student learning independently (though one kit can be used for up to three students in a school setting).

All materials and instructions for the hands-on science experiments are included in this physical science starter kit.

# Learn the basics of electricity and investigate:

- · Parallel & series circuits
- · Light bulbs
- Resistors
- Motors
- Electromagnets
- · Solar power
- And more!



# Classic Chemistry Kit

#### \$89.95

Put the "fun" in the FUNdamentals of chemistry! This classic chemistry set is a wise and long-term investment, designed to help students learn and explore key chemistry concepts hands-on.



ADD TO CART

- ▲ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- 1 SHIPPING RESTRICTIONS

# **Product Description**



# SKU: KT-CLACHEM

How does a fire extinguisher work? What's exactly is in slime? Can eggs really expand? Discover these answers and more with our Classic Chemistry Kit for kids (& adults!).

WOW your 11+-year-old with 20 memorable chemistry experiments, and equip them with a generous amount of chemicals and high-quality supplies. This classic chemistry set is so much more than an educational toy.

# This complete one-box chemistry set boasts:

- 40 pieces of high-quality chemistry lab supplies
- 7 different lab-grade chemicals
- 20 simple (yet exciting) chemistry experiments
- A 12-page, easy-to-follow instruction manual
- Personal protective equipment (PPE) for your young scientist
- Top-ratings as an HST bestseller

If you're just beginning to teach chemistry (organic chemistry, modern chemistry, etc.) to your kids, this Classic

Chemistry Set is the perfect place to start. With it, you and your child can conduct 20 hands-on chemistry

experiments from the comfort of your very own 'home chemistry lab.' These hands-on chemistry experiments inspire

curiosity and hands-on learning, while also helping children discover and explore a broad range of fundamental

chemistry principles, including:

- · atoms and molecules
- · states and properties of matter



# Renewable Energy Science Kit

#### \$364.95

Pay in 4 interest-free payments of \$91.24 with PayPal. Learn more

Experiment with an entire mini renewable energy system with this science kit! You'll get to use a hydrogen fuel cell, solar energy, wind turbines, and water electrolysis to power your projects.



- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



SKU: KT-NEWENER

Renewable energy is more than futuristic - and now you can discover how it works with this detailed renewable energy kit.

Experiment with hydrogen fuel cell technology, solar energy, wind turbines, and water electrolysis! An entire miniature renewable energy system can be constructed on a miniature scale.

# This renewable energy kit includes:

- a wind turbine module
- a solar photovoltaic panel
- · an electrolyzer
- a PEM fuel cell
- a hydrogen storage system
- · and more!

You'll get to learn the whole system step by step, configure it in different ways, and visualize the workings of clean energy principles from start to finish. A complete manual that explains the technology and defines experiments is included on CD.

# Want to study renewable energy in-depth?

Turn this renewable energy kit into a full unit study with the included Renewable Energy Science Education CD-ROM to go with the kit. It contains a **129-page digital (PDF) textbook on renewable energy** by Dr. Colleen Spiegel, plus a **124-page experiment manual**, flash animations to show how fuel cells work, technical support, and a kit assembly



# Advanced Chemistry Labware Set

#### \$179.95

Pay in 4 interest-free payments of \$44.99 with PayPal. Learn more

Here's all the equipment you need to explore advanced chemistry! This set comes with high-quality glassware, lab tools & supplies, and personal protective equipment (PPE) for an all-in-one lab kit. Just add chemicals!



ADD TO CART

- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



# SKU: CE-KITADV

This advanced chemistry set is full of labware and equipment that's perfect for high school, homeschools, amateur chemists, or even professional scientists setting up a home chemistry lab. We know choosing lab supplies to go beyond basic science experiments can be time-consuming and expensive. So with this professional chemistry set, we did the work for you!

Here's all the chemistry lab equipment you need to explore advanced chemistry. In this chemistry lab equipment set, we've included high-quality glassware, lab tools and supplies, and personal protective equipment (PPE). Our quality HST glassware is **durable with easy-to-read markers**—making it simple for teachers, parents, and students alike to achieve accuracy with measuring and mixing.

If you're looking for a detailed chemistry set for high school kids or a gift for a science enthusiast, this professional chemistry set is the one we recommend!

This all-in-one science kit includes the pieces you need to conduct the most common chemistry experiments and chemical reactions.

# Inside this professional chemistry set, you'll find:

- Glassware: beakers, flasks, graduated cylinders, test tubes, bottles, and more.
- Lab tools: stainless steel spatula, stirring rods, test tube clamp, and more.
- Chemistry Equipment: alcohol and stand, test tube rack, mortar and pestle.
- Personal protective equipment: goggles, gloves, and lab apron.

This exceptional value saves you time, money & headaches; everything is conveniently-bundled and ready to go! This



# **Product Description**



# SKU: KT-FUELCCK

**Save now!** Put together this hydrogen fuel cell car experiment kit to see for yourself how clean, efficient fuel cell power works!

Just add distilled water to the onboard tank and hook up the solar cell or battery pack to begin the process of electrolysis that produces hydrogen gas, which the fuel cell then combines with oxygen to produce enough electricity to power the car.

This hydrogen fuel cell car kit includes a motorized chassis with an LED light and a motor, reversible polymer electrolyte membrane (PEM) fuel cell, solar cell, power supply battery pack with leads, cylinders for water and hydrogen gas, and other necessary parts. Build the car with common household tools. You supply distilled water and two AA batteries.

This kit becomes a full unit study with the included Renewable Energy Science Education CD-ROM, which contains a 129-page digital (PDF) textbook on renewable energy by Dr. Colleen Spiegel, a 124-page experiment manual, flash animations to show how fuel cells work, technical support, and a kit assembly guide. The textbook includes 7 chapters that cover topics such as climate change, solar energy, wind energy, electrolysis, fuel cells, hydrogen power, and electronics. The material is appropriate for middle school through high school, and advanced topics are included for the upper grade levels. The experiment manual is written for the complete Renewable Energy Science Kit, but has tips for adapting the experiments to this specific kit. Compatible with Windows 98/ME/2000/XP/7.

The Fuel Cell Car can be used as a science fair project. Here are a few ideas to get you started.



# H-Racer 2 Hydrogen Fuel Cell Car

## \$199.95

Pay in 4 interest-free payments of \$49.99 with PayPal. Learn more

Looking for a really cool way to show how hydrogen power works? The H-Racer 2 hydrogen fuel cell car is a fun AND educational way to learn about water electrolysis and fuel cell science!



ADD TO CART

♣ Ages 12+

In Stock & Ready to Ship

# **Product Description**

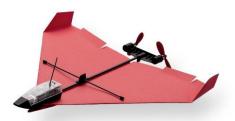


## SKU: KT-HRACER2

A really cool way to show how fuel cell cars work! This updated H-Racer hydrogen-powered car includes IR remote control steering, glowing lights, faster speed, and longer runtimes. Fuel up this small, sleek car with hydrogen gas produced in the refueling station by electrolysis of water, using either the included solar panel or AA batteries. Then watch it go as the hydrogen combines with oxygen from the air in the onboard fuel cell, generating a DC current that makes the racer's motor run. As you experiment with the H-Racer 2, you'll learn about water electrolysis and fuel cells (the science behind hydrogen power) as well as recent advances in fuel cell technology.

Some assembly is required to use the H-Racer 2. You provide two AA batteries.

This kit becomes a full unit study with the included Renewable Energy Science Education CD-ROM, which contains a 129-page digital (PDF) textbook on renewable energy by Dr. Colleen Spiegel, a 124-page experiment manual, flash animations to show how fuel cells work, technical support, and a kit assembly guide. The textbook includes 7 chapters covering climate change, solar energy, wind energy, electrolysis, fuel cells, hydrogen power, and electronics. The material is appropriate for middle school through high school, and advanced topics are included for the upper grade levels. The experiment manual is written for the complete Renewable Energy Science Kit, but has tips for adapting the experiments to this specific kit. Compatible with Windows 98/ME/2000/XP/7.



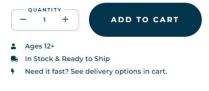


# **Product Description**

# PowerUp 4.0 Electric Paper Airplane Kit

# \$69.95

Future pilots and engineers, get ready for an exciting STEM experience with the POWERUP ® 4.0! Sail the open skies and fly on auto-pilot for up to 10 minutes at a time. Control your plane in the palm of your hand, using your smartphone!



# $\bigcirc$

# SKU: KT-AIRPL4

# The Next-Generation Smartphone Controlled Paper Airplane Kit

Future pilots and engineers, get ready for an exciting STEM experience with the POWERUP ® 4.0! Sail the open skies with your paper airplane designs, and fly on auto-pilot for up to 10 minutes at a time. Control your plane in the palm of your hand, using your smartphone!

The POWERUP ® 4.0 is simple to fly with autopilot and gyro stabilizer, controlled through your smartphone. With its sophisticated onboard computer, real-time telemetry, and auto-stabilizers, the 4.0 can fly in imperfect weather. Enjoy up to 10 minutes of flight time, with a 230 ft (70 m) control range.

This module works well with a wide variety of planes, even if your folds aren't perfect. The crash-proof carbonfiber body easily attaches to paper airplanes and can be used to upgrade balsa wood or foam flyers. It's perfect for beginners and flight hobbyists looking to improve their designs!

Take your creations to the next level with supplemental <a href="PowerUp Paper Airplane Templates">PowerUp Paper Airplane Templates</a> and the full-color <a href="PowerUp 56-page">PowerUp 56-page instruction book!</a>

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.





# How's it Growin'?

#### \$44.99

Design and carry out investigations to discover the world of plant growth, including the variety in plant parts, plant needs, and what plants will do to meet their needs. It's the perfect gift for your developing botanist!



ADD TO CART

- Biology
- Accelerate (3rd-7th grade)
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



SKU: SU-HOWGRO

Do you know what plants need to grow? The Accelerate level Science Unlocked curriculum kit How's it Growin'? is an engaging experience providing several easy plant science experiments and STEM activities for a developing botanist.

Students will learn about the plant life cycle by growing seeds, the resources a plant needs to survive, and to what lengths a plant will go to get to those resources. Additionally, students will demonstrate seed germination by growing and testing a series of plants to see if their newfound knowledge is true! The kit includes a **full-color student curriculum workbook and detailed teacher guide**, with detailed step-by-step instructions for six activities designed to engage your students in studying a plant's required resources. Your student's experience has inquiry-based activities and assessments designed to enhance your student's understanding of the resources a plant requires to grow and survive. This kit will take just minutes to set up, but **provides over 8 hours of learning, lesson plans, and fun science experiments!** Both the teacher and student can jump right in, following the student curriculum workbook and teacher guide.

In this kit, the student will engage in these fun activities:

- 1. Observing a phenomenon in plant growth
- 2. Plant seeds and design their own maze for a plant to grow through
- 3. Use a number of seeds to grow a set of plants to use for multiple activities throughout the kit
- 4. Organize leaves based on their venation, shape, and edging to determine possible ecosystems the leaf's plant would be found in
- 5. Test and observe respiration of a leaf





- Launch (8th-12th grade)
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



#### SKU: SU-GOOGLO

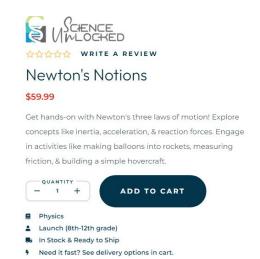
Good to Glow: Atomic Structure and Chemical Reactions is a Launch level Science Unlocked curriculum kit. Shine bright with this chemistry kit to learn how chemical compounds react and how chemical bonding is based on atomic structure. Conduct flame tests on the reactants and products of reactions, observe candles with colored flames to learn about atomic structure, use the periodic table to predict the properties and bonding of chemical compounds, find out what happens to glow sticks in hot and cold water (and why), and test the effect of solution strength on the speed of a metal replacement reaction.

"Good to Glow" comes with a full-color Student Workbook and detailed Teacher Guide. It is a phenomenon-based approach, designed to fully engage students in the science of chemical reactions. Through a series of experiments, students will learn why reactions happen and how to explain them using the periodic table. As part of a special program from Home Science Tools, this Launch level kit will provide over 18 hours of engaging instruction, helping your student gain knowledge and confidence while doing real science.

In this kit, the student will do these activities and more:

- 1. Observe the flame colors produced by two burning powders before and after a reaction
- 2. Use a model of the atom to explain different flame colors of candles
- 3. Learn how to use the periodic table to predict the properties of elements and the results of bonding
- 4. Use glowsticks to discuss reactions and predict their products
- 5. Make solutions of copper sulfate and find out how they react with aluminum foil





# **Product Description**



## SKU: SU-NEWTON

Get hands-on with sir Isaac Newton's three laws of motion! Explore concepts like inertia, acceleration, and reaction forces. We've designed an exciting curriculum filled with engaging and memorable physics activities, including making balloons into rockets, measuring friction, and building a simple "hovercraft."

Our highly engaging kit includes a full-color student curriculum workbook and teacher guide with detailed, stepby-step instructions for seven fun science activities (plus extras!) designed to engage your student in the laws of motion and how they were developed. The student experience has inquiry-based activities and assessments designed to enhance your student's understanding of physics and the world around them. Designed to provide over 16 hours of education and entertainment, both teacher and student will be able to open the box and start within minutes.

In this kit, the student will engage in these engaging science experiments:

- 1. Watch what happens to objects in a spinning water-filled tube.
- 2. Put Newton's First Law of Motion into practice and be able to to explain why some objects just stay still.
- 3. Make a Newton's Tube, which isn't quite Newton's cradle, but works similarly.
- 4. Race different balls down ramps to learn how force acts and gravity fits into Newton's Second Law of Motion and what the second law states.
- 5. Explore a new type of force friction through the measurement of the drag on a weighted balloon.
- 6. Demonstrate Newton's Third Law of Motion by using the power of air to make balloons into simple rockets.
- 7. Investigate buoyancy and density while making an easy hovercraft toy.
- 8. Keep the physics fun rolling with a variety of engaging optional extensions!



# Thames & Kosmos Robotics Workshop

\$249.95 \$242.90

Pay in 4 interest-free payments of \$60.73 with *PayPal*. Learn more.

Build & program robots with this complete, hands-on Robotics Workshop kit from Thames & Kosmos. Using sensors, motors, a core controller & hundreds of snaptogether building pieces, you can assemble 10 different robots!

ADD TO CART

A ges 12+

In Stock & Ready to Ship

# **Product Description**

Θ

## SKU: KT-ROBWRK

Build and program robots with this Robotics Workshop kit: a complete robotics engineering system from Thames & Kosmos!

Using sensors, motors, a core controller, and hundreds of snap-together building pieces, you can follow the instructions to **assemble ten different robots**. The versatile parts also allow you to make robotic science experiments according to your own designs. This fun robotics curriculum starts out with instructions for building simple robots, teaching you how the sensors can be used to control the robots.

# With this Thames & Kosmos Robotics Workshop kit, kids can build:

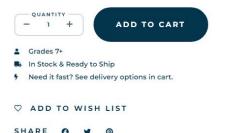
- · an ultrasound robot that can avoid obstacles,
- · a drawing robot,
- · a touch sensor robot
- · a ball-shooting robot
- · a crawling robot,
- · a grabbing robot
- · a robotic arm that can pick up objects,
- · a butler robot,
- · a robot that will turn toward a light source,
- and a cool scorpion robot!



# Coronavirus Education Kit

## \$40.95

This Coronavirus Education Kit is an excellent educational tool to use in the classroom, at home, at work, or at community events. Conduct 6 hands-on activities to better understand virus transmission & response!



**Product Description** 



SKU: KT-PANDEM

# The Coronavirus Education Kit is an excellent educational tool to use in the classroom, at home, or even at work or community events.

This kit provides detailed, scientifically accurate information about viruses, epidemics, pandemics, explanations of contagion, immunity, and the role of treatments, isolation, and quarantine. Through 6 hands-on activities, students will gain an appreciation for virus transmission, better understand the importance of hygienic practices, and begin to understand the consequences and responses of spread through a community.

--- WE ALSO HAVE AN ELEMENTARY VERSION AVAILABLE! (for Grades 2 - 6) ---

# The Kit Includes 6 Hands-On Activities:

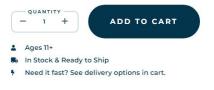
- 1. Testing hand-washing techniques for the removal of simulated viruses and germs on hands; practicing proper hand hygiene
- 2. Exploring person-to-person virus transmission using simulated "germs"
- 3. Assessing the possibility of surface-to-person transmission
- 4. Demonstrating droplet-based transmission from a sneeze or cough
- 5. Finding the source of a virus outbreak in a fictitious scenario
- 6. Creating a potential solution that could be implemented in the fictitious community to protect citizens, prevent



# Erycard Blood Type Test Kit

## \$13.95

The single-use Erycard Blood Type Test Kit contains everything needed to perform one complete blood test for ABO and Rh. Wondering which of the 8 possible blood types you have? Use this kit to quickly and easily find out!



O ADD TO WISH LIST

**Product Description** 

SKU: BE-BLDTST2

# The Erycard Blood Type Test Kit helps to easily answer this common question: "What is my blood type?"

This single-use kit from Innovating Science is specifically designed for educational use. It **contains everything**needed to perform one complete human blood test for ABO and Rh, including an Erycard 2.0 Blood Grouping Card for ABO/RHo(D) Forward Grouping with Autocontrol.

Whether you're wanting to visit the blood bank for a donation, or you're simply curious about your blood type, this Erycard blood test is simple, easy-to-use, requires a small amount of blood, provides accurate results, and comes with step-by-step instructions. Manufactured by Tulip Diagnostics, the Erycard blood test based on the principle of lateral flow and guided by capillary action.

## Here's how it works:

- 1. Prick your finger with the included finger prick tool, and add a drop of blood to the series of wells on the Erycard that contain blood typing antibodies (there are 4 total)
- 2. Add buffer to the 4 wells <u>beneath</u> the blood-filled wells to rinse them
- 3. Observe as some wells remain red, while others wash away clear (wells with blood samples that agglutinate\* will remain red, while those that do not will wash away clear)
- 4. Using the 4-well combination of clear and red, you will be able to determine your blood type with the included key

Possible ABO blood groups include A, B, AB, and O. Each of these can be Rh-positive or Rh-negative, meaning there are 8 possible blood types people can have: A+ or A-, B+ or B-, AB+ or AB-, and O+ or O-. Wondering if you'll



# **Product Description**

# TTTT Z REVIEWS

# Cold, Flu, or Allergy Kit

# \$28.95

Use the Cold, Flu, or Allergy Kit to explore the diagnosis & treatment of fictitious patients who may have a cold, the flu, or allergies. Includes a teacher's guide & student worksheet! Takes about 2 - 3 class periods (40 min. each) to complete.



- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST



## SKU: KT-STO157

Become a doctor with this Cold, Flu, or Allergy Kit! Diagnose and treat your fictitious patients who may have a cold, the flu, or common seasonal allergies.

The common cold, influenza (the flu), and seasonal allergies all have similar symptoms - but they should be treated differently. In this interactive Biology lab, you have 3 patients who have come in with symptoms that could be related to one of these three conditions.

Using hands-on, simulated flu tests and (simulated) swabs from your patients, you'll first determine which patients (if any) have the flu. With that information, you will then review each of their symptoms, provide a diagnosis, and determine a treatment. But to determine a treatment, you'll need to read the included over-the-counter (OTC) medicine labels and align the active ingredients with your patients' diagnoses. We know you'll be a great doctor and have fun doing it!

Each kit comes with a detailed teacher's guide and a complete student worksheet. Aside from a pair of safety goggles, all supplies needed to conduct the hands-on activities are included. No specialized lab equipment is required - making this kit a perfect learning activity for all types of schools and homes.

Time to complete: 2 - 3 Class Periods (about 40 minutes each)

From the Manufacturer: Active Inquiry, Ready-to-Go, Cost-Effective and Student/Teacher Friendly! This Science Take-Out kit was designed by experienced science educators who understand the diverse needs of teachers and their students. The Science Take-Out team has extensive expertise in curriculum development, classroom instruction, and



# Rocks & Minerals Sample Set

#### \$32.95

Get 1" rock & mineral samples (15 of each) and tools to inspect them in one boxed set. Kit has rock & mineral samples, magnifier, nail (hardness) & streak plate (color). So kids can handle, test & study rocks & minerals!



- ♣ Ages 10+
- 🛼 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: RM-SAMPSET

Handle, test & study rock and mineral samples! The Rocks and Minerals Sample Set is the perfect rock collection! It includes 15 rock specimens and 15 mineral specimens, each measuring about one inch in length.

This rock collection set has two boxes of specimens: 15 rocks and 15 mineral samples. While specimens are numbered as a differentiation aid, no identification key is provided. Instead, this set is best for students working to identify the various rock and mineral samples through their course work.

With this set, you get the following rock and mineral samples.

### Rocks

Obsidian, Granite, Basalt, Scoria, Rhyolite, Shale, Calcareous Tufa, Sandstone, Conglomerate, Limestone, Slate, Marble, Quartzite, Gneiss, and Schist.

### Mineral Samples

Fluorite, Microcline Feldspar, Hematite, Pyrite, Milky Quartz, Calcite, Biotite Mica, Muscovite Mica, Magnetite, Alabaster Gypsum, Satin Spar Gypsum, Selenite Gypsum, Talc, Halite, and Graphite.

Along with the rock and mineral specimens, this set also has tools to test, study, and conduct mineral identification.

This mineral kit and rock set also includes compartmented storage boxes. Use the included 1" acrylic magnifier to view details up close, the nail to test hardness, and the streak plate to test color.



MENIEWS

# Magnetism and Temperature Kit

### \$44.95

What happens to magnets when they get really hot? Or really cold? Does temperature affect a magnet's strength? Find out with this Magnetism and Temperature Kit.



ADD TO CART

- ▲ Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: SB-MAGTEMP

Picking up a chain of paperclips with a magnet can amuse students for hours. How many paperclips will it hold? Will adding one more cause them all to fall? But the Magnetism and Temperature Kit goes beyond simple amusement. With this kit, kids not only have fun but also gain solid science knowledge.

Through hands-on experiments, kids discover how the strength of a magnet varies with temperature. But why would that even matter?

Physicists sometimes study matter under extreme conditions, like for space shuttle design. For example, the exterior of a space shuttle is made from special tiles. They undergo testing to make sure they can withstand the crushing pressure and wild temperature swings of space travel. Likewise, scientists also need magnets that function well in the cold emptiness of space.

Now you can experiment similarly with a Magnetism and Temperature Kit. Simulate extreme conditions in your kitchen, then test how magnets perform.

Note: This kit tests only permanent magnets.

Instructions for this kit are available online. See below links to the instructions and more.

### You will also need from home:

- Plastic tongs for holding magnets
- Heat-resistant glove or oven mitts
- Flat surface or plate
- Freezer



# Solar Powered Water Desalination Kit

#### \$39.95

Build a solar-powered water desalination device with materials ready for assembly! Based on an award-winning state science fair project, this engaging science kit is sure to provide hours of fun and experimentation.



ADD TO CART

- ▲ Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



SKU: SB-SOLDESL

This solar desalination kit from Science Buddies is based on an award-winning state science fair project. With it, students can use build a DIY desalinator that transforms saltwater into fresh drinking water!

# What is Desalination?

Ocean water is too salty to drink. But a process called desalination can turn seawater into fresh water that people *can* drink. In other words, desalination is the process of removing salt from seawater, amazingly making it drinkable water. There are several different desalination systems that can be used to do this!

With this water desalination kit, you will make a solar desalination device that uses a power source that is free—the sun!

While this isn't quite a survival kit for the filtration of contaminants in a survival situation, this kit is an excellent educational resource for teaching students about water needs a multitude of scientific concepts!

This high-quality water desalination kit contains all the materials you need to build a working desalination chamber without making trips to multiple stores. We've gathered all the hard-to find pieces, like plastic boxes and funnels that are just the right size, the right weight washers, a beaker, and a graduated cylinder, in one simple kit. We've even predrilled the holes in the rectangular boxes and cups so you will spend less time setting up the experiment and more time enjoying the results!

The desalination process requires some tinkering to correctly set up the experiment. Please read the **FAQ page** before starting your desalination experiment to understand common challenges and recommended solutions. Additional supplies, which can be found on this **Materials and Equipment page**, are required.



# Build Your Own Crystal Radio Kit

### \$74.95

The classic crystal radio kit made even better with easy to understand instructions, solder-free building, and an amplifier as an alternative for full sound! It's the perfect set up for an engaging science fair project.



- ▲ Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



#### SKU: SB-RADIO

Science Buddies staff scientists worked long and hard and with selectivity to develop a crystal radio kit that will:

- 1. make your radio project successful, and
- 2. avoid the many problems of the amateur radios at toy stores that are called "crystal radios"

With this Crystal Radio Kit, you will become a radio experimenter as you learn the basic radio circuit elements required for receiving radio signals. Plus, you'll be able to listen to AM radio broadcasts with something you made yourself!

# What is a crystal radio?

From the Science Buddies Website:

A crystal radio is a very simple radio that was popular in the early history of radios. It is an electrical circuit that can pick up and play sound from AM radio stations. Rather than rely on outside electrical sources, like batteries or plugs, crystal radios get their power directly from the radio waves. The parts of a crystal radio include an antenna, a tuning coil, a diode detector/crystal detector (labeled as "detector"), earphones/earpiece, and a connection to an electrical "around."

# What makes this crystal radio set different from all of the others out there?

- Easy-to-understand online instructions with lots of pictures, making this an excellent and simple crystal radio for beginners.
- A pre-assembled amplifier/speaker unit and connecting cable, which enables you to hear stations much more



### Microbial Fuel Cell Kit

#### \$79.95

Generating electricity from mud? It's a dirty little secret, but it's true! This microbial fuel cell kit, or MFC Kit, is filled with the supplies you need to build and test your own microbial fuel cells.

#### Out of Stock, Expected to Ship: 8/6/2022

Enter your email address to be notified when this item is back in stock.

Email Address

Also keep me up to date on news and exclusive offers.

### **Product Description**



### SKU: SB-MICFUEL

Check out a promising form of alternative energy with our Microbial Fuel Cell Kit! This electricity generation MFC kit was developed exclusively for Science Buddies; it contains two microbial fuel cells that allow you to **run simultaneous tests, compare different soil conditions, create electricity-generating mud, and more.** Who knew you could use mud to explore electrical engineering??

# What's a microbial fuel cell?

Microbial fuel cells (MFCs) basically mimic bacterial interactions that are found in nature; they use bacteria and a highenergy oxidant (like oxygen) to create an electrical current!

With this hands-on microbial fuel cell kit, middle and high school students can explore alternative power sources, better understand electrochemistry and electron transfer, and discover the unique ability and power of microbes (microorganisms).

### Here's how it works:

- 1. Simply pack the fuel cell vessels with mud
- Align the anodes and cathodes as directed in our **project instructions** (this science fair pack can be used for all sorts of neat MFC projects!)
- 3. Sit back and wait for the "magical microbes" (or electrogenic bacteria) in the mud to make an electrical current!

This Microbial Fuel Cell Kit includes hacker boards that sit on top of the microbial fuel cells, allowing you to power LED lights or a combined clock/thermometer (included in the kit) from the energy the electrogenic microbes create.



# Strength of an Electromagnet Kit

#### \$29.95

With this physics science kit, you will make an electromagnet and investigate how the strength of its magnetic field changes with its design.



ADD TO CART

- ▲ Ideal for Grades 4+
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST



### SKU: SB-ELMAGST

You may be familiar with permanent magnets—the kind that hang on a refrigerator. But did you know that other magnets, called electromagnets, can be turned on and off? When turned on, electromagnets act just like permanent magnets, but if you turn them off, their magnetic properties disappear. Doorbells often contain electromagnets!

With this physics science kit, you will make an electromagnet and investigate how the strength of its magnetic field changes with its design. The kit contains enough magnet wire and iron bolts to build 4 different electromagnets. How many paper clips can each magnet hold?

Instructions for this kit are available online. See below for links to the instructions and more.

### You will also need from home:

- Masking tape
- · Scissors or wire cutters
- Optional: shallow plastic container, slightly longer and wider than the iron bolts



### Basic Circuits Kit

### \$14.95

The Basic Circuits Kit brings a unique twist to learning about electricity. Build a simple circuit, create your own dimmer switch, learn about conductors & more! See the product description below for more information.



ADD TO CART

- Ideal for Grades K+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.



SKU: SB-CIRCUIT

# This Basic Circuit Kit contains everything you need for an engaging, hands-on introduction to electricity and circuits!

Science Buddies scientists have selected quality electronic components that will last after repeated use, so you can explore all three Basic Circuits projects for an in-depth look at electricity and conductivity.

Using real electronics components inside this basic circuit kit, you'll build and test a basic circuit and explore how electricity flows through the components.

Take your exploration of circuits and problem solving even further with this electricity kit by easily attaching additional components to your circuit! For example, you can add different materials to test which are the best conductors, create your own dimmer switch, explore parallel circuits, and more. The opportunities for **DIY electric circuit projects** with this basic kit are endless!

Online, step-by-step instructions guide you through each of these electrical circuits projects, and the supplies in this kit make it easy to take your basic circuits exploration to the next level.

Not quite ready to checkout? Take a look at the customer reviews below to learn more; there's a reason **this starter kit** has a near 5 star rating!

Instructions for this kit are available online, see below for links to the instructions and more.

### What additional items will you need from home?

Depending on the project you choose to explore, you will also need some basic household items, such as aluminum



### SKU: SB-CHCRIME

Discover what it is like to be a forensic chemist with this hands-on kit!

to identify an unknown substance discovered in the kitchen of a critically ill elderly lady. Is it a common kitchen ingredient like sugar, salt, or cornstarch? Or will tests reveal that the mystery substance is aspirin—an over-the-counter pain medication that can be toxic at high doses?

Following the scenario and instructions set out in the Crime Scene Chemistry project, you will perform a series of tests

The experimental tests included in the kit are easy to perform, safe, reliable, and clearly demonstrate how different chemical properties like color, solubility, and reactiveness are useful during chemical analysis of an unknown substance. This kit is a fun introduction to real-world chemistry!

Instructions for this kit are available online, see below for links to the instructions and more.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- WARNING: This product can expose you to Aspirin, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

# Crime Scene Chemistry Kit

#### \$44.9

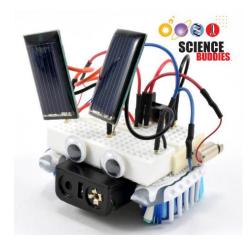
Try your hand as a forensic scientist. Learn to use chemical analysis techniques to identify an unknown substance.



ADD TO CART

- ▲ Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- 9 SHIPPING RESTRICTIONS
- O ADD TO WISH LIST





# Advanced Bristlebots Robotics Kit

#### \$59.95

Take the next step in building bristlebots! Build a light-tracking or solar-powered toothbrush robot. Brushes & googly eyes are not included in this kit. Use the fun design ideas shown to inspire your own creations!



- ▲ Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



### SKU: SB-ABRISBT

Move beyond basic brushbots and bristlebots with our Advanced version!

Perfect for older kids building their first robot (or younger kids who have already mastered the trio of simple robots possible with our **Bristlebot Kit**), the **Advanced Bristlebot Kit** takes kids to the next level of robot building as they explore either a solar-powered robot or the use of sensors to control robot behavior. Moving along on twin toothbrush heads (not included) the advanced bristlebots built from this kit are fun enough to be a toy, yet, with the test conditions laid out in the project instructions, ideal for a good robotics engineering science project.

The Advanced Bristlebot Kit contains all the electronics parts needed to create either a light-tracking bristlebot or a solar-powered bristlebot—your choice! The parts are reusable, allowing you to build one type of robot, play with it as long as you like, and then recycle the parts to build the other.

To make building these advanced bristlebots easier, we've pre-attached tinned leads, eliminating the need to solder or struggle to push flimsy wires into breadboard holes. We've also color-coded the jumper cables to match the step-by-step diagrams, photos, and instructions for each advanced bristlebot, enabling older kids with no previous electronics experience to build these robots with confidence.

Instructions for this kit are available online, see below for links to the instructions and more.

**Please note:** The brushes & googly eyes pictured above are not included in this kit. Use the fun design ideas shown to inspire your own creations!

Additional items needed: Depending on the bristlebot being built, toothbrush heads, double-sided foam tape, scissors or wire cutters, and a flashlight are needed.



# Snap Circuits Green Kit

### \$74.95

Learning about energy sources and how to "think green" is a snap! Kids will enjoy the challenge of using the award-winning Snap Circuits® components in this alternative energy kit to build over 125 hands-on projects.



O ADD TO WISH LIST

**Product Description** 

SKU: KT-SCGREEN

# Learning about energy sources and how to "think green" is a snap!

Kids will enjoy the challenge of using the award-winning Snap Circuits® components in this alternative energy kit to **build over 125 hands-on projects**! As they create with this educational toy, they will get to explore environmentally-friendly energy and how the electricity in your home works.

This Snap Circuits Green alternative energy kit from Elenco Electronics has over 45 parts, including:

- a solar cell,
- a rechargeable battery,
- a clock,
- · a wind fan,
- · an analog meter,
- · a hand crank generator,
- · an electric car,
- · a water wheel,
- a 78-page full-color manual with all the alternative energy projects,
- a separate educational manual called "Think Green" that explains environmentally-friendly energy including geothermal, hydrogen fuel cells, wind, solar, tidal, hydro, and others,
- · and more!

Just provide two **AAA batteries** and you'll be ready for loads of fun learning about and experimenting with electronic



# Deluxe Distillation Apparatus Kit

### \$79.95

This deluxe chemistry distillation kit is filled with the labware, glassware & stands you need to get started with distilling in the lab. Includes a 300 mm sealed Graham condenser, flasks, a support stand & much more!



ADD TO CART

- ♣ Ages 14+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



SKU: CE-DIKIT2B

This deluxe distillation kit comes with high-quality laboratory glassware and the stands you need to get started with chemistry lab distillation!

There is so much to explore when it comes to distillation - and so many kinds of distillation to learn about, including simple distillation, steam distillation, fractional distillation, short path distillation, and more! A distillation apparatus consists of 3 major parts: a distillation flask to heat the mixture, a condenser that cools the vapor and acts as a chiller, and a receiving flask/vessel.

### The borosilicate glass in this distiller set includes a:

- 300 mm sealed Graham condenser
- 50 mm diameter Kjeldahl distillation ball
- · 500 ml flat-bottomed boiling flask
- 500 ml Erlenmeyer flask

### Other distillation equipment in this distillation kit includes a(n):

- 4" x 6" support stand
- adjustable burette clamp
- tripod burner stand
- · wire gauze with ceramic center
- and rubber stoppers

### Assembly instructions and project ideas are also included!



# Rubber Band Car Kit \$12.95 This hands-on kit provides the materials to build and experiment with a balloon racer and a rubber band racer. ADD TO CART ♣ Ages 10+ In Stock & Ready to Ship Need it fast? See delivery options in cart. O ADD TO WISH LIST SHARE (

# **Product Description**



#### SKU: KT-CARKITI

This hands-on kit provides the materials to build and experiment with a balloon racer and a rubber band racer. You'll naturally apply the scientific method as you try and modify different designs to get your racers to go further!

This set comes with design ideas for both a balloon racer and a rubber band racer.

MARNING: CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Forensic Chemistry of Blood Types Kit

### \$49.95

This Forensic Chemistry of Blood Types Kit realistically simulates crime scene blood analysis in the classroom: students learn blood typing techniques while working to solve a crime! Contains enough materials for 10 groups.



### **Product Description**

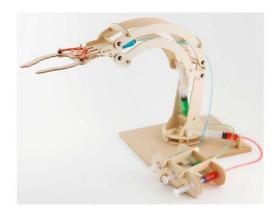


### SKU: KT-ISBLFOR

This Forensic Chemistry of Blood Types Kit realistically simulates crime scene blood analysis in the classroom. Challenge and engage students while they learn to determine different ABO and Rh blood types on samples collected from a crime scene, the victim, and suspects. The kit contains only new formulation synthetic blood, which eliminates the risk of disease transmission.

Students learn blood typing techniques as they test and compare a blood sample from the crime scene to that of the victim and two suspects. The Forensic Chemistry of Blood Types Kit contains enough material for 10 groups. A teacher's manual and reproducible student study guide are included.

Safety gear, specifically gloves, goggles, and apron, are recommended. You provide wax pencil.



# Hydraulic Robotic Arm

This fully functional Hydraulic Robotic Arm demonstrates hydraulic power systems in a meaningful way for both kids and adults.



- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



### SKU: MC-HYDROBO

This fully functional hydraulic arm is an excellent demonstration of a hydraulic power system for both kids and adults. The frame is made from die-cut plywood and uses six syringes and three pieces of rubber tubing to maneuver the claw and arm. A significant amount of assembling and gluing is required (1-2 hours), but the finished product is well worth the effort. This hydraulic robotic arm kit is a great product for anyone interested in STEM fields such as engineering or the manufacturing industry. This robot arm functions on some of the same principles that drive real world machines. Hydraulic robot arms like this one are used for mass manufacturing operations, such as auto assemblies.

STEM refers to Science, Technology, Engineering, and Mathematics and aims to remedy the lagging proficiency of US students in comparison to their industrialized global counterparts. While interpretations vary, most agree that STEM is about innovation, learning about the world, technical literacy, and problem solving. Ultimately, STEM is pushing limits, moving forward, and finding better ways to do things. STEM education is simply providing students and teachers with a stronger grasp of science, technology, engineering, and math through hands-on learning that draws meaningful connections with real-world applications. HST provides many products that integrate two or more STEM disciplines, thereby helping to improve STEM literacy, inspire an interest in STEM careers, and equip today's students with the skills they need to be competitive and competent tomorrow. The Hydraulic Robot Arm incorporates STEM learning by combining problem solving with a real-world application of technology.

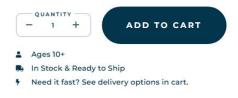
Use three pairs of syringes to control the arm: one pair to open and close the claws, one to raise and lower the arm, and one to rotate the arm 90°. The finished arm is approximately 13.5" tall with a 16" reach and mounted on an 8.5" x 7" base. A 12-page instruction manual with detailed drawings will walk you through the assembly step-by-step. Once assembled, just add water, and you're ready to go! A ruler or tape measure will be helpful, but is not required; glue is



# Rapitest Mini 4-in-1 Soil Tester

### \$16.95

This Rapitest mini 4-way soil analyzer provides an accurate analysis of soil pH, moisture content, fertilizer content, and sunlight. Use it to boost your garden's productivity or for soil science experiments.



O ADD TO WISH LIST

# **Product Description**



### SKU: BE-ANALYZE

This 4-way soil analyzer provides an accurate analysis of soil pH, moisture content, fertilizer content, and sunlight. It's an electronic meter ideal for experiments or science fair projects with plants, or for the avid gardener. Includes cleaning pad, a detailed chart listing the optimal levels of each element for various types of plants, and a table of light requirements.

### Science Fair Project Ideas:

- Test natural fertilizers (compost or other organic materials) and chemical fertilizers to see the effect of each on plant growth and moisture in the soil.
- Learn about soil pollutants by testing the pH of different types of soil (containing sand, clay, peat moss, compost, or fertilizer) before and after adding a chemical pesticide.



# Smithsonian Motorworks Engine Kit

### \$41.95

Make a working internal combustion engine with this

Smithsonian Motorworks science kit! Provides a fascinating
way to learn the basics of how a typical car engine runs and
includes a color poster with detailed instructions.

QUANTITY +

ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



SKU: MC-ENGINE

### Make a working internal combustion engine with this educational Smithsonian Motorworks science kit!

Discover how a real working battery-powered four-cylinder, four-stroke gasoline engine works as you assemble this unique see-through working model engine. With this kit, curious learners can make real lights and sounds; a small electric motor rotates the crankshaft so you can see everything work. This Smithsonian Motorworks kit provides **a** fascinating way to learn the basics of how a typical car engine runs!

This kit **includes a 35" x 23" color poster with detailed instructions**; expand the 'Contents' tab below or a complete list of included items. Please note that the motor color may vary, and that you will need to provide two **AA batteries**, scissors, and a screwdriver (not included).

# More About this Smithsonian Motorworks Engine Kit:

- · Crankshaft turns with a small electric motor
- Pistons go up and down in sequence
- Camshaft turns
- Valves rock/valves open and close in sequence
- · Sparkplugs fire and light up in sequence
- Fan rotates

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



### Soil Test Lab Kit

#### \$31.95

This economical soil testing kit is a great tool for studying the effects of soil nutrients on plant growth or to improve your garden.



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O ADD TO WISH LIST

### **Product Description**



### SKU: BE-SOILLAB

This economical soil testing kit is a great tool for studying the effects of soil nutrients on plant growth or to improve your garden! You will learn to sample your soil, prepare it for testing, and then complete the four analytical chemistry tests to determine pH and the nitrogen, potassium, and phosphorous content. The hands-on chemistry portion of the tests will be especially rewarding for most students as they measure, add chemicals, mix, and analyze the results. This kit has sufficient chemicals to perform each of the four tests ten times.

The four soil tests have semi-quantitative results as follows:

- pH: 4.5 to 7.5 in 0.5 pH increments
- · Nitrate: low to high in five increments
- · Phosphorous: low to high in five increments
- Potassium: low to high in five increments

Use this kit to help study the effects of soil nutrients for your science fair project. Prepare different soils with various pH and nutrient levels and then observe the effects on plant growth. The instruction booklet for this kit includes ideas for adjusting pH and nutrient content and also lists the best pH range for many flower varieties.

### Science Fair Project Ideas:

- Does pH level affect plant growth? What happens if the nutrient level is the same for two soils, but the pH is different?
- Does adding peat moss to soil lower or raise the pH level? What about adding fertilizer?



# Thames & Kosmos Chem C2000

<del>\$159.95</del> **\$149.90** 

With 250 chemistry experiments, this Chem C2000 kit from Thames & Kosmos provides a thorough introduction and excellent foundation for older kids interested in hands-on chemistry. See more product details below!



ADD TO CART

- ♣ Ages 11+
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**

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### SKU: KT-CHEM2K

With **250 chemistry experiments** and a **128-page experiment manual**, this Chem C2000 kit from Thames & Kosmos provides a thorough introduction and excellent foundation for older kids interested in hands-on chemistry.

# Middle and high school students will enjoy diving into important topics and learning how to:

- make invisible ink
- · do chromatography and copper plating
- conduct electrolysis in a test tube
- · grow salt crystals
- · distill saltwater
- · create fizzy reactions
- · combust a magnesium strip
- · change solution colors
- · and much more!

In the process of creating a number of experiments and remarkable reactions, young chemists will find out about acids and bases, physical properties of water, carbon dioxide, combustible materials, water, ammonia, hydrochloric acid, lime, copper, iron, various foods, household cleaners, oil and soap, and more.

This Chem C2000 chemistry set **includes all the experiments and materials from <u>Chem C1000</u>, plus much more.** For dozens of additional tools and chemicals, check our the **Chem C3000 kit**!



# Organic Chemistry Deluxe Glassware Set, 26 Pieces

#### \$226.95

Filled with high-quality laboratory glassware, this Deluxe Organic Chemistry Glassware Set provides the laboratory supplies needed for distillation, extraction, synthesis, reactions, and other organic chemistry processes.



Need it fast? See delivery options in cart.

# Product Description



### SKU: CE-OCKITB

This **Deluxe Organic Chemistry Glassware Set** is an excellent chemistry kit for conducting and learning about distillation (a way to separate a mixture; other ways include chromatography and filtration), extraction, synthesis, reactions, and other organic chemistry processes. The 24/29 standard taper ground joints in this deluxe set fit together with nothing but glass in contact with the chemicals. Because of this, nothing contaminates the organic chemistry process.

# Find a wide variety of distillation apparatus and high-quality labware inside this Organic Chemistry Glassware Kit, including:

- 100 ml, 250 ml, and 1000 ml round bottom boiling flasks (one of each size)
- a 500 ml two-neck distilling flask
- a 500 ml three-neck distilling flask
- a 300 mm Graham condenser (consists of a coil glass tube, unlike a <u>Liebig condenser</u>, which consists of one tube inside another; a West condenser is a thinner version of a Liebig condenser)
- a 300 mm distilling cylinder
- a 250 ml separatory funnel (may be used as a dropping funnel; similar in shape & size)
- · a Claisen adapter
- a 75° distilling head
- a 105° vacuum receiving tube
- a thermometer jacket tube
- · four glass stoppers
- 10 plastic joint clips



### Happy Atoms Complete Set

\$159.95 \$152.90

Pay in 4 interest-free payments of \$38.23 with PayPai. Learn more

If you're happy & you know it, build a molecule! This molecular modeling system embraces a revolutionary approach to teaching chemistry, taking students on a unique chemistry adventure. Build tens of thousands of molecules!

ADD TO CART

Ages 10+
In Stock & Ready to Ship
Need it fast? See delivery options in cart.

O ADD TO WISH LIST

# **Product Description**

 $\Theta$ 

SKU: KT-HACOMP

Create your own happy atoms & explore the world of molecules with this Happy

Atoms Complete Set from Thames & Kosmos!

This hands-on science kit enriches a child's science education and provides an innovative approach for introducing and teaching chemistry to kids. They can use the 17 atom models inside this chemistry set to build hundreds of their own molecular models and glimpse into the real world of chemical bonds; the atoms combine with the user-friendly magnetic metal tips at the ends of rubbery arms. The corresponding app/digital system lets curious learners explore molecular structures, take guided tests, and more!

---Simplify your exploration with the Happy Atoms Introductory Set!---

# What makes Thames & Kosmos Happy Atoms different?

Magnetic physical pieces AND a top-rated digital app.

Kids can build, scan, identify, and explore molecules!

With Happy Atoms Complete, students use 50 atoms representing 16 elements to build more than 17,500 molecules!

# What makes these atoms so happy?

While atoms don't have emotions, they do have observable behaviors. And atoms tend to be more stable (happy) with certain numbers of electrons.

Where do they find extra electrons if they need more to be happy? From other atoms that have too many electrons, of course! When atoms share or exchange electrons to be happy, they stick together. Happy atoms form molecules!



# **Energy Conversion Kit**

#### \$79.95

This economical energy conversion kit lets you experiment with conversion between four different power sources - mechanical motion, light energy, wind energy & chemical energy. It's an excellent hands-on project for ages 10+!



# **Product Description**



### SKU: KT-ENECONV

This economical energy conversion kit lets you experiment with conversion between different forms of energy. You get four devices that generate electrical energy from different sources of power:

- a hand generator, which uses mechanical motion;
- · batteries, which use chemical energy;
- · a solar cell, which uses sunlight (light energy);
- and a windmill, which uses wind energy.

Three devices use the electrical energy to generate light (LED), motion (motor), and sound (buzzer). Use the electrical energy generating devices in various combinations with one another and the electricity-powered devices.

This energy conversion kit includes a set of six cables to quickly connect the devices together. An instruction and experiment manual is also included. You provide two **AA batteries**, a hairdryer or fan to power the wind turbine, and a **digital multimeter**.

Use this energy conversion kit in the home or classroom for hands-on learning about different energy forms. It can also be used for science fair projects. Use a digital multimeter to measure the voltage and amperage generated by the different devices.



# Sabbath Mood High School Chemistry Part 1

### \$166.95

Pay in 4 interest-free payments of \$41.74 with PayPal. Learn more

This kit is designed for the Sabbath Mood High School Chemistry Part 1. It includes many of the hard to find objects for completing the experiments throughout the course and for the year.



ADD TO CART

- Grades 10 12
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

## **Product Description**



### SKU: SK-SMCHEM1

This kit is designed for the Sabbath Mood High School Chemistry Part 1. It includes many of the hard to find objects for completing the experiments throughout the course and for the year.

MARNING: CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Sabbath Mood High School Chemistry Part 2

### \$175.95

Pay in 4 interest-free payments of \$43.99 with PayPal. Learn more

This kit is designed for the Sabbath Mood High School Chemistry Part 2. It includes many of the hard to find objects for completing the experiments throughout the course and for the year.



- Grades 10 12
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: SK-SMCHEM2

This kit is designed for the Sabbath Mood High School Chemistry Part 2. It includes many of the hard to find objects for completing the experiments throughout the course and for the year.

MARNING: CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.





# The Mighty Mole

### \$59.99

Inflate balloons, hydrate silica, and chew bubblegum on your way to learn to convert between moles, mass, and particles with ease with this science curriculum kit – it's all part of the wonderful world of stoichiometry!



### ADD TO CART

- Launch (8th-12th grade)
- Chemistry
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: SU-MIMOLE

Inflate balloons, hydrate silica, and chew bubblegum on your way to learn to convert between moles, mass, and particles with ease – it's all part of the wonderful world of stoichiometry! Have fun with several meaningful activities, including using chemistry to inflate balloons, comparing the masses and numbers of objects, making silica hydrated but not wet, finding the number of sugar molecules in gum, and calculating a limiting reactant.

This Launch level kit includes a **full-color student workbook and a detailed teacher guide**, with step-by-step instructions for both hands-on and reading-based activities designed to engage students in mass-particle relationships and mole ratios. Both teacher and student will be able to open the box and start within **minutes**, and the kit will provide over **17 hours** of engaging learning.

In this kit, the student will engage in these fun activities:

- 1. Use different ratios in a chemical reaction to blow up balloons.
- 2. Use a scale to study the connection between mass and molecules.
- 3. Study chemical formulas and more ratios by hydrated silica packets.
- 4. Using your mole knowledge, solve several stoichiometry problems (and chew gum!).
- 5. Learn how limiting reactants affect what happens in chemical reactions.

Use The Mighty Mole lab kit to answer questions such as:

- What is a limiting reactant?
- How are mass and molecules connected?
- How are moles used to count atoms and measure mass?





### Project Projectile

### \$39.99

Hit the mark with this physics kit that aims to help students understand the laws of one-dimensional and twodimensional motion. Engage in fun and educational activities as your student unlocks the world of physics!



- Physics
- Launch (8th-12th grade)
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



#### SKU: SU-PROJEC

Project Projectile: Motion in Two Dimensions is a **Launch level Science Unlocked curriculum kit**. Hit the mark with this physics kit that aims to help students understand the laws of one-dimensional and two-dimensional motion. Have fun with several meaningful activities, including predicting the motion of steel balls, practicing the six-step problem-solving method with kinematics equations, observing the jet of water form a fountain, shooting pipet water projectiles, and designing a ball launcher.

Project Projectile comes with a **full-color Student Workbook and detailed Teacher Guide**. It is a phenomenon-based approach, designed to fully engage students in the science of mathematical relationships and real-life applications of several types of motion. Through a series of experiments, students will learn why reactions happen and how to explain them using the periodic table. As part of a special program from Home Science Tools, this Launch level kit will **provide over 15 hours of engaging instruction**, helping your student gain knowledge and confidence while doing real science.

In this kit, the student will do these activities and more:

- 1. Predict when a thrown ball and dropped ball will reach the ground.
- 2. Use the kinematics equations to describe one-dimensional and two-dimensional motion.
- 3. Solve motion problems using the six-step problem-solving method.
- 4. Make a water fountain and observe the shape of the water jet that comes out.
- 5. Shoot water projectiles from a pipet to explore the effect of the launch angle.
- 6. Design a device that can launch a ball at the optimal angle.







#### SKU: SU-ENTRAN

Transformers: Energy in Disguise is a Launch level Science Unlocked curriculum kit. It can't be created nor destroyed, but you can design, build, and test devices to convert energy from one form to another. Engage in memorable physics activities, including building a wind turbine, blowing over obstacles with light, and using a motor as a generator.

Transformers comes with a full-color Student Workbook and detailed Teacher Guide. It is a phenomenon-based approach, designed to fully engage students in the science of energy conversion. Through a series of experiments, students will learn why reactions happen and how to explain them using the periodic table. As part of a special program from Home Science Tools, this Launch level kit will provide **over 15 hours of engaging instruction**, helping your student gain knowledge and confidence while doing real science.

In this kit, the student will do these activities and more:

- 1. Spark fun with steel wool and a battery.
- 2. Use a simple design to understand energy transfer.
- 3. Build a wind turbine and make it spin.
- 4. Use mathematics to explain describable patterns.
- 5. Blow over obstacles with light.
- 6. Follow the engineering process to build the most efficient tool to turn on a light.
- 7. Keep the physics fun going with a variety of optional extensions.





#### AAAA WALLEA KETIEW

# The Material World

#### \$54.99

Get up close with some interesting materials to learn how their physical properties are determined by particle-level chemical structures by engaging in a variety of experiments and activities with this science curriculum kit!



ADD TO CART

- Launch (8th-12th grade)
- Chemistry
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



#### SKU: SU-MATWOR

Get up close with some interesting materials to learn how their physical properties are determined by particle-level chemical structures. Have fun with several meaningful activities, including making an electrical device run hot (and cold), making a plastic polymer sculpture, "teaching" metal to remember its shape, and changing the colors of crystals by their temperature!

This Launch level kit includes a full-color **student workbook** and a **detailed teacher guide**, with step-by-step instructions for both hands-on and reading-based activities designed to engage students in the particle level structures responsible for physical properties of materials. Both teacher and student will be able to open the box and start **within minutes**, and the kit will provide over **15 hours of engaging learning**.

In this kit, the student will engage in these fun activities:

- 1. Use an electric current to produce a temperature gradient.
- 2. Find out how changing temperatures can melt and mold a polymer.
- 3. Study the behaviors and atoms of metals using a strange sample.
- 4. Explore the unique heat-sensitive properties of LCD paper.
- 5. Use your cumulative knowledge to make a model of a thermoelectric generator.

Use The Material World lab kit to answer questions such as:

- Why do plastics have a wide variety of properties?
- What gives metals the ability to be hammered, drawn, and bent?
- How do LCD sheets and screens change color?
- How does a thermoelectric generator work?





#### SKU: SU-MIMOLE

Inflate balloons, hydrate silica, and chew bubblegum on your way to learn to convert between moles, mass, and particles with ease – it's all part of the wonderful world of stoichiometry! Have fun with several meaningful activities, including using chemistry to inflate balloons, comparing the masses and numbers of objects, making silica hydrated but not wet, finding the number of sugar molecules in gum, and calculating a limiting reactant.

This Launch level kit includes a **full-color student workbook and a detailed teacher guide**, with step-by-step instructions for both hands-on and reading-based activities designed to engage students in mass-particle relationships and mole ratios. Both teacher and student will be able to open the box and start within **minutes**, and the kit will provide over **17 hours** of engaging learning.

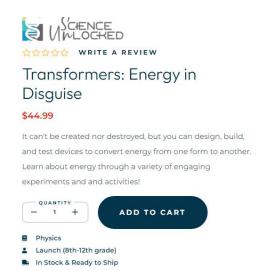
In this kit, the student will engage in these fun activities:

- 1. Use different ratios in a chemical reaction to blow up balloons.
- 2. Use a scale to study the connection between mass and molecules.
- 3. Study chemical formulas and more ratios by hydrated silica packets.
- 4. Using your mole knowledge, solve several stoichiometry problems (and chew gum!).
- 5. Learn how limiting reactants affect what happens in chemical reactions.

Use The Mighty Mole lab kit to answer questions such as:

- What is a limiting reactant?
- How are mass and molecules connected?
- · How are moles used to count atoms and measure mass?
- How are chemical formulas determined through experimentation?







### SKU: SU-ENTRAN

Transformers: Energy in Disguise is a Launch level Science Unlocked curriculum kit. It can't be created nor destroyed, but you can design, build, and test devices to convert energy from one form to another. Engage in memorable physics activities, including building a wind turbine, blowing over obstacles with light, and using a motor as a generator.

Transformers comes with a full-color Student Workbook and detailed Teacher Guide. It is a phenomenon-based approach, designed to fully engage students in the science of energy conversion. Through a series of experiments, students will learn why reactions happen and how to explain them using the periodic table. As part of a special program from Home Science Tools, this Launch level kit will provide **over 15 hours of engaging instruction**, helping your student gain knowledge and confidence while doing real science.

In this kit, the student will do these activities and more:

- 1. Spark fun with steel wool and a battery.
- 2. Use a simple design to understand energy transfer.
- 3. Build a wind turbine and make it spin.
- 4. Use mathematics to explain describable patterns.
- 5. Blow over obstacles with light.
- 6. Follow the engineering process to build the most efficient tool to turn on a light.
- 7. Keep the physics fun going with a variety of optional extensions.

Use Transformers to answer questions such as:

- What is energy?
- How does energy work?





science curriculum kit explains animal traits and how that impacts their survival. Play the survival game detailing natural selection and explore examples from each class of animals.



- Biology
- Launch (8th-12th grade)
- In Stock & Ready to Ship

# **Product Description**



#### SKU: SU-GAMSUR

Have you ever wondered why animals look the way they do? This Launch level Science Unlocked Curriculum kit will help you find out! The Game of Survival kit is a fantastic lesson plan and interactive experience for a young biologist!

In this kit, students will customize and play a game to learn about the process of natural selection, genetic variation, and adaptations. They will use math to better understand the role natural selection has on the living organisms we share our earth with. Game of Survival comes with a **full-color Student Curriculum Workbook and Teacher Guide**. It is a phenomenon-based approach, designed to fully engage students in adaptations and the theory of natural selection. Through a **customizable game**, **simulations**, **and experiments**, students will become engrossed in the wonders of the species around them. This Launch level curriculum kit will provide **over 13 hours of knowledge**, educating your student about natural selection and adaptations, as well as what that means for species.

In this kit, the student will partake in these fun activities:

- 1. Customize their own Survival Game
- 2. Test model beaks to determine which is most universal
- 3. Create a model batwing and test it to better understand adaptations for flight
- 4. Develop their own experiment on iguanas based on comparative observations
- 5. Discover odd examples of mimicry that increase reproductive fitness in fishes
- 6. Simulate the impact of coloration and camouflage on species survival
- 7. Test themselves and their friends to see if humans are better at spotting danger than animals





### Chasing Equilibrium

### \$49.99

Discover the mechanisms that keep your body regulated. Students will learn about osmosis and diffusion as they work through this engaging curriculum kit. They will learn how the body functions and dissect a sheep kidney.



Launch (8th-12th grade)

In Stock & Ready to Ship

## **Product Description**



### SKU: SU-CHASEQ

Chasing Equilibrium: Osmosis and Diffusion is a Science Unlocked Launch level curriculum kit that will help your student discover the internal conditions that keep the human body in balance. The Chasing Equilibrium curriculum kit is a fantastic experience for a young biologist or future doctor!

In this kit, students will discover osmosis, diffusion, and homeostasis through a series of hands-on experiments, including a sheep kidney dissection. Additionally, students will understand how organ systems work together for the benefit of human health. Chasing Equilibrium comes with a full-color Student Curriculum Workbook and Teacher Guide. This kit contains activities and information that focuses on osmosis, diffusion, and maintaining homeostasis. Students will discover how passive active transport mechanisms work and why the body relies on these mechanisms for survival. As part of a special program from Home Science Tools, this Launch level kit will provide over 14 hours of knowledge, educating your student about bodily processes that keep them healthy and in a state of equilibrium.

In this kit, the student will partake in these fun activities:

- 1. Watch osmosis and diffusion occur before their eyes
- 2. Discover the factors that impact the rate of diffusion
- 3. Test how salt impacts tonicity
- 4. Learn why homeostasis is crucial to survival and the homeostatic relationship between osmosis, diffusion, and equilibrium
- 5. Dissect a sheep kidney
- 6. Connect multiple body systems to understand how sodium flows through the body



# Thames & Kosmos Robotics, Smart Machines - Hoverbots

\$134.95 \$129.90

Pay in 4 interest-free payments of \$32.48 with *PayPal*. Learn more

Use this Thames & Kosmos Hoverbots kit to build and program amazing robots that balance on two wheels! This kit gives kids a simple, fun & customizable intro to robotics as they build 8 motorized robots that self-balance.

QUANTITY

ADD TO CART

Ages 8+

In Stock & Ready to Ship

### **Product Description**



### SKU: KT-RSMHOV

**Build and program amazing hoverbots that balance on two wheels!** With this engaging science kit, kids can discover the world of robotics — an exciting, interdisciplinary field combining physics, engineering, and computer science.

This Thames & Kosmos Hover Bots kit gives kids a simple, fun, and customizable introduction to robotics. You can **build eight motorized robots that use a special self-balancing technology to move around**. Code programs for your robots using an easy, visual programming app on a tablet or smartphone, which connects to the robots via a wireless Bluetooth connection.

The hoverbots in this robotics kit use a combination of sensors to balance themselves:

- a gyroscope sensor is used to detect the angle of tilt of the vehicle
- · an accelerometer is a sensor that detects the acceleration, or change in speed, of the vehicle

Together, these two sensors can tell the microcontroller — the robot's "brain" — if the vehicle is tilting too far forward or backward and moving too fast forward or backward to remain balanced! Then, sensors attached to the motors, called encoders, can determine the current speed of the wheels. Using the app interface, you can program the robots to move at different speeds and in different directions, and you can program them to light up in various colors and play sounds.

# Use this Thames & Kosmos Hoverbots Smart Machines kit to:

- build a HoverBot that balances on two wheels and then transforms into a four-wheeled rover in one quick action;
- conduct physics experiments using a swinging pendulum and a balancing bird on top of the robotic base unit;



# Thames & Kosmos Architectural Engineering

\$49.95 \$44.90

Build your foundation in architectural design with this engineering science kit from Thames & Kosmos! Through model building exercises, you will play the role of architect & engineer as you piece together an array of models.



ADD TO CART

- Ages 10+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



### SKU: KT-ARCENG

Soaring spires, towering arches, fascinatingly complex curves and angles! **Build your foundation in architectural design with this fascinating engineering science kit** that explores the engineering principles behind planning and developing buildings and structures.

Through model building exercises inside this educational toy and kit, you play the role of architect and engineer as you **piece together an array of models**, from small, basic structural elements like trusses, arches, and domes, to giant complex models of real-world buildings.

Try building the Sydney Opera House, or put the Eiffel Tower on display in your living room!

With **20 guided model builds**, you can construct stadiums, skyscrapers, a ferris wheel, and so much more! By getting hands-on with the exercises inside this Thames & Kosmos Architectural Engineering kit, you'll **develop an understanding of how architectural engineers apply scientific principles to their designs** and how the buildings and structures of the 21st-century push materials and engineering to the limits.

The **44-page, full-color manual** inside this engineering science kit guides your journey while also encouraging independent exploration of your own designs.

What is the tallest tower, the most voluminous dome, or the longest bridge you can build with the modular building pieces? How will you use what you learn to further your architectural journey? Discover the answers to these questions and more with this hands-on STEM experiment kit!



# Biodiversity, Ecosystems and Human Impact Kit

#### \$39.95

With this Biodiversity, Ecosystems & Human Impact Kit, high school students will become both scientists & engineers as they work to solve a fictitious (yet realistic) ecosystem/biodiversity crisis. Perfect for grades 9-11!



- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

O ADD TO WISH LIST

**Product Description** 

SKU: KT-BIODVH

# Looking for an engaging ecosystem activity for high school students?

This "Saving Thor Lake: A Study of Biodiversity, Ecosystems, and Human Impact Kit" will put high school students at the center of solving an ecosystem/biodiversity crisis in a fictitious polluted lake. The realistic scenario presented in this science kit emphasizes biodiversity's role in maintaining ecosystem health, and the lab as a whole illustrates the complexity of many of our world's environmental issues.

With this exciting hands-on activity, students will become both scientists and engineers!

- · As scientists, they will run tests to quantify the performance of a pollution clean-up solution
- · As engineers, they will compare this solution to two others and propose an optimal design all the while understanding that there is rarely a "perfect" solution to such complex problems

This ecosystem and biodiversity lab consists of two parts:

- Part 1: Introduction & hands-on study of Nitrate & Phosphate levels in treated & untreated samples
- Part 2: Evaluation & selection of an optimal project for maintaining Thor Lake biodiversity

This high school science lab kit encourages hands-on learning and in-class discussion, and is ideal for students in grades 9-11 (ages 14 - 17).

Looking for enough lab materials for up to 20 students? Check out our Biodiversity, Ecosystems, and Human **Impact Classroom Kit!** 



# Environmental Air-Water Testing Kit

#### \$74.95

The Environmental Air-Water Testing kit includes a detailed teacher's manual, reproducible student worksheets, and instructions & materials for 9 tests. Materials are included for up to 30 students working in groups.



ADD TO CART

- Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- SHIPPING RESTRICTIONS

**Product Description** 



SKU: KT-ISENVR

# Study air and water pollution with this exceptional kit!

This Environmental Air-Water Testing Kit includes a detailed teacher's manual, reproducible student worksheets, and instructions and materials for 9 different tests. Materials are included for up to 30 students working in groups.

# Water tests include the following concepts:

- 1. Dissolved/Free Oxygen
- 2. Hardness
- 3. Chloride Content
- 4. Phosphate Content
- 5. pH

# Air tests include the following concepts:

- 1. Particulate Pollutants
- 2. Smoke Density
- 3. Chemical Pollutants
- 4. Carbon Dioxide

This kit is aligned to the Next Generation Science Standards (NGSS)\*

Disciplinary Core Ideas: ESS3.A; ESS3.C Performance Expectations: 4-ESS3-1; MS-ESS3-3; HS-ESS3-4 Cross Cutting Concepts: Cause and Effect; Interdependence of Science, Engineering, and Technology; Influence of Science, Engineering, and Technology on Society and the Natural World; Influence of Engineering, Technology, and Science on



# Diagnosing Diabetes Kit

#### \$28.95

Become a doctor with this Diagnosing Diabetes Kit, and determine if your fictitious patient has Type 1 or 2 diabetes! Comes with a teacher's guide & student worksheet. Takes about 2 - 4 class periods (40 min. each) to complete.



- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



#### SKU: KT-STO117

Become a doctor with this Diagnosing Diabetes Kit! In this 3-part lab, you'll use simulated blood plasma samples and a glucose tolerance test to determine if your fictitious patient has Type 1 or 2 diabetes.

With this Biology kit, you'll first learn about diabetes, and the role of insulin, to create a patient information sheet about diabetes, the difference between Type 1 and 2 diabetes, and the glucose tolerance test. You'll then analyze simulated blood plasma samples from your patient's glucose tolerance test (measuring both glucose and insulin levels) and will have the opportunity to plot and interpret the data. Finally, just like a real doctor, you must use your collected data to diagnose the patient and propose an effective treatment plan!

Each kit comes with a detailed teacher's guide and a complete student worksheet. Additionally, aside from safety goggles and a few common household items, all supplies needed to conduct the hands-on activities are included. No specialized lab equipment is required - making it a perfect learning activity for all types of schools and homes.

Time to complete: 2 Class Periods (about 40 minutes each) with homework

From the Manufacturer: Active Inquiry, Ready-to-Go, Cost-Effective and Student/Teacher Friendly! This Science Take-Out kit was designed by experienced science educators who understand the diverse needs of teachers and their students. The Science Take-Out team has extensive expertise in curriculum development, classroom instruction, and assessment. All Science Take-Out kits are thoroughly field-tested to ensure that they are student-friendly, teacherfriendly, and meet significant learning objectives. These innovative and easy-to-use hands-on science activity kits are designed for use by individuals or small groups of students. The activities do not require any special laboratory



### Chemical Reactions Kit

### \$89.95

Discover the basic types of chemical reactions with a complete Chemical Reactions Kit. Conduct experiments for each type of chemical reaction: synthesis, single replacement, double replacement, decomposition & combustion.



ADD TO CART

- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- 9 SHIPPING RESTRICTIONS

### **Product Description**



### SKU: KT-CHEMRXN

What is a chemical reaction? Maybe you can't define it, but you'd know one if you saw it, right? Trick question! You can't always see chemical reactions, but there are some reliable cues to tell you if one has occurred or not. And you'll learn them all in this Chemical Reactions Kit.

First, kids discover the common indicators of chemical reactions. Then they'll perform eight experiments and decide if they think a chemical reaction occurred. Finally, they'll check their work with the included answer key.

With all supplies included (even safety gear!), this complete kit provides an easy and fun chemical reactions study. The Chemical Reactions Kit helps kids learn the difference between chemical and physical changes. They'll also discover the how and why of basic lab safety protocol.

This Chemical Reactions Kit is intended for kids ages 12 and up. Adult supervision is required.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- WARNING: This product can expose you to chemicals including Methyl isobutyl ketone, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.



# Neutralizing Bacteria Kit

#### \$84.95

You know garlic stops vampires, but have you also heard that it slows bacteria growth? Find out if it's true with the Neutralizing Bacteria Kit. Students test silver & gold, UV light, acne treatment, and more to try to kill a safe E. coli sample.



ADD TO CART

- Ideal for Grades 6+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- 1 SHIPPING RESTRICTIONS

## **Product Description**



### SKU: SB-BACTUSE

With the Science Buddies Neutralizing Bacteria Kit, explore how to kill, treat, or neutralize *E. coli* bacteria. Try any of six projects developed by Science Buddies scientists for kids to use in tandem with this experiment kit.

One crazy method is <u>"feeding" the bacteria to Earth's most abundant animal</u> (that you may have never heard of!).

Another <u>tests common pimple creams</u>, which might help kids choose which one to use on their own acne. And two other projects explore how bacteria interacts with metals.

The Neutralizing Bacteria Kit includes prepared agar plates, sterile gloves and swabs, and a **Escherichia Coli Bacteria- Freeze Dried Culture**. The easy-to-use freeze-dried culture is a safe strain that's found in your intestines—not the kind that causes food poisoning. *E. coli* is a gram-negative, facultative, anaerobic bacteria.

The *E.coli* sample arrives in a freeze-dried pellet with a rehydrating broth and agar slant with instructions. Then use the dropper tip to dispense the bacteria onto the prepared culture dishes.

Instructions for this kit are available online. See below links to the instructions and more.

Use the Neutralizing Bacteria Kit with the following projects, found online at Science Buddies:

- The End Zone: Measuring Antimicrobial Effectiveness with Zones of Inhibition
- Death Rays: What Duration of Ultraviolet Exposure Kills Bacteria?
- Which Acne Medication can Really Zap that Zit?
- Is the Gold in My Jewelry Real?
- Tiny Titans: Can Silver Nanoparticles Neutralize E. coli Bacteria?
- Worm Hunt: Isolating Soil Nematodes from Your Backyard



## SKU: SB-ENERSHK

Build your own mini, motion powered generator!

Have you ever wondered what it takes to create electricity? Science Buddies scientists developed this electricity and magnetism experiment kit to provide a straightforward and fun introduction to the science of how magnetic fields can be used to create electricity. You will learn about magnetic induction and how it can be used to generate electricity.

This kit includes all the electronic parts you need to build your own mini motion activated generator. Science Buddies easy-to-follow online instructions will support you as you build a basic motion powered generator and experiment with the amount of power generated. How many magnets and how much shaking will it take to light up one LED light? How about two, three, or four LEDs?

Instructions for this kit are available online. See below for links to the instructions and more.

# You will also need from home:

- · Safety glasses
- Cardstock, 8.5 x 11 inch sheet
- Corrugated cardboard, 3 x 6 inch
- Scissors
- · Hobby knife or utility knife
- Ruler
- · Pen or pencil

# Shaking Up Some Energy Kit

### \$44.95

SHARE

Discover how magnetic fields can be used to create electricity by building your own mini, motion-powered generator!











# SKU: SB-CUFEKIT

Explore the "magic" of chemistry with color-changing chemical reactions students can see! Just right for a budding chemist, this kit allows young scientists to explore the levels of copper and iron in different solutions. This fun, fast, and visually striking experiment involves solutions that change from reddish-orange to blue so you can easily "see" the results of your experiment. We've included test tubes and a graduated cylinder to ensure that you have all the proper chemistry tools at your fingertips. This kit is perfect for a fun introduction to the wonders of chemistry.

\*Important Note: This kit comes with enough test tablets to do 3 full trials.

Instructions for this kit are available online, see below for links to the instructions and more.

# You will also need from home:

- Distilled water (available at grocery stores)
- Skewers
- White vinegar
- · Permanent marker
- Plastic cups, 16-ounce (oz.) size (12)
- Pennies, should all be dull and dingy (30)
- · Timer or stopwatch
- Strainer
- · Paper towels
- Liquid measuring cup, metric
- 1 SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50



# Hydraulic Machines 4-in-1 Pack \$34.95 The Hydraulic Machines 4-in-1 Pack brings four wooden machines to life with hydraulic power. QUANTITY 1 + ADD TO CART Ages 8+ In Stock & Ready to Ship Need it fast? See delivery options in cart.

SHARE

# **Product Description**



## SKU: MC-HYDMACH

The Hydraulic Machines 4-in-1 Pack brings four wooden machines to life with hydraulic power. Learn how to use water pressure in syringes and rubber tubes to control a platform lifter, a scissor lift, a cherry picker, and an excavator. Built from pre-cut and pre-drilled wooden parts, these machines will provide hours of fun and hands-on learning.

The models vary in size but range from 7" (18 cm) to 9.5" (24 cm) high. Models are packaged in individual bags inside the box. All four machines can be built at the same time - no parts are shared between the models. Some assembly and gluing is required. Scissors or a sharp knife are needed to cut tubing; glue is included. This is a great product for anyone interested in STEM fields such as engineering or the manufacturing industry. These machines function on some of the same hydraulic principles that drive real world machines.

STEM refers to Science, Technology, Engineering, and Mathematics and aims to remedy the lagging proficiency of US students in comparison to their industrialized global counterparts. While interpretations vary, most agree that STEM is about innovation, learning about the world, technical literacy, and problem solving. Ultimately, STEM is pushing limits, moving forward, and finding better ways to do things. STEM education is simply providing students and teachers with a stronger grasp of science, technology, engineering, and math through hands-on learning that draws meaningful connections with real-world applications. HST provides many products that integrate two or more STEM disciplines, thereby helping to improve STEM literacy, inspire an interest in STEM careers, and equip today's students with the skills they need to be competitive and competent tomorrow. The Hydraulic Machines 4-in-1 Pack incorporates STEM learning by combining problem solving with a real-world application of technology.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Electrolysis of Water Kit

### \$24.95

Separate water into hydrogen gas & oxygen gas with this complete water electrolysis kit! Includes stainless steel electrodes, test tubes, alligator clip leads, sodium sulfate, a beaker, wooden splints, and a study guide.



- O ADD TO WISH LIST

# **Product Description**



SKU: KT-ELECH20

Use the materials inside this hands-on water electrolysis kit to separate water into hydrogen gas and oxygen gas!

# What is Water Electrolysis?

Electrolysis of water is the process of water decomposing into hydrogen gas and oxygen gas in response to an electric current. Water electrolysis experiments provide engaging learning opportunities and physical science activities for middle and high school students.

# This water electrolysis kit includes:

- · stainless steel electrodes,
- · test tubes,
- · a beaker,
- alligator connector clips,
- · sodium sulfate,
- · wooden splints,
- and a helpful study guide!
- (all you have to provide before you begin is the power supply: a 6-volt battery)

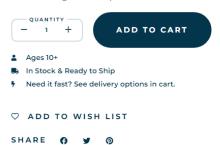
Take a peek at our **Electrolysis of Water Product Instructions** to discover helpful information about electrolysis, teaching tips, various experiments, and more!



# Oil Spill Cleanup Experiment Kit

# \$24.95

This kit is designed to teach kids about an oil spill and let them investigate cleanup methods.



# **Product Description**



# SKU: KT-OILSPIL

This kit is designed to teach kids about an oil spill and let them investigate cleanup methods. It includes the materials you'll need (except for water) plus full instructions for doing six different science projects. Learn about the polarity of water, use feathers and sponges to study the effects of crude oil on animal life and the environment, and try out real techniques that are used to clean up an oil spill (such as absorption and dispersion). Includes ideas for science fair projects.

# MORE ABOUT THIS KIT

Large oil spills have a costly and lasting environmental impact. The 2010 Gulf oil spill received tremendous news attention, as it should. That high awareness creates a unique opportunity to teach kids about oil spills and their impact. This kit has everything needed to get your kids experimenting first-hand with the science of oils spills, their impact on the environment, and the difficulty in cleaning them up. With kids taking turns, there are enough lab materials in the kit for a whole classroom to try their hand at containing a spill with a mini containment boom, plus trying to disperse or absorb the oil.

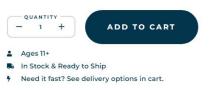
**WARNING:** This product can expose you to Respirable crystalline silica (sand dust), which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



# Human Skeleton Model, 34"

### \$74.95

This large 34" (85 cm) human skeleton model offers a wonderful learning opportunity for both younger and older students.



O ADD TO WISH LIST

SHARE () y ()

# **Product Description**



# SKU: CM-SKELN33

This large 34" (85 cm) human skeleton model offers a wonderful learning opportunity for both younger and older students! Special features of this deluxe human skeleton model include intervertebral discs, a moveable jaw, skull that opens, and appendages that move and can be removed for study. This half life-sized human skeleton model is sturdily made of washable, unbreakable PVC plastic. It comes complete with a stand for easy viewing and a detailed printed key that identifies over 100 skeletal features.



# Chemistry Magic Tricks Kit

### \$39.95

Put on your very own DIY magic show with this exciting
Chemistry Magic Tricks Experiment Kit. With it, you can
create color-changing solutions, instantly turn water into a
solid, make two kinds of invisible ink, and more!



1 SHIPPING RESTRICTIONS

O ADD TO WISH LIST

# **Product Description**



# SKU: KT-CHMAGIC

Using this exciting Chemistry Magic Tricks Kit, middle and high school students can **conduct 12 impressive and fairly easy magic tricks**! The fun science experiments inside include creating color-changing solutions, instantly turning water into a solid, making two kinds of disappearing ink, and more.

Amaze your friends and family with the 12 cool experiments inside, and learn about the science of pH, acids and bases, density, chromatography, and polymers. There are enough materials provided to do each of the science experiments many times, so you can:

- 1. Discover how each chemical reaction trick works
- 2. Practice & practice until you get them just right
- 3. Perform them all for an audience!

The **high-quality chemistry equipment** in this Chemistry Magic Tricks Kit, like glass beakers and a graduated cylinder, will make you look and feel like a chemist. Plus, you'll feel like a true magician as you use the three chemicals inside to make two kinds of invisible inks, turn ordinary water bright red (without using food coloring!), make a colorful rainbow in a tube, and much more. Some household items are needed to conduct all of the chemistry experiments inside.

Don't let the magic stop there! Visit our <u>learning center</u> to explore more fun science experiments:

- learn about surface tension with bubbles;
- build an ice cube igloo;
- · experiment with magnetic levitation;
- and more!



# Water Treatment and Filtration Kit, Small Group Version

# \$43.95

This kit demonstrates the importance of water treatment plants and helps kids discover the how and why of water treatment and filtration.



- Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- **1** SHIPPING RESTRICTIONS

# **Product Description**



## SKU: KT-ISWATER

This Water Treatment and Filtration Kit makes "polluted" water and the importance of water treatment plants clear! Kids will discover the "how" and "why" of water treatment and filtration. Then they put their learning to the test on a sample of "polluted" water.

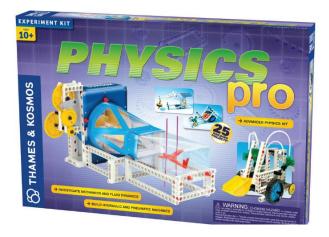
This Innovating Science Kit from Aldon teaches water treatment plant processes and the reasons for each one. Then oversee students conduct their own small-scale water-treatment procedures on "polluted" water.

Students examine how the water changes after each treatment step. They observe physical characteristics of water, such as clarity, color, odor. Then kids note the effects of water treatment from the beginning of the treatment process until the end. Through observation and experimentation, the importance of water treatment plants becomes obvious!

The Water Treatment and Filtration Kit has enough materials for 5 groups of students. Teacher's Manual and Student Study Guide copymasters are included.

You provide a large container, a small sharp object, and contaminants for water (soil, twigs, leaves, etc.).

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** This product can expose you to Respirable crystalline silica, which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



# Thames & Kosmos Physics Pro V2

\$99.95 \$89.90

With this deluxe kit, kids will spend hours exploring some of the most fascinating aspects of physical science: how water and air can power machines, allow objects to fly, and much more. Explore more product details below!





- ♣ Ages 10+
- 🐘 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



## SKU: KT-PHYSPRO

Physics Pro kit is the biggest, most advanced physics kit in Thames & Kosmos' physics repertoire. With this deluxe kit, kids can spend hours exploring some of the most marvelous things within physical science - how air and water rest and flow, can power machines, allow objects to fly, and much more!

# Use this Thames and Kosmos Physics Pro kit to:

- 1. expand upon your study of statics and dynamics from previous lessons;
- 2. dive into a study of more advanced topics in physics, including fluid dynamics, energy, oscillation, hydraulics, and pneumatics.

As students dive into these more complex topics, they'll discover how physics gives us an amazing set of tools that can be applied in the real world in so many ways!

# Conduct physics lab experiments and cool building projects that put advanced physics principles to work,

including spectacular models of a rotating crane, a model car with hydraulic brakes, pneumatic shocks, a hydraulic lift, a water turbine, a steamboat, a wind tunnel and wind machine, a trick fountain, and a motorized crane. Discover how ships float and airplanes fly, why a streamlined shape lets a car drive faster, how power plants convert a current of water into electrical current, and much more!

The main focus of the kit is the behavior and properties of air and water — the world's two most important fluids — as well as objects immersed in them. Experiment with your models to discover you will what forces work on these fluids and what kinds of energy they possess.

The 96-page, full-color experiment manual covers density, capillary action, water & air's relation to temperature and







## SKU: AS-STELLAR

Quickly locate and identify stars visible to the naked eye with this unique device. The Stellarscope® star maps are accurate every night of the year. Just attach the adapter for your latitude, rotate the time/date selector for the current day and time, and look through the Stellarscope® with proper east-west orientation and you have a star map aligned with the actual night sky.

- Includes star maps for both the Northern and Southern hemispheres with over 1500 stars identified and the brightest stars identified by name.
- The star maps are accurate between 20° and 60° North or South latitude.

Includes a night-viewing light. The Stellarscope® doesn't track the planets, since their position changes constantly.



# Urinalysis Using Simulated Urine Kit

### \$66.95

With this urinalysis kit, 15 groups of students can perform real tests on simulated urine samples, examing factors such as pH, color & clarity. They'll also test for the presence or absence of proteins always & calcium!



- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- 1 SHIPPING RESTRICTIONS

# **Product Description**



# SKU: KT-ISURAN

Urinalysis is one of the oldest medical diagnostic tests and still one of the most common. In this activity, students will use simulated urine, yet they will perform the same actual tests used on real urine samples. Students will examine the simulated urine for factors such as pH, color, clarity, as well as test for the presence or absence of proteins, glucose, and calcium. The students will then examine the samples microscopically to determine if crystals may be present in any of the samples.

This Urinalysis Using Simulated Urine Kit contains enough materials for 15 groups. A teacher's manual and reproducible student study guide are included. Safety gear, specifically gloves, goggles, and apron, are recommended. You provide a hot water bath, glass test tubes, and compound microscopes (4X/10X/40X).

NOTE: This product may be ineligible for some promotions.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.



# Orion StarBlast 6" Astro Telescope

## \$494.95

Pay in 4 interest-free payments of \$123.74 with PayPal. Learn more

This highly portable Orion StarBlast 6" Telescope provides great astronomical views that are usually only achieved with larger telescopes. Its portability and ease-of-use even makes it an excellent beginner telescope!



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- SHIPPING RESTRICTIONS

# **Product Description**



### SKU: AS-TSTAR06

The StarBlast 6 Astro Telescope is highly portable yet provides great astronomical views usually only achieved with larger telescopes.

This 6" f/5.0 Orion StarBlast 6 telescope has a tabletop design and a light grasp of 27.4 square inches, which is 80% more light than a 114mm (4.5in) reflector telescope. More light means you'll see more stars and galaxies and greater detail of the moon and planets.

The Orion StarBlast 6 telescope has a compact Dobsonian-style mount that is simple to use--just rotate the swivel base and pivot the telescope to aim it effortlessly at any night sky object. Then, simply apply gentle pressure on the telescope to keep the object in view as the earth rotates and the object location changes.

The StarBlast 6 was designed specifically for visual observation of astronomical objects in the night sky. Like all Newtonian reflector telescopes, this Astro reflector telescope is not suited for daytime terrestrial usage because the image in the eyepiece is inverted (rotated 180°). The eyepiece will also be too low to the ground for comfortable viewing when pointed near the horizon.

Learn about a wide variety of celestial objects with this high-quality Orion StarBlast 6 telescope! Peer into dark skies to investigate the rings of Saturn and the bands of Jupiter; take a glimpse of deep-sky objects like nebula, globular star clusters, and galaxies; and so much more. To find deep-sky objects in the sky, it is best to consult astronomy software such as Starry Night software, a star chart, or a Planisphere. These guides will help you locate the brightest and best deep-sky objects for viewing with your StarBlast 6.



# Thames & Kosmos Chem C1000

\$64.95 \$64.90

With this chemistry set, kids can do 125 hands-on experiments like making four kinds of invisible ink, creating a mini fire extinguisher, generating electricity from a chemical reaction, and separating one color into many!



ADD TO CART

- ♣ Ages 10+
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- 1 SHIPPING RESTRICTIONS

# **Product Description**



## SKU: KT-CHEM1K

With this popular beginner chemistry set, kids can do 125 hands-on experiments that make chemistry relevant and fun, like making different kinds of invisible ink, creating a mini fire extinguisher, generating electricity from a chemical reaction, and separating one color into many!

In the process, they'll get to investigate acids & alkalis, chromatography, precipitation, air pressure, electricity, incandescence, and chemical compounds. This makes the Chem C1000 Chemistry Experiment Kit a great learning tool!

This Chem C1000 science kits helps kids discover how to identify the elements of different chemical substances and how to use lab equipment safely, providing a good background for any aspiring chemist! Includes an **80-page full-color experiment manual**. Some additional items are needed, such as soda water and a **9-volt battery**.

Take a look at the customer reviews below for further insight and product details; there's a reason this Chem C1000 chemistry set has almost 5 stars!



# Snap Circuits Light Kit

## \$76.95

Snap Circuits Light shows you another side of music!

Connect it to your iPhone, iPod, or MP3 player (not included)

& watch as the lights change to the beat! Includes over 175

hands-on projects for hours of exploration & fun.



- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



# SKU: KT-SCLIGHT

Snap Circuits Light from Elenco Electronics (model SCL-175) shows you another side of music!

Simply connect it to your iPhone, iPod, or a different MP3 player (not included), and watch as the lights change to the beat. The strobe light with spinning patterns will amaze you with its visual effects!

Like all Snap Circuits sets, this Snap Circuits light kit makes learning electronics both simple and fun. **Kids use the** colorful pictures in the full-color project manual to build more than 175 projects, like:

- a strobe light,
- a voice-activated light show,
- · an infrared detector,
- a glow-in-the-dark flying fan,
- · fiber optic communication,
- and more!

This Snap Circuits Light STEM kit has more than 55 parts mounted on plastic modules; these parts snap together with ease, providing hours of educational fun while teaching basic electronics concepts.

Snap Circuits Light received a 2012 Best Toys for Kids Award by ASTRA (American Specialty Toy Retailing Association).

# Explore more of Elenco's Snap Circuits collection:

- Snap Circuits Green Kit (explore alternative energy)
- Snap Circuits Jr. 100 Electronics Discovery Kit



# Engino Discovering STEM: Simple Machines

### \$94.95

The Engino Discovering STEM: Simple Machines Kit occupies kids' hands and minds for hours at a time! Students learn & apply the concepts of simple machines as they build 60 models, including a catapult, helicopter & more.



O ADD TO WISH LIST

# **Product Description**



# SKU: KT-ENGM10

Get a kit that teaches kids engineering concepts while they play! The Engino Discovering STEM: Simple Machines Kit occupies kids' hands and minds for hours at a time. Praised for its educational and enjoyment value, this interactive kit is an unforgettable intro to physical science and engineering.

Like all Engino kits, the Simple Machines kit makes complex concepts accessible for kids. They learn and apply real-world mechanical engineering principles as they build 60 working models. A few of the models that kids can create with this science kit include a:

- Construction Crane
- Scissor Lift
- Catapult
- Helicopter
- Vise
- Windmill
- · and many more!

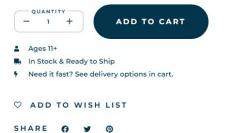
This 5-in-1 building kit combines the Engino Discovering STEM series into one complete set. Students will discover and build operational models for all simple machine mechanisms:

- levers & linkages
- wheels, axles & inclined planes
- · pulley drives
- cams & cranks



# Static Electricity Study Kit

A great way to explore static electricity! Included are a pith ball electroscope, fur friction pad, balloons and glass rod.



# **Product Description**



# SKU: EL-STATKIT

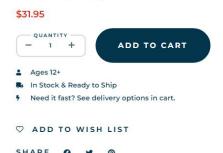
A great way to explore static electricity! Included are a pith ball electroscope, fur friction pad, balloons and glass rod. Includes study guide and tips for teaching young children.

These questions might help you come up with a good science fair project: Do factors like humidity and temperature affect static electricity? How can you reduce static electricity or increase it?

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Intro to Mendelian Genetics, Small Group Version



# **Product Description**

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# SKU: KT-ISMGENE

Simulate Mendel's work and determine patterns of inheritance with this Intro to Mendelian Genetics Kit.

Using special chips and Innovating Science exclusive "double dice," students simulate monohybrid and dihybrid crosses. After the crosses, students determine genotypic and phenotypic ratios for select traits. Then they compare their values to the theoretical "ideal" values as put forth by Mendel.

This Intro to Mendelian Genetics Kit from Innovating Science has enough materials for 5 groups. Teacher's Manual and Student Study Guide copymasters are included.

This kit includes all necessary materials.



# Thames & Kosmos Remote-Control Machines: Space Explorers

\$99.95 \$94.90

This Remote Control Machines: Space Explorers kit encourages kids to discover the basic concepts of robotics, machines & space exploration. Once construction is complete, discovery missions can begin in your backyard!



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship

# **Product Description**



# SKU: KT-RCSPACE

This Thames & Kosmos Remote Control Machines: Space Explorers kit encourages kids to **discover the basic** concepts of robotics, machines, and outer space exploration! As they build a variety of space-inspired models, curious learners will be given a glimpse into real-world examples of the outer space robots that have been built and launched into space.

With this engaging construction set and engineering kit, kids can channel their inner astronauts and **spend hours** constructing a working model of the Mars Rover and nine other remote-control machines.

# The additional space-themed models include a:

- space shuttle (with opening cargo bay doors)
- · lunar rover,
- · rocket launcher car,
- · robotic space shuttle payload arm,
- · space droid,
- · walking bot,
- · space probe,
- · cross-wing flyer/starship,
- and spaceship controller!

After construction has been completed, use the remote-control unit to take your models on expeditions in your backyard. Imagine you are the first human to discover the uncharted terrain, and control the robotic arm of your Mars Curiosity Rover model to pick up small rocks, toys, and other "extraterrestrial specimens" you might discover! As kids







### SKU: KT-ISDNAEX

Learn about DNA and extract DNA from plant material with this fascinating hands-on kit! Students will learn the history of DNA discovery and study DNA structure. They will also understand the nature of genetic inheritance and the role of DNA and proteins in genetic expression while using biological detergents, enzymes, and ethanol to isolate DNA from plant material.

This classroom Plant DNA Extraction Kit contains enough materials for 15 groups of students. A teacher's manual and reproducible student study guide are included.

Safety gear, specifically gloves, goggles and apron, are recommended. You provide 25mL graduated cylinder, funnel, and distilled or deionized water.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- ★ WARNING: This product can expose you to chemicals including Methyl isobutyl ketone, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



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# SKU: MS-SETAEM

An excellent enhancement to a high schooler's science education, this **set of 16 prepared slides is designed specifically for the microscope slides portion of the Apologia Biology course.** Rather than providing you with blank slides and cover slips, we've put together high quality, professionally-made microscope slides that are ready for use and perfectly complement the homeschooling Apologia biology series.

Dive into the mysterious world of microscopy as you study the samples on each prepared slide! The microscope slides for this advanced biology course include samples of onion root tip, Hydra budding, Zea mays stem and Zea mays root, Ranunculus stem and Ranunculus root, Planarian, Grantia spicules, and more.

This Apologia Biology Slide Set comes in a slotted plastic container/storage box; it **provides the materials for an essential part of Apologia's** *Exploring Creation with Biology* **course, 3rd edition**. The prepared slides inside can also be used for the labs in the **2nd edition of the same curriculum**.

For an even more well-rounded Apologia biology lab experience, pair this kit with the following:

- Dissection Kit for Apologia Biology
- Microscope Kit for Apologia Biology (includes these same 16 slides, along with several other items)







# SKU: KT-ISSOILA

Testing soil composition is a classic experiment in earth science classrooms. Use this soil analysis kit to teach students how to conduct soil composition tests. They'll also learn how to collect and evaluate local soil samples.

By bringing in local soil samples, students forge a stronger connection to their environment. Test results will be more meaningful, since they're tied to their own backyards! Plus, kids will build a knowledge base that they can apply to any other environment.

This Soil Analysis Kit from Innovating science has enough material for 5 groups. Teacher's Manual and Student Study Guide copymasters are included.

You provide test tubes, test tube rack, test tube tongs, water, uv light, disposable pipets, oven, paper, balance, marker.

A microscope is optional.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states
- **WARNING:** This product can expose you to Potassium Chromate, which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



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# **Product Description**

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# SKU: CM-HUMXRAY

Get an inside look at the human skeleton with these computer-enhanced x-rays. Hold the x-rays up to a window or place them on a table using the included white paper backing to get a detailed look at a real skeletal system. The 18 pieces can be arranged together to reproduce the entire body of a 5-foot-tall young adult. Individual x-rays include skull, hand, rib cage, pelvis, and more. Comes with a teacher guide for working with young students and a reproducible worksheet.

This is a fascinating hands-on tool for exploring the human skeleton! Here are a few of the things you can do and learn with this x-ray set:

- Count the bones in the human body
- Label individual bones
- Explore the purpose of different bones
- Compare and contrast bone structures
- Learn about x-rays and how they are used
- Explore x-ray opacity



# 4M Anti Gravity Magnetic Levitation Science Kit

# \$19.95

The Antigravity Magnetic Levitation kit will positively draw kids into magnet science with six engaging experiments.



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



## SKU: MG-ANGRLEV

The Antigravity Magnetic Levitation kit will positively draw kids into magnet science with six engaging experiments. They will use magnetic forces to build an antigravity sculpture, a floating spinner, a compass, magnetic scale and magnetic spring, a random propelling machine and a personal transporter. As they complete the experiments they will grow in their understanding of magnetic attraction and repulsion and develop concepts of how magnets are used in real-world technical applications.

The Antigravity Magnetic Levitation Kit includes all materials and an instruction guide that takes you through each experiment step-by-step, explains the science of how each one works, and provides magnetism fun facts. Ages 8+.

# 2013 Product of the Year Award



**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Light Experiment Kit \$33.95 Learn about and experiment with light and optics. ADD TO CART . Ages 11+ In Stock & Ready to Ship Need it fast? See delivery options in cart. ADD TO WISH LIST

# **Product Description**

# SKU: KT-LIGHTKT

Learn about and experiment with light and optics! This kit is an economical way to conduct a number of experiments as you learn about light spectrum, mixing colors, reflection of light, refraction of light, diffraction of light, and polarization. The kit includes three light sources, a prism, diffraction grating, polarizing film, a mirror, a convex lens, a concave lens, a protractor and color film. With instructions.



# Happy Atoms Introductory Set

Explore the building blocks of the universe with this Happy Atoms Introductory Set! Use this 3D molecular modeling set to construct 508 molecules & discover a revolutionary approach to chemistry. + ADD TO CART

In Stock & Ready to Ship

Need it fast? See delivery options in cart.

O ADD TO WISH LIST

# **Product Description**



# SKU: KT-HAINTRO

Create your own happy atoms & explore the world of molecules with this Happy Atoms Introductory Set from Thames & Kosmos!

This hands-on science kit provides an innovative approach for introducing and teaching chemistry to kids. They can use the 17 atom models inside to build hundreds of their own molecular models; the atoms combine with the userfriendly magnetic metal tips at the ends of rubbery arms. The corresponding app/digital system lets curious learners explore molecular structures, take guided tests, and more!

Build up to 17,500 molecules with the best-selling Happy Atoms Complete Set!



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ADD TO WISH LIST

# **Product Description**

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# SKU: KT-MICLASS

This is the MicroChem kit designed for two students working the labs together. It includes two manuals and two sets of safety goggles.

This excellent microchemistry lab can be used as a stand alone lab course or in conjunction with any high school chemistry curriculum. It contains experiments that explore 17 chemistry concepts: chromatography, melting points, conductivity of solutions, mole ratios, double replacement reactions, oxidation-reduction reactions, decomposition, Charles' Law, Boyle's Law, hydrated salts, pH and pH indicators, titration, molar mass, buffer solutions, concentration and reaction rates, temperature and reaction rates, and galvanic cells.

Microchemistry (micro-scale chemistry) is ideally suited for home labs. It reduces prep time and lab costs while minimizing chemical use and disposal. The kit includes a complete lab manual with solutions in the back, 22 chemicals, and micro-scale lab equipment. In addition, the labs have been correlated with the Abeka, Bob Jones, and Apologia chemistry curriculum. You will need to provide a few household materials and a heat source (we recommend an **alcohol lamp**). A digital **multimeter** is required for an optional lab. **Safety gloves** are also recommended.

Note: The MicroChem kit has not be updated to the 3rd edition of Abeka Precision and Design at this time.



# Rapitest Soil Test Kit \$19.95 Improve your garden or study the effects of soil nutrients on plant growth. QUANTITY - 1 + ADD TO CART Ages 12+ In Stock & Ready to Ship Need it fast? See delivery options in cart.

O ADD TO WISH LIST

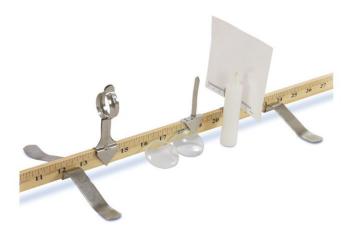
# **Product Description**

# $\Theta$

# SKU: BE-SOILTST

Improve your garden or study the effects of soil nutrients on plant growth! This kit lets you test soil for pH, nitrogen, phosphorous, and potassium. Perform the 4 easy color comparison tests 10 times each. Rapitest.

The following questions might help you come up with a good environmental science fair project: What pH and chemical levels are most common in your area? How do garden soils with different amounts of nitrogen, phosphorous, potash, or pH compare?



# Optic Bench Kit \$33.95 Study optics with this complete kit. QUANTITY 1 + ADD TO CART AGes 11+ In Stock & Ready to Ship Need it fast? See delivery options in cart. SHIPPING RESTRICTIONS ADD TO WISH LIST SHARE ###

# **Product Description**



# SKU: KT-OPBENCH

Study optics with this complete kit. You'll learn about light, refraction, reflection, convex and concave lenses, and focal length. Comes with a study guide for using the optic bench.

A meterstick is included with your order but will be shipped separately via US Priority Mail, regardless of how the rest of your order is shipped. There are no exceptions to this shipping arrangement.

**SHIPPING RESTRICTION:** This bulky item only ships Economy or Ground Service to a street address in the 50 US states.



# Electricity & Magnetism Experiment Kit

\$59.95 \$54.90

Students age 8 & up get a jolt of physics fun with the Electricity & Magnetism Kit from Thames & Kosmos. Use the items inside to make invisible magnetic fields visible, power a spinning motor, construct a loudspeaker & more!

- Ages 8+
- . In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



## SKU: KT-ELEMGKT

Teach kids about the fundamental properties of electricity and magnetism with **60 electrifying experiments** in this Electricity and Magnetism Kit from Thames & Kosmos! With the items inside, curious learners will not only discover circuits and magnetic contraptions with functional devices, but they'll also show the relationship between electricity and magnetism in meaningful ways.

Use this kit to make learning fun! The included manual guides kids as young as 8 years old as they safely and easily conduct tests and a series of experiments to learn about electric current and the earth's magnetic fields.

# **Electricity Experiments:**

- · Build series & parallel circuits
- Light up a light bulb
- Power a spinning motor, two switches & up to three light bulbs
- · Experiment with push buttons and switches
- And more!

# **Magnetism Experiments:**

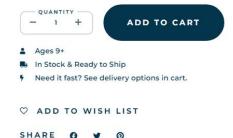
- · Test which materials are magnetic
- Learn about the force of magnetism & magnetic poles
- Investigate magnetic force & direction with a magnetic pendulum device
- Use iron filings to make invisible magnetic fields visible
- And more!



# Electricity & Magnetism Kit

# \$64.95

Make teaching about electricity & magnetism easy with this complete study in static electricity, current electricity, magnetism, and electromagnetism.



# **Product Description**



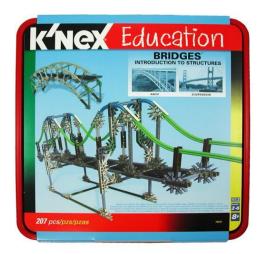
## SKU: EL-ELECMAG

Make teaching about electricity & magnetism easy with this complete study in static electricity, current electricity, magnetism, and electromagnetism. Do projects like building a foil electroscope, making a static electricity pendulum, creating magnets, and building an eddy current motor.

The kit includes the **Safe and Simple Electricity Experiments** book plus materials and equipment to do most of the more than 100 science projects. Excellent explanations of experiment results make this a stand-alone electricity and magnetism course.

Note: To keep costs low for you and encourage recycling, this kit comes packaged in a shippable, environmentally-friendly cardboard box.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# K'Nex - Intro to Structures: Bridges \$46.95 Encourage your budding engineer with these K'nex bridge-building projects. QUANTITY - 1 + ADD TO CART Ages 8+ In Stock & Ready to Ship Need it fast? See delivery options in cart.

ADD TO WISH LIST

# **Product Description**



# SKU: KT-KNBRIDG

Encourage your budding engineer with these K'nex bridge-building projects! Build 13 different bridge structures, including truss, suspension, cantilever, beam, arch, bascule, and cable-stayed, with this construction kit.

Comes with 207 snap-together pieces in a sturdy plastic case. Includes building instructions. Includes a CD containing the 39 page teachers' guide.

# From the Manufacturer

No more toothpicks and glue! The K'NEX Education Introduction to Structures: Bridges set is designed to introduce students to the history, function, structural design, geometry and strength of bridges while providing opportunities for them to acquire skills using a hands-on, inquiry-based approach to information and concepts.

The Teacher's Guide provides the information and resources required to build your students' understanding of scientific, technical and design concepts and to channel their inquiries into active and meaningful learning experiences

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Coronavirus Education Kit -Classroom Add-on

# \$13.50

Use this classroom add-on with our Coronavirus Education Kit (purchased separately). Contains materials for an additional group of 5 students to use with it. Buy as many add-on kits as required to meet your classroom needs!



ADD TO CART

- Grades 2+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

**Product Description** 



SKU: KT-PANCLA

# Use this classroom add-on with our hands-on Coronavirus Education Kit - purchased separately.

Our Coronavirus Education Kit contains enough materials for an individual or group of up to approximately 5 students (copies of Lab Manual and Student Worksheet are required); **this add-on package contains** materials for an additional group of about 5 students to use with it! **Use the included jar to share Glo Germ powder among groups.** 

**Buy as many add-on kits as required to meet your classroom needs!** Use the included 4 oz bottle for sharing Glo Germ powder among groups, and expand the 'Contents' tab below for a complete list of included items.

**WARNING:** CHOKING HAZARD - Balloons. Children under 8 years can choke or suffocate on underinflated or broken balloons. Adult supervision required. Keep uninflated balloons from children. Discard broken balloons at once.



# Biodiversity, Ecosystems and Human Impact - Classroom Kit

### \$104.95

Pay in 4 interest-free payments of \$26.24 with PayPal. Learn more

With this Biodiversity, Ecosystems & Human Impact
Classroom Kit, high school students become both scientists
& engineers as they work to solve a fictitious (yet realistic)
ecosystem crisis. Perfect for grades 9-11!



ADD TO CART

- Ages 14+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

**Product Description** 



SKU: KT-CLBDVH

# Looking for an engaging ecosystem activity for high school students?

This "Saving Thor Lake: A Study of Biodiversity, Ecosystems, and Human Impact Classroom Kit" will put high school students at the center of solving an ecosystem/biodiversity crisis in a fictitious polluted lake. The realistic scenario presented in this science kit emphasizes biodiversity's role in maintaining ecosystem health, and the lab as a whole illustrates the complexity of many of our world's environmental issues.

With this exciting hands-on activity, students will become both scientists and engineers!

- · As scientists, they will run tests to quantify the performance of a pollution clean-up solution
- As engineers, they will compare this solution to two others and propose an optimal design all the while
  understanding that there is rarely a "perfect" solution to such complex problems

This ecosystem and biodiversity lab consists of two parts:

- Part 1: Introduction & hands-on study of Nitrate & Phosphate levels in treated & untreated samples
- Part 2: Evaluation & selection of an optimal project for maintaining Thor Lake biodiversity

This high school science lab kit encourages hands-on learning and in-class discussion, and is ideal for students in grades 9-11 (ages 14 - 17).

This Classroom Kit provides enough materials for up to 20 students working in groups of 4. Copies of printed materials are required.



# SKU: KT-MICRBIT

Meet BBC micro:bit - a handheld micro-computer with huge programming possibility. Get kids started with coding cool DIY creations, from robots to musical instruments, and more! The possibilities are endless with this micro:bit 'inventor's kit.'

With this micro:bit starter kit, you can code micro:bit from any web browser in Blocks, Javascript, Python, Scratch, and more. No software required!

The mini-yet-mighty micro:bit can be used in so many ways! Use it as a standalone device for building your own games, as a "brain" for robots, as the backbone for creative circuit building, and much more.

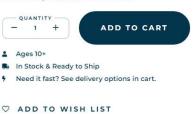
Your micro:bit has the following physical features:

- · 25 individually-programmable LEDs for displaying text, numbers & images.
- · 2 programmable buttons, which you can detect when they're pressed, allowing you to trigger code on the device.
- · 25 external connectors on the micro:bit's edge connector, so you can program motors, LEDs, etc., or connect extra sensors to control your code!
- Light & temperature sensors that detect ambient light and temperature.
- Accelerometer to measure acceleration and detect other actions, e.g. shake, tilt, and free-fall.
- · Compass detects the earth's magnetic field, allowing you to detect which direction the micro:bit is facing.
- · Radio allows you to communicate wirelessly between micro:bits.
- Bluetooth allows the micro:bit to control phones and tablets. You can also send code wirelessly from your phone using apps.

# micro:bit Starter Bundle

SHARE 6

Meet BBC micro:bit -- a handheld micro-computer with huge programming possibility. Get kids started with coding cool creations, from robots, to musical instruments, and more. The possibilities are endless!





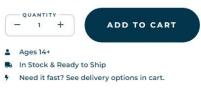




# Titration Equipment Kit

### \$79.95

The Titration Equipment Kit has the lab equipment and instructions you need to perform titrations like a pro!
Discover how to use a burette and volumetric flask, how to make molar solutions, and more.



- SHIPPING RESTRICTIONS
- O ADD TO WISH LIST

# **Product Description**



# SKU: CE-TITRKIT

The Titration Equipment Kit helps you take chemistry experiments to the next level. For beginner or advanced students, it's an excellent addition to any introductory chemistry lab.

In the Titration Equipment Kit, you get the necessary lab equipment for many types of titrations using a burette. The included manual walks you through how to use the included equipment. Covered topics include:

- · lab safety and handling,
- · how to use a volumetric flask,
- · making molar solutions,
- · and proper burette technique.

Then, with the addition of chemicals (sold separately), you're ready to get started on a variety of titrations.

The Titration Lab Equipment kit includes various glassware (beaker, burette, funnel, an Erlenmeyer and volumetric flask, a polypropylene graduation cylinder, ring stand and clamp, and HST instruction manual.

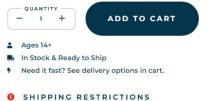
SHIPPING RESTRICTION: Economy Shipping and shipping promotions are not available for this bulky item. This item only ships to a street address in the 50 US states and PR with ground shipping options.



# Separatory Funnel Kit

# \$74.95

The Separatory Funnel Kit helps advance your chemistry study! Do two separation experiments with the quality science tools & clear manual. With the equipment & experience you've gained, tackle more complex chemistry next.



# **Product Description**



# SKU: CE-SEPFKIT

The Separatory Funnel Kit takes your chemistry experiments from basic to advanced! Build confidence while building a strong chemistry foundation.

The Separatory Funnel Kit includes two beakers, a universal clamp, glass funnel, graduated cylinder, Squibb style separatory funnel, safety gear, and more. This kit works well as a standalone kit or combined with existing lab equipment.

Use the included supplies and common pantry items to conduct two chemistry experiments. HST's own full-color instruction manual walks you through how to:

- 1. Separate "pure" water from an oil and water emulsion.
- 2. Perform a salt-induced phase separation of isopropyl alcohol.

After that, you're all set with the equipment and experience you need to tackle more complex chemistry challenges!

The experiments in the Separatory Funnel Kit are designed for scientists ages 14+. But with parental assistance, younger scientists can join in, too! Use only under adult supervision and follow all safety instructions.

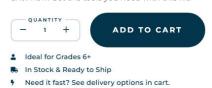
**1)** SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.



# Measuring Gas Production Kit

### \$24,95

Discover chemical reactions & capture their invisible byproduct! Chemical reactions often create gas, which mingles with the atmosphere and is impossible to measure... until now. Get the tools you need with this kit!



O ADD TO WISH LIST

# **Product Description**



# SKU: SB-MEASGAS

With the Measuring Gas Production Kit, kids first cause a chemical reaction and then learn to capture and measure the resulting volume of gas in real-time!

Many chemical reactions in chemistry and biology produce gas as the main byproduct - whether it's carbon dioxide gas, oxygen, methane, or something else. Under typical conditions, that gas floats off and mingles with the atmosphere - making it impossible to measure it. This Measuring Gas Production Kit, however, provides the tools needed to collect and measure the gas emissions created by a reaction!

Get started exploring with five gaseous projects designed by Science Buddies scientists! For each project, gas measurement is either the primary goal or it's used to determine one aspect of the project. Either way, students get a memorable learning opportunity.

# Using this Measuring Gas Production Kit, middle and high school students will learn:

- all about chemical reactions that create gas,
- · how to capture the gas that was created,
- · and how to measure that gas.

Instructions for this kit are available online. See below links to the instructions and more.

# Use the Measuring Gas Production Kit with the following projects, found online at Science Buddies:

- Yeast Reproduction in Sugar Substitutes
- · Yeast Metabolism With & Without Aeration
- Stopping Fungus with Antifungal Medicines



# Voltaic Cell Battery Kit \$17.95 Make your own battery with this voltaic cell kit. QUANTITY — 1 + ADD TO CART Ages 11+ In Stock & Ready to Ship Need it fast? See delivery options in cart. ◇ ADD TO WISH LIST

# **Product Description**

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### SKU: EL-VOLCEL2

Make your own battery with this voltaic cell kit! This voltaic cell kit is a good springboard for your own science fair project on battery power. You will learn how chemical energy is converted to electrical energy as you experiment with vinegar, lemon juice and other electrolytes. This voltaic cell battery kit includes a clear plastic battery jar, copper electrode, either a zinc or aluminum electrode (depending on availability), all hardware needed, and instructions. You supply vinegar or other electrolytes you'd like to try.

You can also purchase optional **iron**, or **carbon** electrodes to make a battery with different electrode combinations.

You can measure the voltage and amperage produced in your voltaic cell experiments using a **digital multimeter**.

These questions might help you come up with a good science fair project:

- What household electrolytes (liquid for conducting electricity that you put in the jar--like vinegar or salt water) are most effective for producing electricity?
- What electrode combination is most effective for producing electricity?
- How well does a carbon rod work as a positive electrode?



### Fluorescent Mineral Kit

#### \$31.95

Learn about fluorescence with glow-in-the-dark rocks! This fluorescent experiment kit has six 1.5-2" mineral specimens that fluoresce under the included black light flashlight.

Discover more in the product description below!





- ♣ Ages 10+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

**Product Description** 



SKU: KT-FLUORKT

# Learn about fluorescence the fun way - by viewing glow-inthe-dark rocks!

This fluorescent science experiment kit comes with six 1.5"-2" mineral specimens that fluoresce under the black light (longwave UV) flashlight that's included. The whole family will be fascinated by these minerals that turn a different color under ultraviolet light!

This set comes with a 51-page booklet that explains fluorescence and includes information on fluorescent mineral identification. The additional instruction guide includes four projects and other activities with the black light. You provide some household items for the activities.

Note: UV light is the part of sunlight that causes sunburns. Never look directly at UV bulbs and wear UV filtering **goggles** if using for extended periods.

| Mineral    | Color under UV light |
|------------|----------------------|
| Aragonite  | yellowish-brown      |
| Hackmanite | orange               |
| Calcite    | pale yellow          |
| Fluorite   | purple, blue         |



# Brain Model, small

#### \$24.9

SHARE ()

See how the parts of the brain work together as you assemble this economical, 31-piece model.



# **Product Description**



### SKU: CM-BRAINSM

See how the parts of the brain work together as you assemble this economical, 31-piece model!

Pieces include cerebellum, lobes, hippocampus, and corpus callosum. It's ideal for helping students visualize how the brain works. 3" length when assembled. Comes with stand and assembly guide.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



### Science in the Kitchen Kit

### \$101.95

Pay in 4 interest-free payments of \$25.49 with PayPal. Learn more

Transform your kitchen into a science lab! Built around common kitchen items, this kit uses fun kitchen science experiments to give kids entirely new ways to look at food. Doing science has never been more delicious!



ADD TO CART

- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

### **Product Description**



### SKU: KT-ISKITCH

Transform your very own kitchen into a fun science lab! This Consumer Chemistry: Science in the Kitchen Kit uses several scientific techniques and science activities to engage and educate students as young as 12 years old.

Built around common kitchen items, this food science kit uses fun activities and kitchen science experiments to give kids entirely new ways to look at food. Doing science has never been more deliciously educational!

# Using this Science in the Kitchen kit, students will:

- · perform chromatography on commercial food coloring
- use chemical reactions and tests to identify an unknown cooking ingredient
- examine the protein-digesting ability of a common meat tenderizing enzyme
- use titration to quantify vitamin C levels
- test an unknown juice or soda (provided by you)
- · compare and contrast various clean-up materials (hand soap, dish soap, and dishwashing detergent)

Using the chemicals and supplies included in this kit, DIY kitchen science projects are now easier than ever. The engaging, yet simple science experiments and STEM activities inside allow kids to explore a number of scientific concepts in a new and memorable setting.

From Aldon's Innovating Science line, this Science in the Kitchen kit contains enough materials for 5 groups students - either in a classroom or homeschool co-op setting. Teacher's Manual and Student Study Guide copymasters are included.

All you need to provide (or purchase separately) is distilled water, a 500 ml beaker, metric rulers, juice, a test tube



## Distillation Apparatus Kit

#### \$69.95

Get started with scientific distilling work in the lab with this distillation apparatus kit, full of high-quality laboratory glassware. Use the materials inside this distillation glassware kit for countless experiments!



- Ages 14+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



### SKU: CE-DIKIT1A

If you're fascinated by or interested in any kind of distillation (fractional distillation, vacuum distillation, steam distillation, short path distillation, etc.), then you will love this Distillation Apparatus Kit! With it, you can easily get started with simple distillation in your home or classroom chemistry lab.

# The quality borosilicate glass/glassware in this glass distillation apparatus kit includes a:

- 300 mm sealed Liebig condenser (consists of an inner tube surrounded by an outer tube, while a Graham
  condenser consists of an inner coil surrounded by an outer tube and an Allihn condenser consists of a glass tube
  with a water jacket),
- 50 mm diameter Kjeldahl distillation ball (stopcock that improves distillation efficiency by preventing carryover of liquid into the condenser; can easily be connected to a boiling flask and condenser using the included rubber stoppers),
- 500 ml flat-bottomed boiling flask (an excellent distillation flask)
- 500 ml Erlenmeyer flask (the receiving flask)

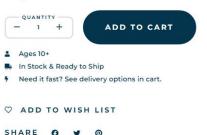
Other distilling apparatus (or equipment) in this distillation kit includes a 4"x 6" support stand, an adjustable burette clamp, a tripod burner stand, wire gauze with a ceramic center, and rubber stoppers. **Assembly instructions and distilling experiment ideas are also included!** 



# Density Measurement Kit

### \$20.95

Learn about density and specific gravity with this complete study kit.



# **Product Description**

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### SKU: MC-SGKIT

Learn about density and specific gravity with this complete study kit. Measure the density of aluminum, steel, brass and copper using equal volume cylinders. Calculate and compare specific gravity. This density measurement kit includes metal equal volume cylinders, 100 ml polypropylene graduated cylinder, spring scale, and activity guide.



# Broken Bones X-Rays

### \$31.95

This set contains copies of real broken bones x-rays.



# **Product Description**



### SKU: CM-BONXRAY

This set contains copies of real broken bones x-rays. Get a detailed look at common breaks in a variety of human bones. Hold the x-rays up to a window or place on a light table to get the best view. This set includes 15 broken bones x-rays and an informative guide. Broken bones include arm, wrist, leg, ankle, foot, rib, back, skull and more.



# Thames & Kosmos Nanotechnology Experiment Kit

\$112.40

Pay in 4 Interest-free payments of \$28.10 with PayPal. Learn more

This Thames & Kosmos Nanotechnology Kit provides an engaging intro to the cutting-edge world of nanotechnology & how it's being used to improve our lives. Includes more than 60 pieces, plus a full-color, 72-page manual.

QUANTITY

1 + ADD TO CART

Ages 15+

In Stock & Ready to Ship

# **Product Description**



### SKU: KT-NANOTEC

Explore the nanoscopic world with the Thames & Kosmos Nanotechnology Experiment Kit - an engaging introduction to the cutting-edge world of nanotechnology and how it is being used to improve our lives.

The science of nanotechnology deals with the smallest structures, in the range of one to 100 nanometers (which are one BILLIONTH of a meter) in size. In fact, some of the biggest scientific breakthroughs in recent years have involved these very small structures that we call nanoparticles!

Nanoparticles can be made of different materials and they come in a wide variety of forms. They can be applied to the surfaces of objects for improvements or added to/mixed in with items to enhance their performance.

### Specific applications of nanoparticles include:

- anti-fog coatings on mirrors and lenses
- environmentally friendly coatings on ships to prevent algae growth (which reduces fuel consumption)
- UV protection components in skin lotions and sunscreens
- · antibacterial coatings for medical devices
- self-cleaning house paint
- · a delivery method for pharmaceuticals in the body
- water-repellent clothes
- · materials to more effectively filter dirty water

As kids dive into this Thames & Kosmos Nanotechnology Kit, they will begin by conducting experiments that allow them to explore the size, scale, and orders of magnitude in the International System of Units - all to discover how



## Crime Scene Science Classroom Refill Kit

### \$85.95

Solve "Mystery of the Disappearing Diamonds" year after year with a new group of student investigators. This refill set replenishes the consumables in the Classroom Crime Scene Science Kit, so you can do the CSI experiments again and again.



Ages 11+
In Stock & Ready to Ship

# **Product Description**



### SKU: KT-CRCLRFL

Refill your "Mystery of the Disappearing Diamonds" Classroom Crime Scene Science Kit. Continue the CSI lab each year by ordering this refill kit with necessary items to perform the experiments.

Contains a new supply of all the consumable materials from the original kit. Includes filter papers, pipet, splints, fingerprint powder, simulated blood, fabric samples, super glue, and 5 student handouts.

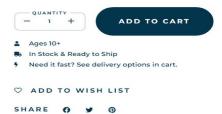
**WARNING:** This product can expose you to Phenolphthalein, which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



# 4M Windmill Generator Kit

### \$20.95

See for yourself how a generator works with this hands-on alternative energy kit.



### **Product Description**



### SKU: KT-GSWIND

See for yourself how a generator works with this hands-on alternative energy kit. The windmill you build with it can be used inside (with a fan) or out, and makes a great demonstration of wind power in the classroom or at home! This kit includes a rotor, motor with gears, LED, and more! The instructions are fully illustrated and include diagrams of a motor and a generator to help you understand how each of them works and what the difference is. The instructions also have information on recycling plus some fun facts. You supply a plastic bottle to use as a base plus a screwdriver.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Enzymes and the Process of Digestion, Small Group Version

### \$33.95

Discover how the digestive system works and how enzymes help unlock nutrients from food and convert them into usable forms.



O ADD TO WISH LIST

# **Product Description**



### SKU: KT-ISENZYM

We know eating food provides our bodies with nutrients—but how? Find out with the Enzymes and the Process of Digestion Kit.

All the food in the world is useless if the human body can't extract necessary nutrients from it. Discover how the digestive system works and how enzymes help unlock nutrients from food and convert them into usable forms.

First, students expose three nutrients (carbohydrates, proteins, and lipids) to different digestive enzymes. Then they compare samples to nutrients without added enzymes. Finally, kids conduct chemical tests to check how effective the enzymes were in digesting the compounds.

From Innovating Science, the Enzymes and the Process of Digestion Kit has enough materials for 5 groups. Teacher's Manual and Student Study Guide copymasters are included.

You provide glass test tubes with stoppers, test tube rack, hot plate, beakers, labeling tape, and distilled water.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** This product can expose you to Phenolphthalein, which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



# K'Nex - Intro To Simple Machines: Gears

#### \$43.95

Discover how six simple machines work as you construct a bicycle, egg-beater, crank fan, and more.



O ADD TO WISH LIST

SHARE O V O

# **Product Description**



### SKU: KT-KNGEARS

Discover how six simple machines work as you construct a bicycle, egg-beater, crank fan, and more. Learn about three different types of gear configurations (spur, crown, and sprocket) and how they function, then use this knowledge to create your own machines!

This kit comes with 198 snap-together pieces and a project guide, all in a sturdy plastic storage case. Includes a CD containing the 39 page teachers' guide.

Key science concepts that can be taught and learned with this kit include:

- · Identify 3 different types of gear configurations and test them to determine how they operate
- · Discuss what gear ratio is and how it is calculated
- Compare and contrast how different gear configurations function
- Determine how different gear configurations change amount of applied force, speed or direction of movement
- · Identify appropriate places where different types of gears are used

### From the Manufacturer

Sprocket Gears! Spur Gears! Rack & Pinion! And More! The K'NEX Education Intro to Simple Machines: Gears set is designed to introduce students to the scientific concepts associated with gears. Students are provided with the opportunity to acquire skills using a hands-on, inquiry-based approach to information and concepts as they build, investigate, discuss, and evaluate scientific principles in action.

The Teacher's Guide provides the information and resources needed to build students' understanding of scientific concepts and channel their inquiries into active and meaningful learning experiences. Extension activities to explore



# Vacuum Filtering Set \$69.95 This special set allows you to more quickly separate suspensions and mixtures using vacuum filtration. QUANTITY 1 + ADD TO CART ♣ Ages 11+ ♣ In Stock & Ready to Ship ↑ Need it fast? See delivery options in cart. ♥ ADD TO WISH LIST SHARE ♠ ♥ ♠

# **Product Description**

SKU: CE-FILTKIT

This special set allows you to more quickly separate suspensions and mixtures using vacuum filtration.

Everything you need is included: a 500 ml vacuum filtering flask, a hand vacuum pump, a 2-piece plastic 90 mm Buchner funnel with approximate 300 ml capacity, 9 cm filter paper, connection tubing, and a rubber stopper. The stopper hole is specially cut to hold the Buchner funnel.

The hand pump greatly simplifies the process of vacuum filtration, eliminating the need for a water source and vacuum aspirator. It is also much more economical than a costly electric vacuum pump. You get great vacuum filtering results with this set!

The **vacuum pump** is also available separately.



# 4M Water Rocket Kit \$24.95 Build your own rocket using just a bottle, water, and a bike pump. QUANTITY 1 + ADD TO CART Ages 12+ In Stock & Ready to Ship Need it fast? See delivery options in cart. ADD TO WISH LIST SHARE G O

# **Product Description**



### SKU: KT-WATROCK

Build your own rocket using just a bottle, water, and a bike pump. Demonstrate Newton's Third Law of Motion: for every action there is an equal and opposite reaction. Using water pressure and air pressure from a bike pump (not included), this rocket soars into the air, reaching heights of almost 200 feet!

This kit includes 1 plastic bottle (rocket body), 4 fins (one for spare), 1 fin support, 1 stopper, 1 stopper connector, 1 pump connector, 1 extension tube, and an informational instruction manual. You supply adult supervision and a bicycle pump.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Enzymes and the Process of Digestion Kit

### \$75.95

All the food in the world is of no use if the human body can't extract necessary nutrients from it.



ADD TO CART

- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O SHIPPING RESTRICTIONS
- O ADD TO WISH LIST

## **Product Description**

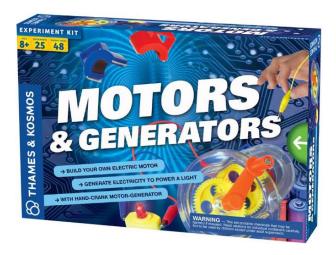


### SKU: KT-ISDIGES

All the food in the world is of no use if the human body can't extract necessary nutrients from it. Students learn about digestion as they expose three nutrients (carbohydrates, proteins, and lipids) to different digestive enzymes. These samples will be compared to nutrients to which no enzymes are added and chemical tests will be used to determine if the enzymes were effective in digesting the compounds. Upon completion, students will not only understand the importance of the digestive system but also the vital role enzymes play in releasing nutrients from food and converting them to a form usable by the body. This Enzymes and the Process of Digestion kit contains enough material for 15 groups of students. A teacher's manual and reproducible student study guide are included.

Safety gear, specifically gloves, goggles, and apron, are recommended. You provide test tubes, test tube rack, hot plate, beakers, labeling tape, markers, and distilled water.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- **WARNING:** This product can expose you to Phenolphthalein, which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



# Thames & Kosmos Motors & Generators

<del>\$24.95</del> **\$24.90** 

Explore simple motors in a hands-on way with this Thames and Kosmos Motors and Generators kit! Perfect for any child interested in technology or engineering, this kit includes 25 experiments & a 48-page, full-color manual.

QUANTITY - 1 +

ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

O ADD TO WISH LIST

### **Product Description**



SKU: KT-MOTOGEN

Learn about simple motors with this hands-on science kit from Thames and Kosmos!

Explore simple motors in a hands-on way with this Thames and Kosmos Motors and Generators experiment kit. It provides excellent opportunities for creativity and experimentation and is **an engaging STEM toy** for any kid interested in technology or engineering.

While doing 25 DIY experiments, young students will use this educational toy and science experiment kit to learn about magnets, gears, electricity, circuits, motors, and generators.

Includes a full-color, 48-page instruction manual that guides curious learners through the steps of each experiment.

# Experiments inside this Thames and Kosmos Motors and Generators Kit Include:

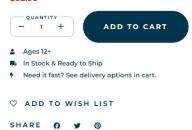
- · making a hand-crank electric generator
- building an engine block with gears
- · making a magnetic compass
- · creating a motor that uses magnets
- · making a closed circuit with your motor
- and much more!

The experiments build on each other, providing understanding about how motors and generators work. Two AA batteries are required (not included).



# Forensic Chemistry of Hair Analysis, Small Group

### \$32.95



# **Product Description**



### SKU: KT-ISFHAIR

Talk about a bad hair day! Discover how forensic scientists use hair to help solve crimes.

Explore the differences between human and animal hair. Plus, learn differences among different types of human hair. Then, compare a hair sample from a crime scene to hair samples from four known suspects.

From Innovating Science, the Forensic Chemistry of Hair Analysis Kit has enough material for 5 groups. Teacher's Manual and Student Study Guide copymasters are included.

You provide a **microscope** and water.

Looking for more forensic classroom kits? Work these classroom crime scene scenarios for additional study.



# Deluxe Build Your Own Racer

### \$39.95

With this fun race car experiment kit, get everything you need to build & experiment with cars powered by solar energy, mouse traps, balloons, & rubber bands.



ADD TO CART

- ♣ Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



### SKU: KT-CARKIT3

With this fun "build your own" race car experiment kit, make & experiment with cars powered by mouse traps, balloons, rubber bands, and solar power! Your kids will naturally learn about physics, mechanics, and problem solving as they design, build, and perfect a car using each of these four propulsion methods:

- The balloon-powered and rubber band-powered race cars are the simplest to build and will get your kids started thinking about the mechanics of wheels, axles and friction as well as how to best use forces to transfer power to the car wheels.
- · The mousetrap racer is more sophisticated, using a spring and lever arm to rotate the wheels and axle.
- · The solar race car then raises the level of challenge, providing the opportunity to experiment with both a gear drive and pulley drive system powered by either a solar cell or a battery.

This complete kit includes design ideas and construction tips for building and experimenting with all four propulsion systems. You provide two AA batteries (optional), sharp knife or scissors, wire cutter, glue, tape, and decoration if desired. Experiment with different voltage outputs with additional solar cells.

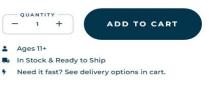
**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Stethoscope, Bowles

### \$8.95

A great educational quality stethoscope that will be a real asset to any human anatomy study.



O ADD TO WISH LIST

SHARE

# **Product Description**

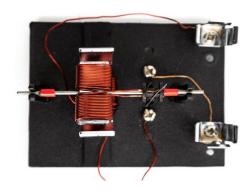


### SKU: BE-STETH

A great educational quality stethoscope that will be a real asset to any human anatomy study. A stethoscope is used for auscultation (listening to sounds within the body). Stethoscopes are most commonly used to measure blood pressure and to hear the sounds produced by the heart and lungs. This Bowles Stethoscope is comprised of a chest piece, a diaphragm, bell, and stem, sturdy tubing, and ear tubes and ear tips on the earpiece.

This acoustic stethoscope features a diaphragm (larger, flat disc) and bell (hollow cup). The diaphragm transmits higher frequency sounds, like breathing and heartbeat, while the bell transmits low frequency sounds.

Note: Not for medical use.



# DC Motor Kit

### \$13.95

Make your own DC motor with this excellent educational kit, ideal for learning how and why motors work using electromagnetism.



In Stock & Ready to Ship

Need it fast? See delivery options in cart.

O ADD TO WISH LIST

# **Product Description**

### SKU: EL-KIT02

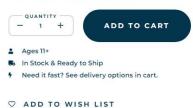
Make your own DC motor with this excellent educational kit, ideal for learning how and why motors work using electromagnetism! It contains everything needed to build and operate a simple DC motor, including detailed instructions. (You provide one AA battery.)



# Tree & Leaf Identification Kit

### \$17.95

Challenge your identification skills.



SHARE ()

# **Product Description**



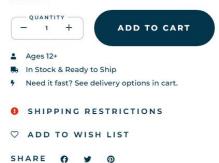
### SKU: BE-TREEKIT

Challenge your identification skills! With this kit you can learn how to use the 61-page Tree Finder dichotomous key to identify 10 unlabeled leaves. After you have mastered the process, you can use the key to identify the trees in your area! (Key covers trees east of the Rockies, but many species can be found in the west also.) Instructions included.



# Flame Test Lab

### \$50.95



## **Product Description**



### SKU: KT-ISFLAME

Have you ever seen a purple flame? How about blue? What do those brightly-colored blazes mean? Find out with this Safer Flame Test Kit!

The flame test is an analytical technique often used for the identification of certain elements, primarily metal ions. First, observe the color of the flame. Then view the light spectra emitted from the flame through a spectroscope.

Some versions of this test pose safety concerns for kids. But the Safer Flame Test Kit reduces safety concerns by using small candles. They're easier for students to work with and manage in a lab setting.

Despite the smaller flame, there is no loss in the clarity of the emission spectra from the candles. It's easy and safe for kids to observe and deduce which element causes the colored flame.

This Innovating Science Safer Flame Kit has enough material for 3 groups. Teacher's Manual and Student Study Guide copymasters are included.

You provide matches.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- WARNING: This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.



# Fingertip Pulse Oximeter

# \$33.95 This oximeter from Prestige Medical measures oxygen saturation in the blood. QUANTITY 1 + ADD TO CART Ages 11+ In Stock & Ready to Ship Need it fast? See delivery options in cart. SHIPPING RESTRICTIONS ADD TO WISH LIST

SHARE () Y

# **Product Description**

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### SKU: BE-OXIMETR

An oximeter is a medical device used to measure oxygen saturation in the blood. This lightweight and compact fingertip oximeter is extremely easy to use and also measures pulse rate. It has an LED display screen, low power consumption, and auto shut-off feature. The two included AAA batteries provide up to 30 hours of continuous use. It comes with a nylon protective case, lanyard and instructions. One-year warranty form Prestige Medical.

• SHIPPING RESTRICTION: This item only ships to a street address in the 50 US states.



# Whodunnit? Detective Spy Scope

#### \$138.95

Pay in 4 interest-free payments of \$34.74 with PayPal. Learn more

The My First Lab Whodunnit? Detective Spy Scope is a special duo-scope design that allows you to view both highly-magnified transparent microscope slides and solid objects.

QUANTITY +

ADD TO CART

- ♣ Ages 11+
- 🕒 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



SKU: MI-DUOSPY

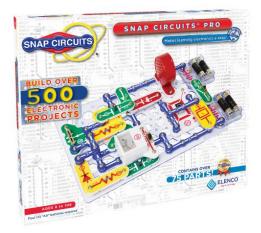
NOTE: For a limited time, you'll get a free Microscope Starter Kit (\$33 value) when you purchase this microscope!

The free kit will automatically be added when you add the microscope to your cart.

The My First Lab Whodunnit? Detective Spy Scope is a special duo-scope design that allows you to view both highly-magnified transparent microscope slides and solid objects. The key to this dual-viewing functionality is an LED illumination system that can either provide bottom lighting for slides or top lighting for solid specimens. In addition, the illumination system can provide white light for standard viewing or ultraviolet "black" light for viewing currency and other fluorescing objects.

Don't confuse this little detective microscope with a toy or a simple magnifying glass: it **features real optical glass lenses and a metal frame**, making it **durable and very usable**. It sits 12" tall, which is the ideal size for kids while still providing a big enough field of view. The bright LED light is powered by three AA batteries, making it a take-anywhere scope indoors or out. Two 2-way switches allow you to independently use white light or black light on the bottom illuminator and/or top illuminator. A 6-hole disc diaphragm provides lighting and contrast control when using microscope slides. The three objective lenses and 10x widefield eyepiece provide total microscope magnification levels of 40, 100, and 400x. The large coarse focusing knob is fast and easy to use at 40x and 100x magnification but requires more care at 400x magnification.

The Whodunnit? Detective Spy Scope comes with an extensive accessory kit for hours of crime scene type investigation. With it and their microscope, kids can dive into forensic science as they analyze and study evidence, including fingerprints, blood splatter, hair and fiber, writing and ink, fraud, acids, and other liquids. They can also use prepared slides, as well as learn to make their own slides with coverslips and more! A complete list of items

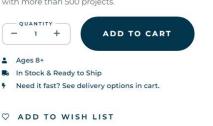


# Snap Circuits Pro 500 Kit

### \$79.95

SHARE O

This is the ultimate Snap Circuits electronics experiment kit, with more than 500 projects.



## **Product Description**



### SKU: KT-SNAP500

Explore electronic circuits with Elenco Electronics' ultimate Snap Circuits experiment kit - includes more than 500 projects!

This Elenco Snap Circuits Pro set has **72 snap-together components** that include a transformer, analog meter, LED display, voice recording IC, and FM radio module.

The **three full-color project manuals (182 pages total)** show how the parts can be used to build electronic devices, such as:

- · a voice recorder,
- a music meter,
- various other meters,
- · a variable oscillator,
- a digital voice recorder,
- an adjustable light control,
- · sound and electricity controllers,
- · your child's very own circuits and devices,
- and more!

This educational toy makes a great gift for any 8+-year-old interested in learning about circuits and electronics. No tools or soldering are needed with this electrical circuits kit! The **lego-like snap circuits parts easily snap-together** and onto the included plastic grid, making solid electrical connections.

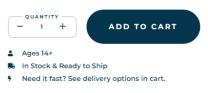


# Organic Chemistry Standard Glassware Set

### \$149.95

Pay in 4 interest-free payments of \$37.49 with PayPal. Learn more

Our Standard Organic Chemistry Glassware Set has standard taper ground glass joints & provides the laboratory supplies needed to perform distillation, synthesis, and other organic chemistry processes.



### 9 SHIPPING RESTRICTIONS

## **Product Description**



### SKU: CE-OCKITA

Our **Standard Organic Chemistry Glassware Set** has standard taper ground glass joints & provides the laboratory glassware needed to perform distillation, synthesis, and other organic chemistry processes. The 24/29 standard taper ground joints allow the different pieces to fit together with only glass in contact with the chemicals. Because of this, nothing contaminates the organic chemistry process.

This organic chemistry glassware set includes 50 ml, 100 ml, 250 ml, and 500 ml round bottom boiling flasks (one of each size), a 300 mm Graham condenser, a 300 mm distilling cylinder, a 250 ml separatory funnel, a Claisen adapter, a 75° distilling head, a 105° vacuum receiving tube, a thermometer jacket tube, two glass stoppers, and eight plastic joint clips.

Search beyond the short-lasting plasticware and set yourself up for endless organic chemistry labs! This **21-piece glassware set** affords various organic chemistry process configurations. The glass labware and components in this organic chemistry kit are high-quality GG17 borosilicate glass with a low coefficient of thermal expansion, meaning the glassware will withstand typical laboratory thermal variations common to chemistry processes like heating and cooling. Standard taper ground joint glassware is customary for organic chemistry. A thin film of silicone grease or a layer of PTFE tape on the joint creates a leak-proof connection, even under vacuum or modest pressure, while plastic joint clips tightly hold connections together.

The standard taper ground glass joints are the international standard 24/29, which means 24 mm in diameter at the widest part of the joint with a standard taper that is 29 mm long. These pieces also fit with the US standard 24/40 ground joints with the same 24 mm diameter and standard taper, but at 40 mm long.

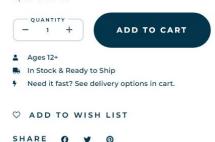
Complete your distillation set-up by ordering a few additional items separately: support stands and clamps, a burner,



## Bottle Rocket Launcher Kit

#### \$34.95

Study Newton's laws of motion as you build rockets that soar up to 150 feet.



# **Product Description**



### SKU: MC-ROCKET

Study Newton's laws of motion as you build rockets that soar up to 150 feet! This high-quality launcher uses water and air pressure (from a bicycle air pump, not included) to launch plastic soda pop bottles. Includes instructions with ideas for experiments, such as making an altimeter and testing what happens when water and air pressure amounts are varied. This set does not come with a wooden stand as pictured; metal prongs at the bottom of the launcher are designed to stick it into the ground to secure the launcher. Adult supervision required.

Want to use this kit for a science fair project? See our experiment ideas below to get you started.

You provide a soda bottle, air pump, tire pressure gauge, and other household items. We also recommend protective **safety goggles**.

### Science Fair Project Ideas:

- Experiment with different levels of air and water pressure to find what makes the rocket go the highest.
- Try launching the rocket on days with different weather conditions to see how temperature, wind speed, and outside air pressure change how high it goes.



# Sound Measurement Kit

### \$22.95

Measure sound wave lengths and determine the speed of sound with this inexpensive resonance kit.



- Need it fast? See delivery options in cart.



# **Product Description**



### SKU: MC-SOUNKIT

Measure sound wave lengths and determine the speed of sound with this inexpensive resonance kit. Includes 60 cm long glass tube, water reservoir, connecting fittings, 512 cps tuning fork and instructions. (Also requires a **ring stand**, **burette clamp** and **meterstick** or **tape measure**, not included.)



# Acıd Kaın, Weathering, and Erosion Kit

### \$64.95

With this Environmental Chemistry Acid Rain, Weathering, and Erosion Kit, students experiment with the effects of acid rain on naturally occurring stone and common building materials.



### **Product Description**



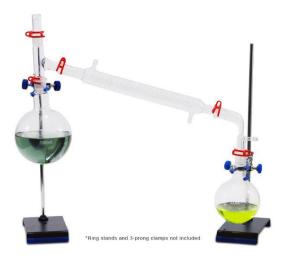
### SKU: KT-ISARAIN

With this Environmental Chemistry Acid Rain, Weathering, and Erosion Kit, students experiment with the effects of acid rain on naturally occurring stone and common building materials. Acid rain is a term used generically to describe any type of acidic moisture: rain, snow, or fog. Acid rain can have devastating effects on aquatic ecosystems, terrestrial areas, naturally-occurring rocky surfaces, and human-made surfaces as well. Different stone and metal substances used in the construction of buildings, statues, monuments, etc. may all be affected by acid rain. The rates of erosion and weathering may increase rapidly depending on the degree of acidity in the precipitation.

With this kit, students expose many rock materials and metals, both naturally-occurring and common in construction, to an acidic environment and examine their reactions in contrast to the same materials exposed to "normal" rain (tap water). This Acid Rain, Weathering, and Erosion Kit contains enough materials for 15 groups. A teacher's manual and reproducible student study guide are included.

Safety gear, specifically gloves, goggles, and apron, are recommended. You provide 500mL container for mixing sulfuric acid.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- **WARNING:** This product can expose you to Respirable crystalline silica, which is known to the State of California to cause cancer. For more information go to **www.P65Warnings.ca.gov**.



# Vacuum Distillation Organic Glassware Set

\$124.95

Get the high-quality glassware needed for organic chemistry vacuum distillation in one convenient kit! This starter set comes with round bottom flasks, a Graham condenser, a protective storage box, a distilling head & more.



ADD TO CART

- ♣ Ages 14+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

## **Product Description**



### SKU: CE-DISTVAC

This laboratory glassware set makes an excellent organic chemistry vacuum distillation kit. Beginners and expert scientists alike will save time and money with this simple vacuum distillation set!

# What does "distill" mean?

Distilling a liquid consists of three steps: 1) purifying it by vaporizing it, 2) condensing it by cooling the vapor, and 3) collecting the resulting liquid. As one example of application, essential oils are created through a process called steam distillation.

# What's included in this Vacuum Distillation Apparatus Kit?

- 500 ml glass round bottom flask
- 1000 ml glass round bottom flask
- 300 mm Graham condenser
- 75° distilling head
- 105° vacuum adapter / receiving tube
- · thermometer jacket tube
- glass stopper
- 5 plastic keck joint clips
- · Shipping box with foam inserts for storage



# Protist Microscope Discovery Kit

\$289.95

This Microscope Discovery Kit will give you everything you need to explore the microscopic world of protists. It includes the same quality and features as other fine high-school-level microscopes at an affordable price.



ADD TO CART

- Ages 9+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

## **Product Description**



### SKU: KT-MICPROT

This Protist Microscope Discovery Kit is a fantastic Biology science kit! You will get everything you need to explore the microscopic world of protists.

Our Home LED Microscope is an **excellent value!** This student microscope is built to HST's exacting standards & represents **high-quality from top to bottom**: from its eyepiece, to its high power **40X, 100X, & 400X magnification** settings & zoom, to its LED light, metal arm, overall glass optics & beyond! With it, you'll get the same quality and features as other fine high-school-level student microscopes, but at a very affordable price. Plus, this Home Science Tools LED Microscope comes with a **lifetime warranty** - because you deserve to make a purchasing decision you trust.

When comparison shopping for a compound or stereo microscope on Amazon and beyond, you'll often find nearly identical specifications across different brands. But what you can't tell from the specifications is the microscope's overall quality and reliability. The market is flooded with poorly manufactured, low-cost microscopes that seem like a bargain... until you use them.

Our high-quality Home Microscope is different. The sturdy, reliable mechanical construction of this kids microscope id designed to withstand the rigor of heavy classroom use and will last a lifetime, It's recommend by over 100+ 5-star reviews!

Its smoothly-rotating head and eyepiece make it easy to share between two or more students, and its precision fine and coarse focusing bring specimens into focus quickly and sharply. This compound microscope features long-life and variable-intensity LED lighting, which provides a bright field of view and is cool enough for use with live specimens. This microscope may very well be **the best microscope for your curious learners**.



# PowerUp Paper Airplane Templates

### \$15.00

Create incredible designs for your POWERUP 2.0 or 4.0 airplane conversion kit and fly in style! This pack of templates includes 10 paper templates to fold 5 unique airplane designs. 2 waterproof templates are also included!



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: GS-AIRPLTM

Create incredible designs for your **POWERUP 2.0** or **4.0 airplane conversion kit** (module not included). This pack of templates includes 10 paper templates to fold 5 unique airplane designs. An additional 2 templates are made from DuPont/Tyvek waterproof paper for all-weather flying. You also receive a desk stand for displaying your beautiful designs.

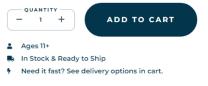
For use with the PowerUp 2.0 Electric Paper Airplane Kit and the PowerUp 4.0 Electric Paper Airplane Kit.



# Enzymes and Lactose Intolerance

### \$28.95

Discover the science behind lactose intolerance with this chemistry kit. Can over-the-counter LACTAID (R) digest lactose? Learn about enzymes and how sugar lactose is broken down through a variety of engaging experiments.



### O ADD TO WISH LIST

## **Product Description**



### SKU: KT-STO119

Discover the science behind lactose intolerance! Students will learn about enzymes and model lactase, the enzyme responsible for breaking down the sugar lactose. Then they'll conduct tests to determine if over-the-counter LACTAID (R) can digest lactose. Finally, students will design and conduct a series of experiments to explore the impact of pH on the action of enzymes.

This kit will have students excited about scientific discovery. They'll learn key concepts including

- 1. Enzymes are biological catalysts
- 2. Reaction rates are impacted enzymes
- 3. Temperature and pH influence enzyme function

This kit can be conducted in the classroom or at home in two 40 minute sessions plus homework. Comes with complete Teacher Guide and Student materials.



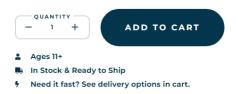
MARNING: CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Sound Measurement Kit

### \$22.95

Measure sound wave lengths and determine the speed of sound with this inexpensive resonance kit.



 $\heartsuit$  ADD TO WISH LIST

SHARE () y ()

# **Product Description**



### SKU: MC-SOUNKIT

Measure sound wave lengths and determine the speed of sound with this inexpensive resonance kit. Includes 60 cm long glass tube, water reservoir, connecting fittings, 512 cps tuning fork and instructions. (Also requires a **ring stand**, **burette clamp** and **meterstick** or **tape measure**, not included.)



# Atoms, Isotopes, and Ions Kit

### \$19.95

Use the Atoms, Isotopes & Ions Kit to build a series of atoms with various electron configurations & energy levels. Comes with a detailed teacher's guide & student worksheet!

Complete in 2 - 4 class periods (40 min. each).



- ♣ Ages 11+
- 🛤 In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



### SKU: KT-STO142

Finally, a way to get hands-on with atoms, isotopes, and ions... just watch out for those sub-atomic particles!

This innovative physics kit uses simple representations of protons, neutrons, and electrons to convey the complex characteristics of atoms, isotopes, and ions. Use the included plastic chips (sub-atomic particles) to **build a series of atoms with various electron configurations and energy levels.** Then, learn how changing the number of protons, neutrons, or electrons can produce an entirely different element!

Students are sure to enjoy the Atoms, Isotopes, and Ions Kit - a hands-on, reusable activity that brings the sub-atomic world to the macro-scale.

Each kit comes with a detailed teacher's guide and a complete student worksheet. Additionally, all supplies needed to conduct the hands-on activities are included. No specialized lab equipment is required - making this a perfect learning activity for all types of schools and homes.

Time to complete: 2 Class Periods (about 40 minutes each) with homework

From the Manufacturer: Active Inquiry, Ready-to-Go, Cost-Effective and Student/Teacher Friendly! This Science Take-Out kit was designed by experienced science educators who understand the diverse needs of teachers and their students. The Science Take-Out team has extensive expertise in curriculum development, classroom instruction, and assessment. All Science Take-Out kits are thoroughly field-tested to ensure that they are student-friendly, teacher-friendly, and meet significant learning objectives. These innovative and easy-to-use hands-on science activity kits are designed for use by individuals or small groups of students. The activities do not require any special laboratory



# Circuit Building Kit for Raspberry Pi

#### \$99.95

Already have a Raspberry Pi? If so, use this Circuit Building Kit for your Raspberry Pi to build a mini computer and program it to make your own interactive, electronic gadgets & games. Let the programming fun begin!

### Out of Stock, Expected to Ship: 9/14/2022

Enter your email address to be notified when this item is back in stock.

Email Address

Also keep me up to date on news and exclusive offers.

# **Product Description**

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### SKU: SB-CIRCRPI

If you already have a Rapsberry Pi, you now need the 'building blocks' and projects to help you dive into all of the programming and electronic circuits fun! The Science Buddies: Circuit Building Kit for Raspberry Pi has all the electronics components you need to discover 8 fun projects using the Raspberry Pi. Explore, build, and personalize gadgets and toys with the all-in-one, reusable, electronic components.

### Raspberry Pi Projects include:

- an electronic drum set,
- an interactive toy,
- smart art,
- · an interactive carnival game,
- · an invader alert,
- · a musical light show,
- a video game,
- · and computer-generated art.

The Science Buddies: Circuit Building Kit for Raspberry Pi provides a hands-on look at the inner workings of a computer by letting you build and program one yourself! Powered by your Raspberry Pi 3B+, a credit card-sized computer that will serve as the "brain" for all of your electronic gadgets, this simple circuit kit is ideally suited for a novice, but powerful enough to grow with your ideas!

It's easy to get started with this engaging and education STEM toy! Step-by-step illustrated project instructions, including video tutorials, provide on-screen guidance as you work on DIY projects.



# Heart Model, small

### \$28.95

SHARE ()

Visualize how the human heart works with this 29-piece model.



# **Product Description**



### SKU: CM-HEARTSM

Visualize how the human heart works with this 29-piece model.

Put together the atria, ventricles, main arteries, aorta, and more. 3.5" length when assembled. This economical model is ideal for helping students understand how the heart works. Comes with stand and assembly guide.

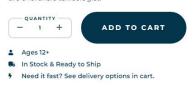
**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Forensic Chemistry Drug Detection Kit

### \$44.95

Everyone who ate the school cafeteria's chili became ill. You are a forensic toxicologist.



O ADD TO WISH LIST

SHIPPING RESTRICTIONS

# **Product Description**



### SKU: KT-ISDRUGT

Everyone who ate the school cafeteria's chili became ill. Could someone have tainted the chili? You are a forensic toxicologist. You must determine if any of the chili ingredients from the cafeteria could have been substituted with aspirin, which appears to have been stolen from the nurse's office. You will perform a series of lab tests, including tests on control acetylsalicylic acid, the chemical name of aspirin.

This Forensic Chemistry of Drug Detection Kit contains enough material for 15 groups of students. A teacher's manual and reproducible student study guide are included.

Safety gear, specifically gloves, goggles, and apron, are recommended. You provide distilled water.

Forensic chemistry drug detection (drug analysis) is used in sports, police investigations, and by environmental scientists to test for herbicides and pesticides. Scientists who use chemistry to find evidence are called forensic analysts. Forensic analysis is an increasingly important field with many applications.

- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- **WARNING:** This product can expose you to Aspirin, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to **www.P65Warnings.ca.gov**.



# Clinical Lite Professional Stethoscope

### \$19.95

The Clinical Lite professional stethoscope is a classic dual head stethoscope.

QUANTITY +

ADD TO CART

- Ages 11+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



### SKU: BE-STETHCL

The Clinical Lite professional stethoscope is a classic dual head stethoscope that is extremely light weight and affordable. The anodized aluminum dual head has a fiberglass diaphragm to optimally detect S1 and S2 heart sounds as well as Korotkoff sounds, while the bell side is optimally designed for assessing S3 and S4 heart sounds. The Clinical Lite professional stethoscope incorporates a snap-on diaphragm retaining ring and a non-chill bell ring providing the ease of use and maintenance, while enhancing patient comfort.

This stethoscope includes two sizes of soft eartips, replacement diaphragm and ID tag. The approximate overall length is 31" and it weighs 3.9 oz. Lifetime warranty with free lifetime replacement parts from Prestige Medical. Excellent video instructions for using a stethoscope are available on YouTube.com.



# Magnetic Levitation Kit

#### \$37.95

This kit is designed for kids to investigate magnets and magnetism through five engaging experiments and five indepth special projects.



ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.
- O ADD TO WISH LIST

# **Product Description**



### SKU: KT-LEVISET

This Magnetic Levitation kit is designed for kids to investigate magnets and magnetism through five engaging experiments and five in-depth special projects. The exciting final project is to build and operate a magnetically levitated train car! All the harder-to-find materials are included: 27 magnets, a compass, iron filings, a 36-page magnetic levitation project booklet, and more. Find out about equilibrium, gravity, and magnetic fields. You provide some common household items.

Activities include floating magnets, balancing gravity and magnetism, and building magnetic pendulums.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Xenon Pocket Otoscope

### \$57.95

An otoscope is an optical medical device used to examine the outer ear and eardrum.

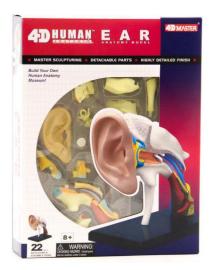


# **Product Description**



### SKU: BE-OTSCOPE

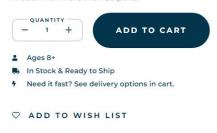
An otoscope is an optical medical device used to examine the outer ear and eardrum. The xenon pocket otoscope is a medical quality otoscope that is affordable enough to be used at home to identify ear infections. Unlike low-cost otoscopes, the xenon pocket otoscope is designed for professional medical use. It has 3x magnification and a very bright xenon lamp that provides 6000 candlepower illumination. It also includes one reusable speculum and two sizes of disposable specula, along with a Welch Allyn converter. The xenon pocket otoscope can be converted into a bright penlight by removing the otoscope head. Two AAA batteries are included. Excellent video instructions for using an otoscope are available on YouTube.com.



# 4D Human Anatomy Ear Model

### \$29.95

Engage the senses with this highly-detailed, interactive ear model with more than 20 parts.



# **Product Description**



### SKU: CM-EARMDL2

Engage the senses with this highly-detailed, interactive ear model. By seeing and touching, kids learn and remember better. With more than 20 parts, this model is a challenge to assemble and helps students learn and remember how the ear is constructed. Once they can accurately put it together, create a game and see how quickly students can assemble the parts of the ear! The included pamphlet explains how the ear works, labels and explains the function of the different parts of the ear, and provides interesting facts.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Refill Kit for Control Bleeding Training Kit

# \$24.95

Get a refill kit for the Apprentice Doctor Control the Bleed Course & Training Kit (must be purchased separately). Includes nitrile gloves, gauze squares, a fluid bag, a syringe, a stitch cutter, a pressure bandage, and more!



- ♣ Ages 12+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



# SKU: KT-APDSTBR

Get a refill kit for the **Apprentice Doctor Control the Bleed Course & Training Kit** (must be purchased separately). Expand the 'Contents' tab below for a complete list of included items.

★ WARNING: CHOKING HAZARD - Balloons. Children under 8 years can choke or suffocate on underinflated or broken balloons. Adult supervision required. Keep uninflated balloons from children. Discard broken balloons at once.

**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



# Kids First Biology Lab

### \$40.40

Discover the science of living things with this complete kids microscope science kit from Thames & Kosmos! Includes a microscope, prepared & blank slides, various tools, and a beautifully illustrated 32-page manual.

### Out of Stock, Expected to Ship: 8/29/2022

Enter your email address to be notified when this item is back in stock.

Email Address

Also keep me up to date on news and exclusive offers.

# **Product Description**



SKU: KT-KIDBIOL

# Discover the science of living things with this complete introductory microscope kit from Thames & Kosmos!

The beautifully illustrated experiment manual guides you through DIY observations of many living specimens found in and around your home: onion cells, pond water, chloroplasts, plant stem cross sections, microorganisms, mouth cells, meat cells, different types of hair and fur, dust mites, bugs, pollen in honey, and so much more.

# Use this engaging kids microscope science kit to:

- · discover how an onion cell shrivels;
- · see how an earthworm wiggles;
- analyze the differences between the hair on your head and the sheep's hair in your wool sweater;
- and more!

# This Thames & Kosmos Kids First Biology Lab kit includes:

- a microscope
- · three prepared specimens on a slide
- four blank slides
- coverslips
- tweezers
- · a dissecting needle
- a section slicing tool (microtome)
- · a 32-page manual
- and more



# ElecFreaks micro:bit Tinker Kit

### \$69.95

Use this ElecFreaks Tinker Kit with your micro:bit to discover fun & creative ways to learn new coding and electronics skills! Dive deep into makerspace with LEDs, a crash sensor, a mini OLED dispay & more.



O ADD TO WISH LIST

# **Product Description**



### SKU: KT-MBTINKR

Take your micro:bit to the next level with this ElecFreaks micro:bit Tinker Kit. This ElecFreaks Tinker Kit is the ultimate micro:bit add-on package for the tinkerer or maker in your life! They'll spend hours working through modules, like making a moisture sensor, a plant soil monitor, and more. But to get started with this ElecFreaks Tinker Kit, **they'll need a micro:bit Bundle first.** 

With this kit, you'll discover fun & creative ways to learn new coding and electronic skills. Inside, you'll find a micro:bit adapter for easy connection to your micro:bit device, and each of the included accessories come on specially designed boards. No breadboard required!

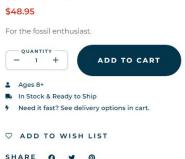
Discover how to use a variety of electronic components like LEDs, different sensors, a potentiometer, a buzzer, and a 5-button gaming keypad. The kit's moisture sensor, mini OLED display, and micro:bit breakout board bring even more fun and sophistication to your learning experience. With this ElecFreaks Tinker Kit, you can use your limitless creativity to make a 5-key music machine, a motion-sensing light, a soil moisture sensor and display that tells you when your plants are thirsty, and more hands-on DIY projects.

We provide instructions that show you how to code the device using block coding, like MakeCode or Scratch. This ElecFreaks micro:bit Tinker Kit.is perfect for beginners, but more advanced coders can replicate the same programs using a more complex language if desired (ex. JavaScript, Python, etc.). This kit requires two AAA batteries, which are included in our **micro:bit Bundle**. If you did not get the HST micro:bit bundle, you'll need to supply your own batteries.

Need some help getting started with your micro:bit or block coding? Check out these excellent micro:bit quick start tips from its creator! And take a look at these other robot kits for more coding practice and fun: ElecFreaks Basic Kit and Starter Kit.



# Advanced Fossil Collection, 30 specimens



# **Product Description**



# SKU: RM-FDELUXE

For the fossil enthusiast! A comprehensive advanced collection of 30 fossils selected to show the diversity of fossil groups in both animal and plant kingdoms. Specimens are numbered in a display box with descriptive key (has old earth dating).



# Production of Biodiesel Kit

# \$44.95 QUANTITY 1 + ADD TO CART Ages 12+ In Stock & Ready to Ship Need it fast? See delivery options in cart. SHIPPING RESTRICTIONS ADD TO WISH LIST SHARE W

# **Product Description**



### SKU: KT-ISBIODI

With the Production of Biodiesel Kit, students use a two-phase process to produce small batches of crude biodiesel. Experiment with your crude biodiesel fuel to show the burning qualities of biodiesel and vegetable oil.

An optional small-scale exercise allows students to use a washing procedure. This activity simulates the full process of producing biodiesel of the quality levels necessary for vehicle use.

The Production of Biodiesel Kit, from Innovating Science, contains enough materials for 5 groups of students.

Teacher's Manual and Student Study Guide copymasters are included.

You provide an assortment of lab items: 250 ml beakers, 25 ml graduated cylinder, 250 ml graduated cylinder, thermometers, hot plate/stirrers, balance, parafilm, pipettes, separatory funnel, and wash bottles.

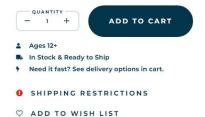
- Teacher's manual and reproducible student study guide
- SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- WARNING: This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



# The Electrochemical Series Kit

### \$44.95

Arrange chemical elements by their electrode potential in this AP Chemistry: Electrochemical Series Kit. Contains instructions and enough materials for 5 groups.



# **Product Description**



### SKU: KT-ISELECH

Arrange chemical elements by their electrode potential in this AP Chemistry: Electrochemical Series Kit.

Metal strips (electrodes) placed in water tend to go into solution as ions, while electrons simultaneously build up on them. The electrical potential difference produced between the metal and solution is the electrode potential (E°).

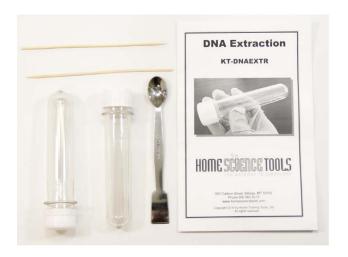
Oxidation is loss; reduction is gain. By definition, an electrode potential is a reduction potential.

Elements that gain electrons from their solution are electronegative. Elements that gain electrons from their solution are electropositive. The most negative E° values are at the top of the electrochemical series and the most positive E° values are at the bottom.

The AP Chemsitry: Eletrochemical Series Kit from Innovating Science has enough material for 5 groups. Teacher's Manual and Student Study Guide copymasters are included.

You provide 5 large flasks, 50 ml beakers, voltmeter with alligator clips, distilled water, and safety equipment.

① SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.





# **Product Description**



# SKU: KT-DNAEXTR

Don't let serious-sounding science intimidate you! Easily engage kids in real science as DNA studies come to life. This kit walks you through the simple process of collecting DNA from cheek cells. Once you've done it, you and your students will be eager to perform the other DNA experiment ideas included in the kit.

Pair with the **Simple DNA Model Kit** for a more in-depth study on DNA.

The kit comes with enough materials for two simultaneous extractions for a student and a parent or two students. For up to 15 groups of students, choose the **Classroom DNA Extraction Kit**. Using **gloves** and splash **goggles** is recommended.

- ① SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- WARNING: This product can expose you to chemicals including Methyl isobutyl ketone, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.



# Chemistry Essentials Set

### \$28.95

Set up your chemistry projects like a pro with this lab equipment! This set contains the most commonly used chemistry lab equipment, equipping you to explore critical chemistry concepts with durable glassware.



O ADD TO WISH LIST

# **Product Description**



# SKU: KT-ESSCHEM

Get started on your own home chemistry laboratory with this collection of essential and basic laboratory equipment!

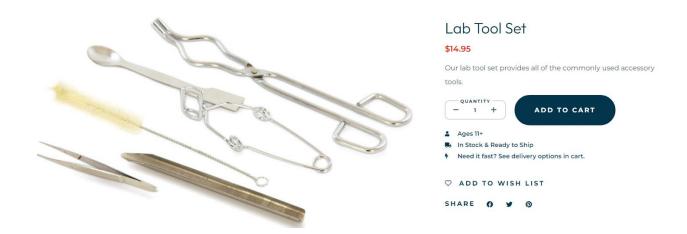
This set contains common laboratory equipment and high-quality laboratory glassware (that can withstand high temperatures) for middle and high school chemistry courses or home science experiments. Always provide adult supervision for kids using labware or chemicals during chemistry experiments!

# Inside this basic chemistry lab equipment set you'll find:

- a 250 ml glass beaker
- 100 ml glass graduated cylinder
- 250 ml glass Erlenmeyer flask
- two large glass test tubes
- · rubber stoppers
- a thermometer
- test tube clamp & beaker tongs
- · cleaning brush
- and pipets (droppers for small amounts of liquid).

Need some ideas to get started using this basic chemistry lab equipment? Check out these popular Chem projects:

- Rainbow Density Column with a graduated cylinder
- Food Chemistry Projects with beakers and test tubes.



# **Product Description**



SKU: CE-LABTOOL

Our lab tool set provides all of the commonly used accessory tools. It's a great addition to any of our glassware kits!



# Celestron StarSense Explorer LT 80AZ Smartphone App-Enabled Refractor Telescope

### \$269.95

Unleash the power of your smartphone to take you on a guided tour of the night sky with the StarSense Explorer LT 80AZ Telescope. View planets, brighter nebulae and galaxies, star clusters, and double stars from the city.

- 1 +

ADD TO CART

- Ages 8+
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: AS-TSTE80

A guided tour of the sky! The **first refractor telescope that uses your smartphone** to analyze and calculate the telescope position in real-time. **Ideal for beginners and enthusiasts alike,** this easy-to-use, app-guided experience will be sure to amaze! **Just insert your phone into the StarSense dock and open the StarSense Explorer app!** 

StarSense Explorer LT 80AZ simple altazimuth mount includes an altitude slow motion adjustment with a sliding rod to fine tune the telescope's pointing position and follow targets as they appear to drift across the night sky. It's all anchored by an adjustable, full-height tripod. Plus, with the fully coated glass optics and 80 mm aperture, views will be sharp and bright. Using the included 90-degree erect image diagonal, you'll also be perfectly equipped for daytime terrestrial viewing.

This telescope offers not only high-quality viewing but with it's **light-weight (only 9.2 pounds total!)** and compact size make it easy to take with you on-the-go. The set up is a breeze requiring **no tools** and only a few minutes to get started with your viewing.

It also comes with an adjustable tripod that enables you to customize the height or place it on uneven surfaces. Plus, you'll receive a number of accessories with the telescope including:

- Two eyepieces (25mm and 10mm) The two eyepieces offer different magnifications to view your intended object
- 2x Barlow lens For even more magnification, connect your 2x Barlow lens to double the power of each eyepiece
- StarPointer(TM) red dot finderscope The finderscope will help you quickly center an object in your eyepiece for
  easier observing.





# Gravity of the Situation

### \$49.99

What an attraction! Create your own Solar System, discover forces of the universe, and expand your understanding of Newton's Law of Gravitation with Coulomb's Law! Learn how physicists today study the smallest particles in the universe.



- Physics
- 🕒 In Stock & Ready to Ship





### SKU: SU-GRAVST

Explore how objects in space stay in orbit, how they could escape orbit, and how the force of gravity is related to the forces within atoms.

Inquiring physicists perform hands-on gravitational and electromagnetic force experiments to explore the fundamental forces of the universe. Students expand their understanding of the Newton's Law of Gravitation with relation to Coulomb's Law, and learn what physicists are discovering in the world of particle physics today, the smallest particles of the universe!

This Launch level kit includes a **full-color student workbook** and a **detailed teacher guide**, with step-by-step instructions for both hands-on and reading-based activities designed to engage students in the relationship between gravitational and subatomic forces. Designed to provide over **15 hours of engaging learning**, both teacher and student will be able to open the box and start within minutes.

In this kit, the student will engage in these engaging science activities:

- 1. Explore how gravity changes as objects move through the Solar System.
- 2. Learn how objects get into orbit around Earth.
- 3. Explore how mass and distance effect the orbit and velocity of planets.
- 4. Compare the fundamental forces that describe the behavior of all matter in the universe.
- 5. Explore more with the electromagnetic force.
- 6. Investigate how physicists are continuing to push with the exploration of particle physics.





In Stock & Ready to Ship

# **Product Description**



### SKU: SU-SECRET

Explore the **connection between electricity and magnetism and the Sun!** Learn about space weather and how energy from the Sun reaches Earth. Expand a balloon to model how stars form, change, and release energy. Students **use a spectroscope** to view the color spectrum and **model the expansion of the universe**.

This Launch level kit includes a **full-color student workbook and a detailed teacher guide**, with step-by-step instructions for both hands-on and reading-based activities designed to engage students in stars and the universe. Designed to provide over **15 hours of education and entertainment**, both teacher and student will be able to open the box and start within minutes.

In this kit, the student will engage in these fun activities:

- Learn how weather from space affects people on Earth.
- Find out what the Sun is and how it releases radiation to Earth.
- Compare the properties of our Sun to those of other stars.
- · Get hands-on with the many ways people see stars with eyes, telescopes, and more.
- Go beyond the stars to learn about the rest of the universe.

### Use the Secret Lives of Stars kit to answer questions such as:

- How does space weather affect things on Earth?
- How is energy produced by and released from stars?
- How do stars change?
- How do people observe stars?
- What is the universe like?





# Going in Circles

### \$54.99

Follow carbon through the carbon, water, nitrogen, phosphorus, and rock cycles. Model and test the Earth's cycles to discover how carbon is incorporated into each of them.



- Launch (8th-12th grade)
- Earth and Space
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: SU-GOCIRC

Follow carbon through the carbon cycle, water cycle, nitrogen cycle, phosphorus cycle, and rock cycle. Model and test the Earth's cycles to discover how carbon is incorporated into each of them. Going in Circles will help any **young** scientist learn about and test the intricacies of Earth's cycles.

In this kit, students will **investigate and test** elements of the different Earth cycles to uncover a variety of Earth's cycles, including the carbon cycle, water cycle, nitrogen cycle, phosphorus cycle, and rock cycle. Students will use these hands-on science experiments to delve into the different Earth cycles and their relationship to carbon. Going in Circles comes with a **full-color Student Workbook and Teacher Guide**. This kit contains activities and information that focuses on the phenomenon of intriguing Earth cycle facts and an interactive Traveling Carbon game.

As part of a special program from Home Science Tools, this Launch level kit will provide **over 15 hours of knowledge**, educating your student about Earth's cycles, and how they are connected through carbon.

In this kit, the student will partake in these fun activities:

- 1. Determine which statements are true or false, and use a model called Traveling Carbon.
- 2. Use a tree ring to connect the relationship between carbon and climate.
- 3. Simulate one piece of the water cycle to see how precipitation levels and soil type relate to runoff.
- 4. Experiment with runoff and plant growth using different concentrations of fertilizer.
- 5. Observe specimens to discover where carbon is found in the rock cycle.

The following are Science Unlocked kits we suggest your student has completed prior to doing this kit:

- Contain Your Excitement
- Beneath Our Feet





# Danger Zone

### \$59.99

There's change on the horizon! Learn what causes change to our global climate and deep-dive into the impact it has on your surroundings. Explore extreme heat and develop a real-life solution to climate problems.



- Launch (8th-12th grade)
- Earth and Space
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: SU-DANGER

Climate change connects people and and all living things around the world. In this kit, you dive deeper into these changes and tackle the challenging problems affecting the world.

Learn about the effects of climate change with hands-on experiments with a common greenhouse gas. Explore the impacts of rising sea levels and increasing wildfires, and develop solutions to manage the effects of extreme heat.

This Launch level kit includes a **full-color student workbook and a detailed teacher guide**, with step-by-step instructions for both hands-on and reading-based activities designed to engage students in climate science.

Designed to provide **over 15 hours of engaging learning**, both teacher and student will be able to open the box and start within minutes.

In this kit, the student will engage in these fun activities:

- Wonder about the worsening effects of climate change.
- Explore how gases in the atmosphere affect global rise in temperature.
- · Learn about how water and ice on Earth are impacted by global temperatures.
- Learn about climate change impacts local weather and regional drought conditions.
- Explore extreme heat and develop a real-life solution to climate problems.

### Use the Danger Zone kit to answer questions such as:

- What are the main causes of climate change?
- How does climate change impact living things on Earth?
- · How does climate change impact weather conditions?
- What can people do to impact the effects of climate change?





# Reducing Reliance on Rarity

### \$59.99

Recognize and test how materials are removed from the Earth and used in modern technology. This kit will help any young environmental scientist discover how the development of technology relates to our environment.



ADD TO CART

- Launch (8th-12th grade)
- Earth and Space
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

# **Product Description**



### SKU: SU-REDUCE

Recognize and test how materials are removed from the Earth and used in modern technology. Reducing Reliance on Rarity will help any young environmental scientist discover how the development of technology relates to our environment.

In this kit, students will uncover the anatomy of a smartphone and how the materials used to build a smartphone relate to the degradation of our environment. Students will use hands-on science experiments to delve into the phenomena of Earth's materials and their use in a smartphone. Reducing Reliance on Rarity comes with a full-color Student Workbook and Teacher Guide. This kit contains activities and information that focuses on the phenomenon of the anatomy of a smartphone.

As part of a special program from Home Science Tools, this Launch level kit will provide **over 14 hours** of knowledge, educating your student about how modern technology impacts our Earth.

In this kit, the student will partake in these fun activities:

- 1. Uncover the anatomy of a smartphone.
- 2. Create their own mines and use them to excavate charcoal.
- 3. Simulate how renewable and nonrenewable resources are used with games.
- 4. Use their inner circle to compare cost and value.
- 5. Grow plants under different conditions to visualize the non-monetary costs of mining.

Use "Reducing Reliance on Rarity" to answer questions such as:

- · How does technology impact our environment?
- What are renewable and nonrenewable resources?





# **Unusual Structures**

### \$49.99

Build, grind, and wash away dirt and rocks to discover the fascinating world of erosion and weathering! Your young geologist will learn about and test the intricacies of Earth's geological processes with this earth science curriculum kit.



ADD TO CART

- Launch (8th-12th grade)
- Earth and Space
- In Stock & Ready to Ship

# **Product Description**



### SKU: SU-UNSTRUC

Model and test the geological processes that occur throughout our planet. Unusual Structures will help any young geologist learn about and test the intricacies of Earth's geological processes.

In this kit, students will build, grind, and wash away "dirt" and rocks to discover the fascinating world of erosion and weathering. Students will use these hands-on science experiments to delve into the different mechanisms of erosion and weathering. Unusual Structures comes with a **full-color Student Workbook and Teacher Guide**. This kit contains activities and information that focuses on the phenomenon of unusual looking, natural structures that result from the geological processes of weathering and erosion.

As part of a special program from Home Science Tools, this Launch level kit will provide over **15 hours of knowledge**, educating your student about **erosion and weathering**, and what that means for the environment.

In this kit, the student will partake in these fun activities:

- 1. View images of unique, natural structures from around the world.
- 2. Test their knowledge on what dirt really is and how nature moves it using erosion tables.
- 3. Compare and contrast the interconnectedness of erosion and weathering by using ice.
- 4. Model wind weathering with several specimens.
- 5. Get hands-on with their own chemical weathering experiment.

# Use the Unusual Structures kit to answer questions such as:

- What makes the structures we see around the world?
- Do structures around the world stay the same or change?
- What are Earth's geological processes?



# Raspberry Pi Projects Kit

### \$179.95

Pay in 4 interest-free payments of \$44.99 with PayPal. Learn more

This Raspberry Pi Projects Kit is the ultimate starter kit for building & programming with the Raspberry Pi 3B+. Use our step-by-step instructions, videos & project ideas to create interactive electronic gadgets & games!

### Out-of-Stock, Discontinued

Enter your email address to be notified when this item is back in stock.

Email Address

**Product Description** 



SKU: SB-RASPPI

# Use this engaging project kit to build a mini-computer and program it to make your own interactive, electronic gadgets and games!

The Raspberry Pi Kit provides a hands-on look at the inner workings of a computer by letting you build and program one yourself. Powered by the Raspberry Pi 3 model B+, a credit card-sized computer that will serve as the "brain" for all of your electronic gadgets, this complete starter kit is one of the best Raspberry Pi kits around; it's an educational gadget and gaming kit ideally suited for novices or programming "noobs", but is also powerful enough to grow with your advancing abilities and ideas!

The "all in one" reusable, electronic components in this Raspberry Pi Project Kit allow you to **explore, build, and** personalize any of the Science Buddies projects - including an electronic drum set, an interactive robot, smart art, and a variety of others.

It's easy to get started with this Raspberry Pi Starter Kit:

- Step-by-step illustrated project instructions, including video tutorials, provide on-screen guidance as you work on DIY projects
- Intro video walks you through the set up of the Raspberry Pi 3B+ so you can start designing, creating, and playing in **under 30 minutes**
- Circuit-building skills and programming with Scratch are taught as you go no previous experience needed
- 8 fun projects, each designed to teach a different skill, so your knowledge grows with each new gadget and game that you build