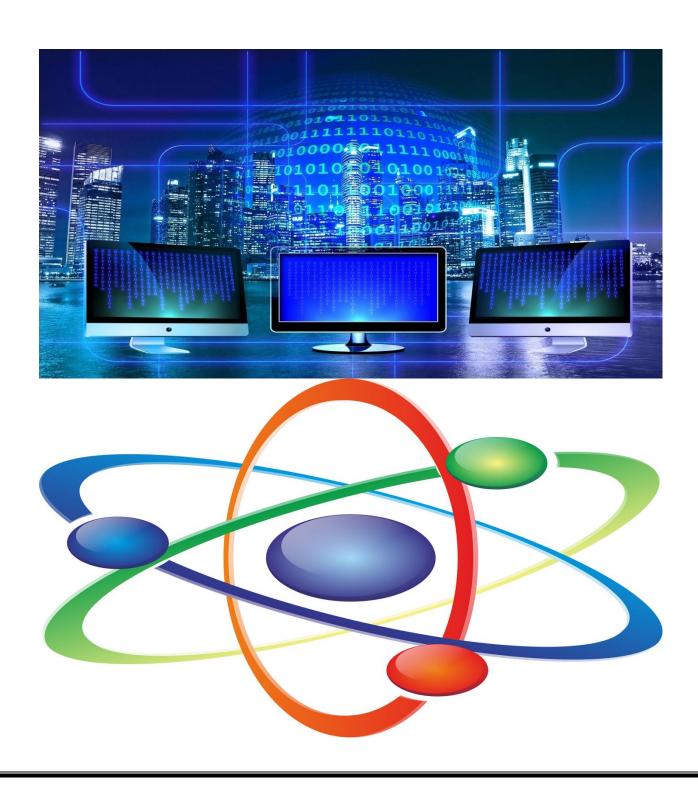
# Science, Technology & Learning Kits and Education Programs Price List (Ages 10 -18)

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



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



Item #3157586

#### \$149.95

(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 Information	
Age Range	Teens
Price Range	Over \$100

#### ByteBoi Advanced Build & Code Your Own Game Console







#### Play a Game You Made on the Console You Built

Become an engineer as you make your own game console and program games to play on it. Assemble the handheld piece while learning about the mechanics and electronics that allow it to run.

Completed, you'll have hours of programming and video game fun. The ByteBoi can be in MakeCode Arcade, which is an easy-to-use coding interface that offers examples and tutorials to help you. Possibilities are endless as you code your own game as you learn about game graphics and character animation.

Once you've added games — either your own or pre-made — you'll be able to play. Once you're done with your gaming session, you'll be able to recharge the Li-Po battery. For ages 14+.

More Information		
Age Range	Teens	
Price Range	Over \$100	

#### Jay-D Build & Code Your Own Mini DJ Mixtable



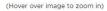
Item #3157535

#### \$139.95

Quantity: 1 Available for Add to Cart + Giftwrap giftwrap!

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

- No prior knowledge of coding or digital sound production
- Easy to follow instructions complete with over 80 pictures to guide you
- · Comes preloaded with sound effects and beats to get you started or code a customizable program
- · Requires soldering





⊕ Description 
 ☆ Reviews

#### Make Your Own Music While Learning Sound Engineering

Build, code and use your own mixtable and learn digital sound production with Jay-D. Start by assembling your own mixtable, an essential piece of DJ equipment, with some soldering (not included). From there, you'll be able to control, mix and manipulate tracks and beats, making your own sounds. The sound board comes preloaded with several sound effects and a collection of prerecorded beats and sounds to make getting started even easier! And adding your own music is easy with a Micro-USB.

Requires soldering (not included). Once assembled, measures 5" x 4.5" with a height of 2.66" at its tallest point. For ages 11+

#### Kit Includes:

- 1 Main circuit board
- 1 Display board
- 5 Acrylic casing pieces
- 1 Bag of small components you'll need for assembly
- 2 5W speakers
- 7 Custommade plate knobs
- 1 USBC cable for charging and programing
- · 1 Micro SD card with preloaded beats

#### Highly Recommended:

Make sure you have all of the tools you need to complete your project with the Electronics Tool Pack (#315723). Included are a soldering iron, diagonal cutter pliers and everything else you'll need for this project.

More Information		
Age Range	Teens	
Price Range	Over \$100	

#### StratoLauncher IV Deluxe





# 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.

#### 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

Quantity:	1	₩ Add to Cart
	ailable for	₩ Add to Cart + Giftwrap
Same d	av shipping i	ordered by 4 P.M (EST) Monday - Friday

- · 120 degree tilting ball head allows terrain adjustments and wind compensation
- Assembly & tools required
- · You supply two empty 2 liter plastic soda bottles, water, and air source (bicycle or foot pump or air compressor)

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

#### Synthia Build & Code Your Own Synthesizer



#### \$139.95

Quantity: 1

① Same day shipping if ordered by 4 P.M (EST) Monday - Friday

- · Create your own funky beats with pre-loaded music samples
- · Record with the built-in microphon-
- Design a custom light show with built-in LEDs
- Soldering required



Description ☆ Reviews

#### **Experiment with the Science of Sound Waves**

This DIY kit combines the functions of a personal sound sampler, drum machine, sequencer and synthesizer while teaching about digital sound production. You'll learn about digital-to-analog signal conversion and how to code a custom light show with the built-in LEDs. About 4 hours build time. USB powered. Some soldering required. For ages 11+.

Includes circuit board, speaker, rotary encoders, slider potenciometers, headphone jack, USB cable and all required components



Synthia is equipped with:

- A dual-core CPU (ESP32)
- Five pushbuttons
- Two encoder knobs
- Two slider potentiometers
   MEMS microphone for recording samples
- A dedicated DAC with a Class-D amplifier
- 1W speaker
- USB-C3.5mm headphone jack
- 121 flashy LEDs

With the help of a built-in MEMS microphone, you can even record your own voice or samples with Synthia! Want to make a beat using, say....the sound of your own burps? You can do it! Sound effects include High-Pass, Low-Pass, Reverb and Robotify. Percussion samples include Open Hi-Hat, Closed Hi-Hat, Snare, Kick (bass drum) and Clap.

More Info	rmation
Age Range	Teens
Price Range	Over \$100

#### 14 in 1 Educational Solar Robot Kit



Item #3153198

#### \$33.95

Quantity: 1 Add to Cart

Available for giftwrap! Add to Cart + Giftwrap

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

Our best-selling robot kit

Construct 14 different solar robots using re-using the same parts

Powered by direct sunlight - no batteries required



#### Design Robots Powered by the Sun

The solar powered robot can be transformed into 14 different robot modes which include a multitude of comical and functional movements. The user can easily change from a wagging-tail, running beetle, walking crab, surfer, speedster or to a 'zombie chaser'. The robot kit provides unique accessories (included) and parts that make the robot move on land and water.

With alternative energy playing such a pivotal role, there is no better time than now to start children on the path to learning basic concepts behind robotics and renewable energy resources. Fortunately, this product is powered by the sun, so there are no batteries required. The robot moves in the direct sunlight and allows children to create and use their infinite imagination.

There are two levels in building the robot kit. Level one includes: Turtlebot, Beetle-bot, Quadru-bot, Boat-bot, Walker-bot, Dog-bot, and Wheelbot. After they amuse themselves with the entry level, can challenge their manipulative skills with second level: Roly Poly-bot, Auto-bot, Slither-bot, Surf-bot, Zombie-bot, Crab-bot, and Row-bot.

Additional features includes: adjustable polarity on the solar panel to change direction of motor rotation, retractable robot head which can be quickly stored in the upper body, the robot head can be installed in the front, top or rear of the gearbox, and a transparent housing to see the movements of the gears.

For ages 10+.

More Information		
Age Range	10 And Up	
Price Range	\$25-\$50	

# STEM V8 Model Engine Kit



(Hover over image to zoom in)



Available for

giftwrap!

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

- 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

Add to Cart + Giftwrap

- Approximately 7" x 6.5 "x 9" once assembled
- Requires 3 AA batteries (not included)
- Demonstration operates for approximately 30 seconds

**1** Description ☐ Videos ☆ Reviews

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

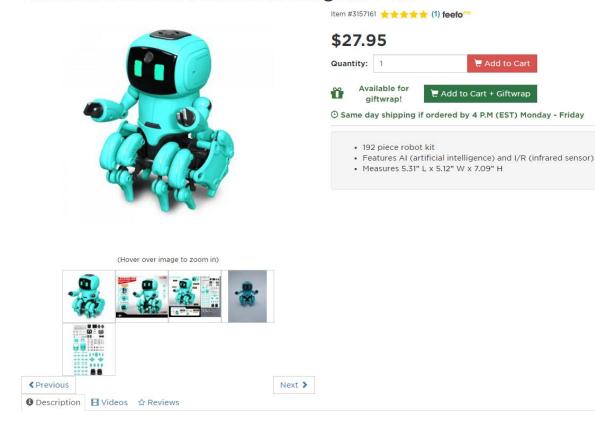
Learn everything you need to know about the heart of a vehicle and how it provides the power for a car to run. Building this 270-piece plastic model of a combustion engine will allow you to see the inner workings of an engine.Turning your STEMNEX engine on, you will see and hear how a real

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 Infor	mation
Price Range	\$50 - \$75
Age Range	Teens
Age Range	Adults

#### KikoRobot.962 Artificial Intelligence Kit



### Bigger, Faster, Stronger Version of our Best-Seller

Equipped with the same I/R (infrared) and AI (artificial intelligence) tech that makes the original a fan favorite, the NEW Kiko features an improved gearbox and an eight-leg design, allowing the robot to reach much higher speeds. Your new companion will pursue your every move or complete handmade obstacles with ease.

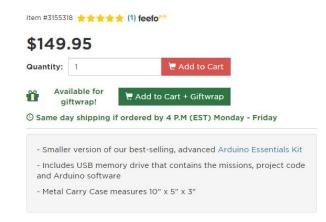
This 192-piece STEM kit is slightly larger too measuring in at 5.31" L x 5.12" W x 7.09" H. Requires 4 AAA batteries (not included). For ages 8+.

More Information		
Age Range	8 And Up	
Price Range	\$25-\$50	

Add to Cart

#### DuinoKit Jr.





#### Arduino-based Learning Kit for Home or Classroom

Enjoy learning the basics with Duino Kit Jr. Arduino based electronics and programming through a series of mission-based learning cards. Easy plug and play connectors eliminate the need for soldering and are easily reconnected into countless projects. Comes inside a study metal carry case.

Next >

Features include: digital temperature & humidity sensor, RGD LED, push button switches, real time clock, LEDs, buzzer, CDS photo cell, potentiometer, rotary encoder, LCD back-lit display, infrared transmitter & decoder, Arduino-compatible NANO microprocessor, jumper wires, USB cable to connect to computer, and USB memory drive that contains the missions, project code and Arduino software. Metal case measures 10" x 5" x 3".

Requires download of Arduino software.

Missions include: displaying text on an LCD, real time clock, weather station, scrolling, blinking & color changing LEDs and more.

\*Please note - the Spring/Summer 2021 catalog mentions inclusion of printed Mission Cards - the Mission Cards are now located on the USB memory drive that contains the project code and Arduino software

A larger, more ADVANCED model is also available:

Arduino Essential Learning Kit (item# 3155100)

#### Highly Recommended:

Make sure you have all of the tools you need to complete your project with the **Electronics Tool Pack (#315723)**. Included are a soldering iron, diagonal cutter pliers and everything else you'll need for this project.

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

#### Learners Deluxe Microscope Kit

Item #3157411

#### \$74.95

Quantity: 1

Available for giftwrap!

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

- Microscope for examining 3D specimens and slides
  Kit includes microscope with 40 accessories
  24 prepared slides featuring 72 specimens
- · Bug loupe for examining live critters and bugs







Next >

#### Complete Entry Level Microscope Kit

An essential tool every child needs in their first steps into scientific discovery, this high-quality microscope is designed for viewing both solid objects and slides. Features 10X eyepiece, 4X, 10X and 40X objectives, a dual focus knob, top and bottom LED lights, a 40-piece science accessory kit including 8 blank slides, specimen slicer, plastic forceps and much more with an experiment guide. Requires 3 AA batteries (not included).

PLUS we're including 24 shatterproof plastic slides prepared with 72 unique specimens featuring plants, insects, food, household products, etc.

AND a 5x bug loupe with a 4" diameter designed for viewing living creepy crawly specimens (you supply those!). For ages 8+.

#### 72 Unique Specimens Prepared for Examination

These high-quality, shatterproof plastic slides are prepared with unique specimens designed for introductory microscope use. Containing 72 unique specimens (prepared on 24 slides- 3 specimens per slide) this eclectic set is color coded by category which includes plants, insects, food, human and animal blood cells, construction materials, household products,

At the beginner to intermediate biology level, these slides are ideal for children 8 and up, and are perfect for classes, home schooling, or just for fun!

Specimens include:

Algae: Hydodictyon, Cladophora, Red Alae (Agar), Spirogyra

Blood: Bird blood, Cat blood, Chicken blood, Cow blood, Frog blood, Human blood, Pig blood, Rabbit blood, Sheep blood

Building materials: Brick, Concrete, Plaster, Rust, Sand, Sawdust

Condiments: Salt crystals, Sugar crystals, Ground pepper

Feathers and Hair: Cat hair, Chicken feathers, Duck feathers, Human hair, straight/curly, Pigeon feathers, Sheep hair

Fibers: Cotton fiber, Dyed cotton, Nylon, Silk

Insect antennae: Butterfly antennae, Honeybee antennae, Locust antennae

Insect feet: Backswimmer foot, Cockroach foot, Locust foot Insect larvae: Mosquito pupa, Mosquito larva, Silkworm larva

Insect wings: Butterfly wing, Fly wing, Honeybee wing, Mosquito wing Leaves: Broadbean leaf, Corn leaf, Corn silk, Leaf vein, Maple leaf, Onion

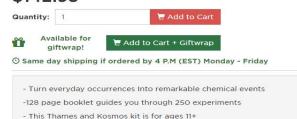
More Information		
Price Range	\$50 - \$75	
Age Range	8 And Up	

#### CHEM C2000 Chemistry Experiment Kit



Item #3152700

#### \$142.95





#### **Exceptional Intermediate Chemistry Set**

Discover how fascinating the world is when you understand the remarkable reactions behind ordinary occurrences. CHEM C2000 includes everything in CHEM C1000 and more — with twice the tools and materials, and more than three times the experiments. Most notably, this kit introduces you to the alcohol burner for experiments that require heat, greatly expanding the number of experiments you can conduct.

CHEM C2000 by Thames & Kosmos	Watch later	Share
		-N
Watch on ▶ YouTube		

Experiment with filtering and separating mixtures, combustion, and electrochemical reactions. Learn how to work with indicators and stronger acids and bases. Explore elements and compounds, including the chemical and physical properties of water, carbon dioxide, oxygen, hydrogen, and carbon. Discover atoms and molecules. Inspect soaps and household cleaners

Experiment with various foods from the kitchen to learn about sugars, fats, and proteins. Investigate metals such as iron, copper, and aluminum. Learn about how chemistry is used in environmental protection and industry.

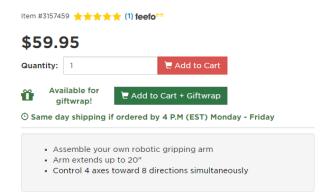
After completing CHEM C2000, you will have experienced firsthand the most important topics in chemistry, creating an excellent foundation for later study of chemical equations and atomic structure.

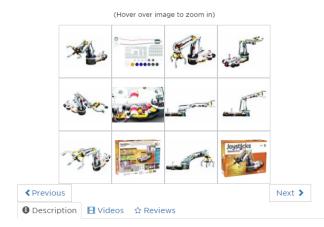
The 128-page, full-color manual guides aspiring young chemists through 250 experiments. The manual provides clear instructions for preparing and performing the experiments and explains the results. Thorough safety precautions and instructions ensure safe experimentation. Professional quality equipment helps you make the most of your chemistry experiments.

More Information		
Age Range	10 And Up	
Price Range	Over \$100	

#### Joysticks Robotic Arm Kit







#### Robotic Claw Gripper Lifts Up Over 1 Pound

Grip it, grab it, lift it...control this innovative robotic arm by manipulating two joysticks simultaneously - just like in the popular arcade game! With the interchangeable 2-claw and 4-claws gripper, you'll experiment lifting objects of different shapes and sizes weighing up to 17.6 oz. You'll clearly see how the inner parts work in tandem, such as connecting rods to pilot the planetary gear system or gear movement to activate the transmission.

Once assembled, arm kit measures: 10.3" x 20.2" x 6.5". Requires 2 D batteries (not included). For ages 10+.

More Information		
Price Range	\$50 - \$75	
Age Range	10 And Up	

# Electronic Playground 50-in-1 Experiments



\$34.95

Quantity: 1 Add to Cart

Available for giftwrap!

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

- 50 fun electronic experiments in one exciting playground
- · Learn about voltage, currents, resistors, capacitors and more
- Create a finger touch lamp, metal detector, radio announcer and more

● Description ☆ Reviews

#### A Fun-Filled, 50-Experiment Introduction to Electronics

This fun-packed playground creates the perfect introduction to electronics as it creates a masterful balance between fun and education. Perfect for enhancing school curriculum, your child will learn by doing like never before.

This ultimate learning machine allows your child to complete 50 different fun projects, teaching them all about voltage, currents, resistors, capacitors and more. Your child will also become familiar with the spring hook-up method as they progress through each experiment.

Projects include completing a finger touch lamp, metal detector, transistor radio and an alarm. An illustrated 76-page manual will provide a clear walk-through of each experiment.

Requires 1 9V battery (not included). For ages 10+.

More Information	
Age Range	10 And Up
Price Range	\$25-\$50

#### Complete Labware Kit in a Wood Case



\$114.95

Quantity: 1 Add to Cart

Available for giftwrap! Add to Cart + Giftwrap

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

• A 16 piece collection of quality labware (plus a pair of safety goggles) for the serious chemistry student

• All labware is re-useable and easy to clean

• Stored safely in a foam lined wooden box with handle



#### Real Labware for Future Chemists

This collection of quality labware is the perfect kit for the serious chemistry student. Includes 4 test tubes with rack, glass beaker, Erlenmeyer flask, measuring cylinder, funnel, alcohol burner with stand, tweezers, thermometer, scoopula, glass stirring rod and a pair of wraparound style, anti fog safety goggles with adjustable strap. All components are packed inside a fitted foam insert then secured safely within the wood storage box with handle. This labware is reusable, easy-to-clean and stores efficiently for years of experimentation.

An in-depth Activity Guide provides step-by-step instructions for experimenting with chemical reactions, heat transfers, molecular bonds and much more. You simply supply every day house-hold items such as sugar, water, food coloring, etc.

For ages 8+ with adult supervision.

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

# Hydraulic Arm Kit



Item #3155436 ★★★☆☆ (2) feefo\*\*

\$59.95

Available for giftwrap!

Add to Cart + Giftwrap

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

- . Challenging 229-piece DIY kit.
- · No battery or motor required. It is powered by water.
- Once assembled, kit measures 12.7" x 9.5" x 16.3"





#### 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+

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

#### RE/CO Robot Kit (Wireless)



Available for giftwrap!

Add to Cart + Giftwrap

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

106 piece robot kit features Al (artificial intelligence) and I/R (infrared sensor)
Features a wireless remote control
Dimensions: 6.30" L x 6.89" W x 3.74" H.

Item #3157162



# Program & Patrol with Artificial Intelligence

Featuring wireless remote control, the RE/CO is an artificial intelligence robot kit ready for off-road adventures. Upgrades over the KIKO robot kit include tank-like tracks and new play modes like storytelling, singing, dancing, and wireless programming.

With 106 pieces including infrared sensor. Dimensions: 6.30" L x 6.89" W x 3.74" H. Requires 6 AAA batteries (not included). For ages 8+.

More Information		
Age Range	8 And Up	
Price Range	\$25-\$50	

#### RC Lamborghini Sian Building Kit



Item #3157647

	\$	6	4		9	5
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Quantity: 1 E Add to Cart

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

- Build an officially licensed Lamborghini from scratch
- Made to 1:18 scale of a real Lamborghini Sian
- · Race this sportscar around with the easy-to-control remote



#### Build and Own the Hypercar of Your Dreams

Build and drive your own luxury Lambo. This extremely realistic Lamborghini replica, built to a scale of 1:18, will give you the taste of luxury you've always wanted.

Become the mechanic as you build this 92-piece dream sportscar yourself. Find a new challenge or a family activity as you assemble it piece by piece. Then become the driver as you race it around, controlling it with the easy-to-use remote control. Leave your friends in the dust as you take pride in your new luxury creation.

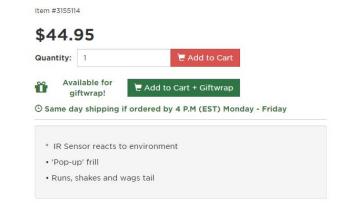
With careful attention to detail, this kit will leave your friends jealous. Just like the real thing, the scissor doors open upward. You can even open the trunk too.

Measures 11" x 5" x 2.5". Requires 5 AA batteries. For ages 8+.

More Information		
Price Range	\$50 - \$75	
Age Range	8 And Up	

#### Kingii Dragon Robot Kit







#### Build a Robot Reptile with Artificial Intelligence

With the *Kingii Dragon Robot Kit* you assemble a smart super lizard with artificial intelligence (AI). Similar to the actual Australian lizard, when this robot feels threatened, it gapes its mouth, flashes its eyes, and dramatically spreads and flaps its frill in a threatening manner.



Activate the infrared sensor in "escape" mode and the robot will automatically act surprised, spreading its frill, dropping its jaw, illuminating its bicolor LED eyes and will scurry away until it escapes to a safe distance. Switch it to "follow-me" mode and the robot will assess danger by bluffing the attacker (unfurling and shaking its frill). When the robot does not sense danger, it might approach you just like a pet lizard.

Assembled measurements: 13.6" x 8.23" x 5". Requires diagonal cutter, Phillips screwdriver, hammer, and knife (all not included).

No soldering required. Includes 70+ parts. Requires 4 AAA batteries (not included). For ages 10+.

More Information		
Age Range	10 And Up	
Price Range	\$25-\$50	

#### Robotic Arm Edge: Wired Control Robotic Arm Kit

Item #3151656 \$39.95

Quantity: 1

Available for

giftwrap!

of 180°

No soldering required



(Same day shipping if ordered by 4 P.M (EST) Monday - Friday Command the Robotic Arm Edge for multiple movements and functions • Robotic arm gripper opens and closes • Movement included radial wrist motion of 120°, an extensive elbow range of motion 300°, base rotation of 270°, base motion

(Hover over image to zoom in)

#### Twist, Lift, and Pivot Via 5 Switch-Wired Controller

With Robotic Arm Edge, command the gripper to open and close as well as several other motions.



Each command and visual manipulation is supplied via five switch-wired controller, five motors, and five joints.

Some of the added features include a search light design on the gripper, and a safety gear audible indicator included on all five gear boxes to prevent any potential injury or gear breakage during operation.

The robotic arm is 9" x 6 1/4" x 15" in size and requires four D batteries that are not included.

#### Specifications:

- · Wrist motion of 120 degrees
- · An extensive elbow range of 300 degrees
- · Base rotation of 270 degrees
- Base motion of 180 degrees
- · Vertical reach of 15 inches
- · Horizontal reach of 12.6 inches
- · Lifting capacity of 100g.

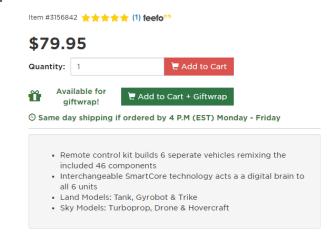
More Information	
Price Range	\$50 - \$75
Age Range	10 And Up

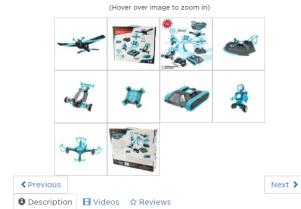
Add to Cart

Add to Cart + Giftwrap

#### SmartCore 6 Modular RC Kit







#### Take Control of the Land and Sky

Featuring 6 separate models: three land vehicles(Tank,Gyrobot,Trike) and three sky vehicles (Turboprop,Drone,Hovercraft). Young innovators will learn principles associated with physics,aerodynamics and electronics when they construct and remix the 46 included components. The individual vehicles automatically pair with the remote control using Smartcore technology making operation impeccable. Includes a built in quick changing LiPo battery and USB cable. For ages 8+.

With gyros and sensors built in, the SmartCore will help stabilize the propellers on the TurboProp, Drone and Hovercraft to keep these airborne models in flight. With land vehicles, the SmartCore keeps Gyrobot vertical with active balancing technology, allows Trike to cruise at high speeds, and turns Tank into a roving explorer.

More Information			
Price Range	\$50 - \$75		
Age Range	8 And Up		

#### Mech-5 Mechanical Coding Robot Kit







#### A Mechanical Coding Wheel is the Heart of this Robot

This unique kit combines mechanical engineering principles with coding basics. No smart device or computer is required. Mech-5 steers its coded courses and programmed tasks by a mechanical coding wheel. Snapping the coding buttons onto the coding wheel directs the robot to perform its basic functions – move forward, backward, right or left, spin or pause. More challenging tasks like throwing, lifting, kicking or drawing, become possible as the user's coding skills increase. Build & rebuild 5 different models. Over 115 parts. Approx. 8.5" tall. Requires 2 AAA batteries (not included). For ages 10+.

This mission-based, entry level STEM coding robot is designed to inspire users to learn about mechanical engineering principles and coding basics. It encourages children to think while also developing their problem-solving and troubleshooting skills when faced with different tasks and difficulties. Engage in the coding world and beyond by challenging yourself with your very first coding robot.

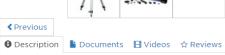
More Information		
Age Range	10 And Up	
Price Range	\$25-\$50	

# TK1 Telescope & Astronomy Kit





Next >



# Same day shipping if ordered by 4 P.M (EST) Monday - Friday Ouality entry level telescope kit with accessories Easy to understand 32-page instructional astronomy booklet For both celestial and terrestrial views Features sturdy aluminum tripod Included Barlow Lens doubles eyepiece magnification power Watch the video below!

#### Inspire Kids to Reach for the Stars

This entry-level, high quality telescope kit includes a comprehensive, easy-to-follow, 32-page astronomy book. The 60mm aperture refractor scope (with coated glass optics) and all its accessories are clearly explained so that even beginners can quickly find the moon, constellations, various nebula and galaxies or planets in the night sky. Features quality optics, durable construction, and a sturdy aluminum tripod. Terrestrial observations on Earth are also possible by using the included 1.5x erecting lens.

Given the right time of year and sky conditions you will be able to view Mercury, Venus, Mars, Jupiter (including its stripes), Saturn, the moons of both Jupiter and Saturn, Uranus, and many craters on the Moon. You can also see various nebula and galaxies including the Hercules nebula, Eagle nebula, Andromeda galaxy, and a seemingly infinite number of stars. For ages 12+.

Check out the complete instructional guidebook in the DOCUMENTS tab

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

#### Nibble Build & Code Your Own Game Console



Item #3157401

\$99.95

Quantity: 1 Available for Add to Cart + Giftwrap giftwrap!

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

- · DIY hand-held video game system
- Includes 4 pre-loaded games, all tools & components
- Soldering required but USB soldering iron is included
- You provide the PC to program your own game apps
- · Open source software
- Code with Arduino, CircuitBlocks or Python

(Hover over image to zoom in)



#### **Build & Code Your Own Game Console**

Preloaded with four retro games inspired by video game classics, this DIY kit has everything you need to build your own video game console in about 2 hours time! Educate yourself about electronics and programming in a fun and interesting way to create games and apps of your own design. No prior knowledge is needed. Tools and batteries are included, too. Just requires use of your own PC to code in Arduino, CircuitBlocks, or Python. The software is open source with all the necessary components and drivers installed.

Includes main circuit, acrylic casing, USB soldering iron with stand, solder wire, screwdriver, full color LCD display, microUSB cable for programming, AAA batteries and misl. components. Online tutorial walks you through the assembly including how to solder. For ages 9+.

#### Tech Specs:

- · Processor: 32-bit, 160MHz
- Storage: 4MB RAM: 80KB
- Display: 1.4" 128×128 Full color TFT Connectivity: WiFi
- Build time: 2 hours
  Programming: C++ (Arduino), CircuitBlocks, Python

#### Pre-Loaded Games:

- Bonk an homage to Pong one of the first commercially-successful
- Invaderz a classic space shooter
- Snake probably the most recognizable game from the early mobile
- SpaceRocks shoot asteroids and earn points

#### Geek Speak:

Nibble is based on ESP8266 - a microcontroller used on various Arduino development boards. Therefore, it can be programmed in Arduino IDE (based on C/C++) – the most popular programming environment for makers.

You can code games for your Nibble in CircuitBlocks code editor similar to Scratch or Code.org that makes it easy for beginners to get into embedded

CircuitBlocks is open source software that automatically makes sure all the necessary components and drivers are installed. There's no need for drivers, libraries, toolchain setups, etc.

More Information		
Price Range	\$75 - \$100	
Age Range	10 And Up	

#### Chatter - Build and Code Your Own Encrypted Wireless Communicator







#### **Build Your Own Security-First Texting Devices**

Become an engineer and learn about coding, encrypted messages and private texting as you build 2 working communicators! Think walkie talks, but more practical - no one talks on the phone anymore.

Chatter is designed to show people that you can communicate free and remotely without the internet. It uses the so-called "LoRa" low-power wide-area network technology in order to send text messages, emojis, memes and GIFs.

The communicators use a publicly-available set of frequencies that are allocated for use cases like this one. With these frequencies, you'll be able to send messages to the other communicator from 1 to 7 km away (depending on your surroundings). That's over 76 football fields!

Build both and give one to your best friend, because texting yourself isn't fun. Then you'll be able to exchange texts, emojis, memes and even GIFs. Chatter also includes several other functions fun functions, including a friends list, chat color customization, profile avatars and notifications. Plus, the friend pairing allows you to connect with more than one other Chatter device.

For ages 14+.

More Information		
Price Range	\$100 - \$300	
Age Range	Teens	
Age Range	Adults	
Price Range	Over \$100	

#### Arduino Essentials Learning Kit



Item #3155100



Quantity: 1 Available for Add to Cart + Giftwrap giftwrap!

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

- 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"





● Description Documents ☆ Reviews

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

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 stepby-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 Decoder

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

#### Raspberry Pi3 Learning Kit



Item #3156286 \$359.95 Quantity: 1 Available for Add to Cart + Giftwrap

giftwrap!

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

- 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







Next >

#### Learn and Develop an Understanding of Electronics

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
- 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
- · L9110 motor driver
- Stepper Motor Driver Module(ULN2003A)
- DC Motor
- · 4\*4 Matrix Keyboard
- · Breadboad Power Supply Module
- · Light Sensor(Photoresistor)
- · Analog Temperature Sensor(Thermistor)
- Relav
- 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)

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

#### **Electronics Tool Pack**



\$57.95

Quantity: 1 Available for giftwrap!

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

Everything you need to do electronics on the go
USB Soldering Iron heats up in 15 seconds!
Includes Power Brick for remote work



#### 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 Information		
Price Range	\$50 - \$75	
Age Range	Teens	
Age Range	Adults	

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

#### Micro:Bot



Item #3157095

#### 

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.

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

#### DIY Mobile 4G Phone Kit



(Hover over image to zoom in)



✓ Previous

**⊕** Description ☆ Reviews

Next >

#### **Build an Educational DIY Mobile Phone**

With this DIY kit, you'll create an open source, fully-functional mobile phone compatible with all mobile networks up to 4G. You'll learn how a basic mobile phone works, the basics behind digital electronics and how to program a microcontroller. After that, you'll spend numerous hours creating your own games and apps and experimenting with hardware. Based on our experience, an 11-year-old kid should be able to assemble this device with a tiny bit of help from an adult. Estimated build time: 5 hours.

The kit includes the circuit board, casing, full color LCD, GSM module, sound module, amplifier, 128MB SD card preloaded with games and apps and all needed components. Recharges via included USB cable.

You must supply regular soldering iron and some solder, diagonal cutter pliers, regular screwdriver and a piece of insulating tape or some superglue.

For programming, this device uses the same chip used on Arduino UNO board – the most popular programming environment for makers (<u>Arduino IDE</u> based on C/C++). It's coded with sets of commands that let you easily develop in-app menus, play and develop sound FX and background music, draw, display and animate bitmaps, make calls, read files from SD card, flash LEDs and much more!

Item #3157060

#### \$199.95

This product is temporarily out of stock.

Notify me when this item becomes available again.

\*CHECK OUT Chatter - Build and Code Your Own Encrypted Wireless Communicators (Set of 2) Item #3157719

- · Create an open source, fully-functional mobile phone
- Requires soldering and precision screwdrivers
- · On-line tutorial
- Text, play games, create apps and much more!

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

#### Garage Physics Ballista Kit



(Hover over image to zoom in)



Description 
 ☆ Reviews

Item #3156524

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Quantity: Add to Carl Available for giftwrap!

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

- Medieval ballista launches ping pong balls more than 30 ft at 4 different angles
- Learn about torsion springs, forces, acceleration, and parabolic trajectories
- Pre-cut 17-piece plywood kit (may require sanding)
- Once assembled measures 18" x 14" x 10"



Next >

#### The Perfectionist's Medieval Weapon of Choice

Bull's Eye! This uniquely designed take on the medieval ballista enables you to accurately alter your trajectories to achieve precision target strikes. Our siege machine uses torsion spring bundle and lever arm (but no counterweight) to achieve amazing (and repeatable) results.

Pre-cut 17-piece plywood kit may require sanding. Once assembled measures 18" x 14" x 10". For ages 14+.

This kit is built from simple components- wood, leather and string- but has amazing results. Once built, ping pong balls can be launched more than 30 feet at 4 different launch angles. Topics explored in the educational instructions include torsion springs, forces, acceleration, and parabolic trajectories.

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

# **Home Science**



#### Complete Introduction to Chemistry (Grades 6-8)

#### \$119.95

Give students a solid chemistry foundation with the handson experiments in this complete lab kit! This set has 40+ real science tools and chemicals, 27 engaging experiments, a 46page manual & safety equipment.



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

#### **Product Description**



#### SKU: KT-CHEMINT

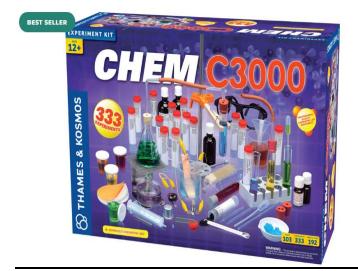
Give kids an excellent intro to chemistry with this hands-on kit! This complete introduction to chemistry kit is full of real lab equipment and step-by-step instructions for 27 chemistry experiments students can do anywhere - no matter their science background!

We've heard that the best way to learn science is through hands-on experimentation; this complete introduction to chemistry kit was created specifically to make it easy for kids to do exactly that. It's hands-on science projects and high-quality materials work together to create a Complete Introduction to Chemistry for ages 11-13. No need to try to round up a bunch of costly items or spend hours preparing lessons! Aside from common household items, this kit includes everything you'll need: real chemicals, protective safety equipment, beakers & flasks, other lab equipment and glassware, and instructions & explanations for 27 essential science experiments.

Middle school and high school students can use this kit to explore states of matter, physical properties (like density), acids & bases, polymerization, precipitation, physical & chemical reactions, electrochemistry, solubility, chromatography, endothermic & exothermic reactions and more.

#### Why get the Complete Introduction to Chemistry Kit?

- · You'll be able to learn important chemistry topics through hands-on experiments, making concepts exciting and memorable.
- · All the laboratory equipment is high quality and designed to last. Durable glass beakers, real test tubes, etc.
- · It comes with protective gear to keep your child safe from possible splashes and spills.
- · Its experiment manual has easy-to-follow instructions designed to make science experiments more accessible for



# Thames & Kosmos Chem C3000

\$279.95 \$254.90

Perform more than 300 experiments with this deluxe, handson chemistry set! The Chem C3000 from Thames & Kosmos includes a 192-page full-color manual and is an excellent introduction course in chemistry for kids ages 12+.

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

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-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:

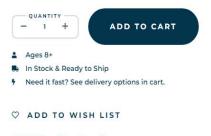
- · conduct water electrolysis
- · make potassium permanganate lose its color
- · test for starches, create precipitates
- do flame color tests
- make chromatograms of leaves and chemicals
- generate electricity from a test tube
- set off time-delay and redox reactions
- break down sawdust into glucose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



#### Insect Collector's Backpack Kit

#### \$104.95

From tiny ladybugs to big, beautiful butterflies, the world of insects is full of wonders. Get the insect collection supplies you (or your kids) need with this handy backpack set; it's the ultimate bug collection kit!



**Product Description** 

SKU: KT-YINSECT

#### The ultimate bug catcher set for your bug collector!

Using this complete bug collection kit, your amateur entomologist can go on their very own backyard safaris! Using the tools and supplies inside, they will:

- · capture bugs and critters with a high-quality net,
- · observe them up close with a magnifying glass,
- · identify them using the hundreds of photos in the Golden Guides from St. Martin's Press,
- · and mount them in a glass-fronted display case!

#### Little hands will love transforming their crawling collectibles into their own DIY bug displays!

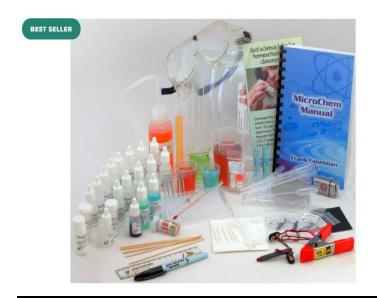
As they work on their collections, your curious bug catchers will use this science kit to make their own discoveries about the fascinating variety of insects and their different lifecycles and behaviors. Please note that backpack colors may vary.

A great gift for any insect enthusiast, this outdoor explorer kit and bug catching kit is sure to entertain your kiddos for hours on end. Let the backyard explorations begin!

Expand the 'Contents' tab below for a complete list of included items, and scroll even lower to see customer reviews; there's a reason this bug collection kit has 5-stars!



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





#### **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,



#### Basic Chemistry Equipment Set

#### \$59.9

Want a real chemistry set for your kids? Look no further! This beginners chemistry set comes with all the basic lab equipment needed for chemistry experiments & projects. Get high-quality beakers, test tubes & much more!



O ADD TO WISH LIST

SHARE () y ()

#### **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



# **Electricity Science Kit**

#### \$24.95

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



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

#### O ADD TO WISH LIST

# **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-KITOI) 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.

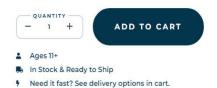
A study guide teaches you how electricity works with six experiments that gets you started with the important concepts related to each component, but we believe the best way to learn about electricity and how it is proportional to electric potential energy is through hands-on trial and error. That's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



# Microscopic Discovery Kit

#### \$289.95

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.



O ADD TO WISH LIST

### **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



# 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!



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

# **Product Description**



#### 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!

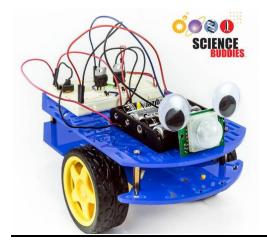
- Orange Juice vs. Sports Drink: Does Gatorade have more electrolytes than orange juice?
- How many electrolytes are in coconut water, the latest sports drink fad?

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.



#### BlueBot 4-in-1 Robotics Kit

#### \$99.9

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: 7/31/2022

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.

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# **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.

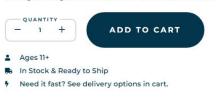
Instructions for this kit are available online; see below for links to the instructions and more.



#### 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!



O ADD TO WISH LIST

SHARE O Y O

### **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





# **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





SHARE ()

# **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!





QUANTITY +

ADD TO CART

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

### **Product Description**



#### SKU: KT-BIOLINT

From vast mountain forests to the tiniest cells in a petri dish, the study of biology is wonderful and amazing!

Explore the amazing world of biology with the **Complete Introduction to Biology kit from Home Science Tools**. This kit will take you on a journey through biology - the study of life - where you'll learn about microorganisms, cells, DNA, genetics, animals, plants, and more.

The kit includes 15 unique hands-on experiments, 35+ science supplies and a 58 page full-color manual. The primary topics covered in this kit include:

- Cell Biology/Structure & Function
- DNA & Genetics
- · Diversity in Nature
- Anatomy
- Photosynthesis

Your student will experience biology topics including:

- · Growing bacteria, mold, yeast and protists
- Practicing microbial culturing and microscopy techniques (microscope not included)
- · Dissecting and examining a sheep heart to understand how the heart regulates blood flow
- · Diving into genetics of blood types, disease and DNA





**Product Description** 

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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 &



# 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





O ADD TO WISH LIST

**Product Description** 

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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.

The ultrasonic sensor works on the same principle as sonar. It sends out sound waves, which bounce off objects. The



# Complete Introduction to Physics (Grades 6-8)

#### \$104.95

How do people move massive grand pianos into high-rise apartments? Find the surprising answer in this physics experiment kit!



ADD TO CART

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

# **Product Description**



#### SKU: KT-PHYSICS

How do people move massive grand pianos into high-rise apartments? Find the surprising answer to this and more with these physics experiments for kids in this science kit! Physics principles come alive with the hands-on demonstrations in this introductory science lab kit. Why settle for reading about Newton's laws of motion when you can prove them in real life?

Transform your coffee table into a physics lab with this complete experiment kit for kids and adults. You'll get everything you need for 17 unforgettable physical science experiments in one box.

With robust equipment and explanations, this is no toy. The Physics Experiment Lab Kit suits middle or high school students, or even adults. This indispensable kit is the only physics set you need!

The physics experiments for kids in this kit will put these concepts in action:

- Gravity
- Velocity
- Work
- Force & motion
- Pendulums
- Levers
- Balance
- · Inclined planes



# **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.



# TAKE AMAZING CLOSE-UP PICTURES WITH YOUR MICROSCOPE!

Get a great deal on a **2.0 Megapixel Digital Camera** from Home Science Tools. You'll be able to take highclarity images of everything you see under your scope. Plus, it's easy to use! **See detailed description >>** 



# 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** 

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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.

PLEASE NOTE THE FOLLOWING MESSAGE FROM THE APPRENTICE TEAM: Dear client, due to COVID19 regulations



# Crime Scene Science Classroom Kit

#### \$149.95

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.

SHIPPING RESTRICTIONS

**Product Description** 

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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)
  - · fiber analysis using a flame test



# Deluxe Chemistry Glassware & Labware Set

#### \$284.95

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!



- 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 highquality chemistry glassware set is a long-term investment that will truly last, 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



# 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!

QUANTITY + 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.



# 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!



- ♣ 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.

The heart of the course is an online eLearning course that takes you step-by-step through the content. You learn by reading, watching videos, and actually practicing the knots and suture techniques using a triple-layer "imitation"



### 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.



- ♣ 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



# 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!



- . Ages 10+
- In Stock & Ready to Ship
- 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
- · 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.

Check out these step-by-step video guides for:

Chapter 3 - Experiments 7 & 8



★★★★☆ 6 REVIEWS

# 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.



- 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.

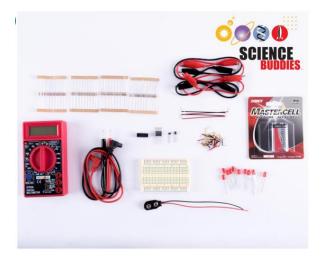
Bacteria are weird. On the one hand, you want to take precautions with food prep to make sure their growth is inhibited. Like in the Minimizing Bacteria in the Thawing and Cooking of Meat project. On the other hand, some foods rely on live culture bacteria—and the more the merrier! Like in the Is That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



# 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



O ADD TO WISH LIST

# **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.

Instructions are NOT included with the kit, but are available online from Science Buddies.



# **Product Description**

# BlueBot 4-in-1 Robotics Classroom Kit

#### \$449.95

While many robotic kits are quite advanced, this home & classroom robotics kit is the perfect intro to robotics - no experience needed. Build robots, explore different sensors & more! Contains enough supplies for 20 students.

#### Out of Stock, Expected to Ship: 8/12/2022

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.



SKU: SB-CLBLUEB

# Build your own robots from scratch and ignite student interest in STEM learning with this home and classroom robotics kit!

Designed to provide students with an authentic, real-world introduction to robotics and computer science, this classroom robotics kit explores problem-solving and the fundamentals of: building circuits, powering motors, and learning how robots capture and respond to information about their surroundings. Ideal for middle school students in grades 6-8, but may be an excellent tool for late elementary or early high school students as well.

This classroom set includes 5 robot kits with enough supplies for 20 students, following our recommended group size of 4. Special teacher pricing – save 10% off the cost of 5 individual kits.

The accompanying lesson plan makes it easy to begin teaching robotics in the classroom - no previous robotics experience is needed.

The lesson plan/robotics curriculum is aligned to NGSS and key state standards; it guides you step-by-step through the robot assembly and exploration of the electromagnetic spectrum using the robot's sensor. Comprehensive teacher tools, including videos and slideshows, guide you through the lesson prep and class time. Additional lesson variations give you ideas on how to customize the lesson plan for your class.

Line-Following BlueBot Lesson Plan: Grades 6-8



# Thames & Kosmos Ultralight Airplanes

\$19.95 \$19.70

With the Thames & Kosmos Ultralight Airplanes kit, as young as 8 year old kids can build five experimental gliders while learning all about the physics of flight. Find more product details in the product description below!





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

#### Product Description



#### SKU: KT-AIRPLNE

This Geek and Co. Science kit by Thames & Kosmos is the ultimate glider airplane set for little the airplane enthusiast in your life! With it, they will learn about the physics of flight as they build five awesome flying glider collectibles - all different types of planes with different wing configurations!

# Discover how airplane wings provide lift and how planes can stay up in the air!

The DIY gliders are constructed of sturdy wood and ultralight plastic and bamboo parts that are fully adjustable for flight experimentation. The guide explains the different parts of an airplane, how the wings provide lift, and even encourages flight experimentation between the different gliders.

The Thames & Kosmos Ultralight Airplane kit includes more than 40 pieces, plus a full-color, 16-page manual. You provide a "test flying" area at least 10 meters long. Ages 8+. Product dimensions are  $8.75 \times 11 \times 2.5$ .

#### **Build 5 Different Glider Models**

- Straight Wing Glider
- Bent Wing Glider
- Sweepback Glider
- Biplane Glider
- · Dual Wing Glider

Not quite ready to add to your cart and checkout? Take a look at the customer reviews below for further insight and





# **Product Description**



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 science-literacy 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:

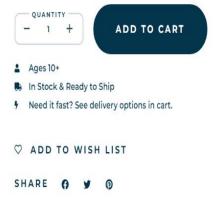
- Parallel & series circuits
- Light bulbs
- Resistors
- Motors
- Electromagnets
- Solar power



# Solar Power Study Kit

### \$28.95

Explore the power of the sun as you learn about alternative energy, photovoltaic cells, and electrical circuits.



# **Product Description**



# SKU: KT-SOLRPOW

Explore the power of the sun as you learn about alternative energy, photovoltaic cells, and electrical circuits. This solar energy kit for students includes instructions to do seven fun experiments, as well as an explanation of how solar power is harnessed. Sure to spark a greater scientific interest in the world we live in! A few basic household items are required for several experiments (such as a light bulb and tin foil).

### Science Fair Project Ideas:

- Use the motor and one of the photovoltaic cells in this kit to make a solar-powered car!
- Try using a box fan to spin the motor, turning it into a generator. Can you combine a solar cell with the generator to produce more power?



# Classic Chemistry Kit

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



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

### **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:

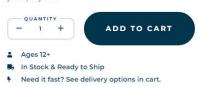
- · atoms and molecules
  - states and properties of matter
  - density
  - osmosis and diffusion
  - solvents and solutes
  - physical changes
  - chemical reactions
  - acids and bases
  - endothermic and exothermic reactions



# Renewable Energy Science Kit

#### \$364.95

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.



O ADD TO WISH LIST

### **Product Description**

 $\subset$ 

#### 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?

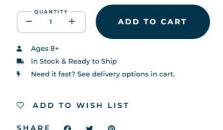
Turn this renewable energy kit into a full unit study with the included Renewable Energy Science Education CD-ROM to go with the kit. It contains a **129-page digital (PDF) textbook on renewable energy** by Dr. Colleen Spiegel. plus a



#### 4M Clean Water Science Kit

#### \$14.95

This Clean Water Science kit allows kids to explore ways of reusing water. They will filter dirty water to make it clean, experiment with distillation to make clean water, and use solar energy to purify water.



# **Product Description**

# $\Theta$

#### SKU: KT-CWATSCI

Finding new ways to reuse our natural resources is a challenging problem. This Clean Water Science kit allows kids to explore ways of reusing water. They will filter dirty water to make it clean, experiment with distillation to make clean water, and use solar energy to purify water.

The 12 pp. color manual provides instructions for performing the three experiments, ideas for additional experiments with the kit, asks thought provoking questions, and provides background information on water, filtration, distillation and pasteurization. You provide a few common household items, like soil, cooking oil, drinking glass, ice cubes, etc. Each experiment can be performed three times. Ages 8 and up. Adult supervision is required.

This kit was included in the University of Cambridge Science Festival.



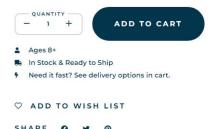
**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



### Snap Circuits 300 Kit

#### \$69.95

This deluxe Snap Circuits kit has over 60 snap-together components that kids can use to build more than 300 electronic devices, including a motion detector, tone generator, oscillator, radio, and more.



### **Product Description**



#### SKU: KT-SNAP300

Using the **60 snap-together piece**s inside this deluxe Snap Circuits 300 kit, kids can **construct more than 300 electronic devices**, such as:

- · a motion detector,
- · a tone generator,
- · a lie detector,
- · an oscillator,
- a radio,
- · and more!

This **Snap Circuits 300 set from Elenco Electronics Inc.** includes everything in **Snap Circuits 100**, plus amplifiers, resistors, capacitors, transistors, a slide switch, and much, much more. The **74-page instruction manual** shows how the components in this educational toy can be used to explore circuit boards and create a wide variety of different electronic projects. Within minutes of opening the box, your 8+-year-olds can begin exploring!

No tools or soldering are needed with this electrical circuits set! The **lego-like snap circuits parts easily snap-together** and onto the included plastic grid, making solid electrical connections.

This Elenco Snap Circuits kit is so engaging that your kids can experiment and learn on their own for hours at a time.

All you have to provide are four **AA batteries** and help for younger children.



### Advanced Chemistry Labware Set

#### \$179.95

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.
- O ADD TO WISH LIST

# **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.



# Hydrogen Fuel Cell Car Science Kit

#### \$119.95

Put together this hydrogen fuel cell car experiment kit to see for yourself how clean fuel cell power works.



ADD TO CART

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

O ADD TO WISH LIST

SHARE O

# **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

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
- Need it fast? See delivery options in cart.

### **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.





# Power of Magnets

#### \$44.99

Test magnetism with a variety of hands-on experiments and activities! Students will learn about what makes something magnetic, what magnetic fields look like, what magnetic force is, and how electricity & magnetism interact.



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

# **Product Description**



#### SKU: SU-PWRMAG

Power of Magnets: Investigations Into Magnetic Fields and Forces is an exciting part of the Science Unlocked Accelerate level curriculum kits. Feel the pull toward this physics kit and get hands-on with magnets to find out what they can do and how they do it. Test the magnetism of burned matches, find out how many paper clips a magnetized paper clip can pick up, visualize a magnetic field with iron filings, make a three-dimensional magnetic force pyramid, and build an electromagnetic motor. "Power of Magnets" comes with a full-color Student Curriculum Workbook and a in-depth Teacher Guide. It is a phenomenon-based approach, designed to fully engage students in the science of magnetism.

Through a series of experiments, students will learn what makes a magnet a magnet (including at the subatomic level), what magnetic fields are like, how magnetic force acts on objects, and how electricity and magnetism are closely connected. As part of a special program from Home Science Tools, this Accelerate level kit will provide over 10 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. Test the magnetism of matches before and after burning
- 2. Make a paper clip magnetic with a neodymium magnet
- 3. Use iron filings to see what a magnet field "looks" like
- 4. Build a pyramid device to observe magnetic forces acting on a central object
- 5. Make an electromagnetic motor with just a few basic components





# **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





#### Newton's Notions

#### \$59.99

Get hands-on with Newton's three laws of motion! Explore concepts like inertia, acceleration, & reaction forces. Engage in activities like making balloons into rockets, measuring friction, & building a simple hovercraft.



ADD TO CART

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

## **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

<del>\$249.95</del> **\$242.90** 

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!





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

## **Product Description**



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!

After you have mastered all of the robotic models in the Robotics Workshop instructions, you will have the tools and



## Thames & Kosmos Structural Engineering Bridges & Skyscrapers

\$49.95 \$44.90

Use this 323-piece Thames & Kosmos Bridges & Skyscrapers kit to learn the basics of structural engineering! Includes a 36-page, full-color, step-by-step manual that guides you through 20 model-building experiments.



- ♣ Ages 8-14
- In Stock & Ready to Ship
- Need it fast? See delivery options in cart.

**Product Description** 



SKU: KT-STRENG

# Do you ever wonder how bridges span huge distances and how skyscrapers stay standing?

Structural engineers use physics, along with their knowledge of the properties of building materials and geometric shapes, to design structures with sufficient strength and stability.

With this Thames & Kosmos Bridges & Skyscrapers kit, you can **learn the basics of structural engineering** by conducting a series of **20 model-building experiments**. Each model demonstrates a basic principle of mechanical physics or structural engineering in a hands-on way.

## With this 323-piece Bridges and Skyscrapers kit, you can:

- Start out with small models that demonstrate how structural elements can be attached together to maximize the strength of a structure for a fixed amount of material used
- · Learn about basic structural elements including columns, beams, trusses, plates, arches, shells, and catenary
- · Explore the forces acting on structural components including tension, compression, shear, and bending
- · Move onto building more complex models of trusses, roofs, and small buildings.
- Experiment with different types of bridge construction, such as a truss bridge, an arch bridge, a cantilever bridge, a
  rope bridge, and a suspension bridge
- Build models of towering skyscrapers what is the tallest tower you can build using only the pieces included in this kit?
- · Learn about the strength and stiffness of materials
- See how structural engineers optimize factors to maximize safety, minimize cost, and minimize the risk of structural failure

This Bridges and Skyscrapers kit includes a **36-page, full-color manual** that guides you through model building with **step-by-step illustrated instructions.** For ages 8-14.



## Thames & Kosmos Robotics, Smart Machines Tracks & Treads

\$134.95 \$134.90

The latest installment in Thames & Kosmos' award-winning Robotics: Smart Machines line. With this 197-piece kit, you can build robots, construct models of real-world smart machines & learn how to code programs yourself!

#### Out of Stock, Expected to Ship: 8/16/2022

Enter your email address to be notified when this item is



#### SKU: KT-ROBOTCK

The latest installment in Thames & Kosmos' award-winning Robotics: Smart Machines line, this version focuses on motorized machines that make use of continuous tracks, also known as tank treads, to move themselves and other objects around.

Models in this Tracks & Treads kit are controlled by programs and an ultrasound sensor. So, in addition to constructing the machines, you'll also learn how to use the included visual programming app on your tablet or smartphone to code the programs yourself!

Build a robot with two large continuous tracks that drives around and avoids obstacles in its path. The attentive tracker bot model detects your hand, moves toward it, and follows it around. Construct models of real-world smart machines, like a conveyor belt robot that carries small objects and an escalator model that carries objects up to another level. You can also assemble other fun robots, including a dozer bot with a bulldozer attachment on its front end, and a fire rescue robot that drives its ladder up close to other objects.

Once you understand how the technology works, you can build your own robots using the kit's 197 building pieces and create your own programs in the programming app, which is available on iOS and Android devices (tablet or smartphone required, not included). For ages 8 - 14.

Batteries Required: AA (3)

2019 Parents' Choice Silver Award 1



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



# 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
- Ice cubes
- Large plastic bowl
- Water
- Stove or hot plate
- Sauce pan or pot
- Lab notebook





## 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.
- O ADD TO WISH LIST

## **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.



#### 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: 7/31/2022

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

Fmail Address

 $\ \ \square$  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
- 2. 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.

A digital multimeter is also included in this microbial fuel cell kit, so you can make exact measurements to determine



## 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.

## **Product Description**



#### 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.

**Product Description** 



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



## Advanced Bristlebots Robotics Kit

#### \$59.95

Take the next step in building bristlebots! Build a lighttracking 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!



ADD TO CART

- . 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!

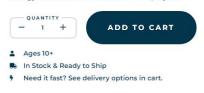
Additional items needed: Depending on the bristlebot being built, toothbrush heads, double-sided foam tape, scissors or wire cutters, and a flashlight are needed.



## 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** 

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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!

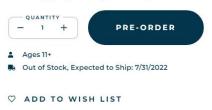
Just provide two AAA batteries and you'll be ready for loads of fun learning about and experimenting with electronic



## Solar Race Car Experiment Kit

#### \$21.95

This solar race car experiment kit provides an excellent, hands-on learning experience for students. Use this solar car kit to enhance your kids' STEM skills and studies (science, technology, engineering and math)!



## **Product Description**



#### SKU: KT-CARKIT4

Experiment with solar energy and electric cars as you design, build, and race your own mini race car!

This solar race car experiment kit provides an excellent learning experience for middle and high school students. It's engaging, hands-on, and even supports the development of vital STEM skills.

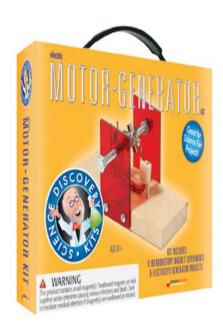
Inside, you'll find everything you need to develop and apply the principles of basic physics, mechanics, and solar energy, while also developing critical thinking and problem-solving skills.

## Using this solar car kit, students can:

- · Experiment with gear drive and pulley drive systems to find out which produces the fastest solar car;
- · Test different solar cell positions to determine which is most effective;
- Test and perfect their designs indoors or on cloudy days (since the solar car can also operate on battery power);
- Experiment with different voltage outputs with additional solar cells;
- And more!

This solar car kit includes both principles of design and construction tips, as well as great flexibility and freedom for students to create, build, and test their own model cars and designs. All you need to provide is two AA batteries (optional), sharp knife or scissors, glue, tape, and decorations if desired.

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



### SKU: EL-MOTRGEN

Explore the wonders of electricity by building and experimenting with a working electric motor and generator!

Generate electricity, run motors, produce light, and more. This complete kit includes all components and a 30-page illustrated guide book with project ideas.

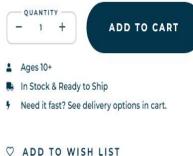
These questions might help you come up with a good science fair project: How does electricity flow through a circuit? How can you control the speed of your homemade motor? How much power does your homemade generator have?

See below for Science Buddies instructions and troubleshooting tips on using this kit below.

## Electric Motor Generator Kit

#### \$40.95

Explore the wonders of electricity by building and experimenting with a working electric motor and generator!.

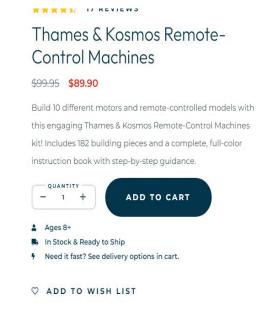


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SKU: KT-RCMACH

Build 10 of your own remote control creations with this engaging Thames & Kosmos Remote-Control Machines kit!

With this construction kit, you can construct a car, crane, bulldozer, antique car, a racer, robot, three-blade dozer, and many more construction vehicles and remote control models. Once built, control your vehicles with the included wireless remote control unit!

This kit is an excellent educational toy; it includes all the lego-like parts you'll need to build the 10 models, plus a **48-** page color instruction book with building instructions.

The three electric motors can be combined to make numerous configurations and complex vehicles of your own creation! Control the machines using a unique six-button infrared wireless remote control which can work for up to three motors simultaneously. The touch sensors allow you to easily navigate your machines around, moving them forward and backward. All of the machines run off three **AA batteries** (not included; battery holder is included).

Take a look at the customer reviews below for more insight and product details!



## Snap Circuits Extreme Educational 750 Kit w/ Case

#### \$194.95

This Snap Circuits Extreme Educational 750 Kit w/ Case provides more than 750 electronics experiments, including 73 computer interface 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-SNAP750

This Snap Circuits Extreme SC-750 Kit from Elenco Electronics Inc. includes a case for accessibility and safe-keeping and **provides more than 750 electronics experiments**. Among the 750 experiments are 73 computer interface projects that provide hours of educational fun!

The **76 components inside this Elenco Snap Circuits Extreme set** are mounted in plastic modules and easily snap together. They can be used to **create devices such as**:

- a solar cell,
- · a transformer,
- · an analog meter,
- · an LED display,
- · burglar alarms,
- a voice recording IC,
- an FM radio module,
- · AM radios,
- and more!

The **five project manuals (326 pages total)** inside this educational toy are filled with colorful pictures that show how the lego-like electronics snap circuits parts can be used to build a multitude of electronic projects, like those related to electromagnetism, vibration switches, and more. No soldering or tools are needed!

The **computer interface projects use free WINSCOPE software on your PC** (a free Mac software product is also available) function as an oscilloscope to monitor and evaluate various input-output signals. The only connection to



## Intro to Chemistry Kit

#### \$64.95

Your chemistry lab is set up... now what? This exciting beginner chemistry set has chemicals, step-by-step science project instructions, and other items to get started experimenting!



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

## $\Theta$

#### SKU: CE-KITINTR

Once you have beakers, flasks, test tubes, and the other essential lab equipment, it's time to do the fun stuff! Get started with the **30 beginner chemistry experiments** in this introductory chemistry set, written in easy-to-follow steps.

Perfect for anyone just starting out with simple chemistry (whether they're young kids or in high school), this science experiment kit offers a beginner but in-depth and hands-on chemistry experience that promotes lifelong curiosity. This science kit is designed as a companion for our **Chemistry Equipment Set** and contains chemicals, equipment, instructions, and explanations for chemistry experiments.

This beginner chemistry set will engage middle school kids in interesting and (truly) fun experiments with real chemicals and genuine lab safety gear. Lab supplies, like graduated cylinders, test tubes, and alcohol lamp are not included; rather, this is an experiment kit (with chemicals and instructions) meant to be used with your existing labware.

#### What do you get?

This bestselling, top-rated chemistry set provides:

- 6 lab-grade chemicals
- 3 household chemicals
- Personal protective equipment (PPE)
- 16-page full-color manual filled with experiments
- 27 step-by-step experiments







#### SKU: AS-PLANMDL

Build your own glow-in-the-dark Solar System Planetarium Model! This kit includes everything you need to assemble, paint, and highlight your model with glow-in-the-dark paint. The completed model spans almost 12 inches and stands nearly six inches tall. The glow-in-the-dark paint enhances the space-like experience.

This craft kit teaches kids about space and the solar system. Although this desk model is obviously not proportionate in size and scale, the Solar System Planetarium offers an educational and creative learning opportunity. Once the model is completed, kids can use it as a decorative display!

This kit contains 3-dimensional Solar System planetarium model, one brush, one strip of paint pots, one tube of glow-in-the-dark paint, a stand with rotating arms, nine steel bars, sand paper, Saturn ring template, detailed instructions, and a bonus wall chart of the Solar System. You supply adult supervision. Although intended for ages 8 and up, this model requires a bit of care, as most of the pieces are quite small.

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



## Hydrocar Fuel Cell Car

#### \$144.95

Fuel cell technology could revolutionize the future of transportation. Using the Hydrocar, middle and high school students can explore and experiment with fuel cell vehicles in engaging and hands-on ways!



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

## **Product Description**



#### SKU: KT-HYDRCAR

Fuel cell technology could revolutionize the future of transportation. Using the Hydrocar, middle and high school students can explore and experiment with fuel cell vehicles in engaging and hands-on ways!

This futuristic electric vehicle/electric car is powered by a clean-energy (zero-emission) fuel cell that converts hydrogen gas to electricity and water. Rather than a traditional gas fuel tank, the two onboard tanks store water that is first converted to hydrogen and oxygen gas through electrolysis. In just a few minutes the hydrogen tank is full and the Hydrocar is ready to run!

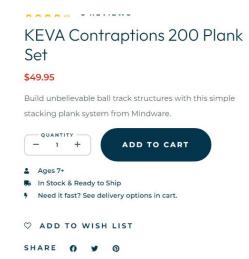
Turn on your hydrocar fuel cell car and watch it go as the hydrogen and oxygen are recombined in the efficient fuel cell to produce a DC current that powers the car's motor. This process can be repeated again and again!

The Hydrocar is designed to independently operate in circles and maneuver around obstacles. The flashing blue LED light in its cockpit indicates that the fuel cell is producing energy. Its next-generation reversible polymer electrolyte membrane (PEM) fuel cell is designed to operate with lower-pressure hydrogen, which allows for a simpler onboard refueling design. Scientists are working to apply similar technology and power sources on a larger scale with full-size cars.

The Hydrocar includes both an efficient solar cell and an AA battery pack to power the electrolysis phase so you can experiment with it indoors or out. Also includes assembly instructions and an educational CD-ROM. Some assembly is required. 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







#### SKU: KT-MWCONTR

Build unbelievable ball track structures with this simple stacking plank system from Mindware®. Young thinkers can create tracks, ramps, tunnels, funnels, and chutes, plus crazy contraptions like the "Black Hole" and "Bounce Plate." Then find out if the ball rolls as expected. Fostering unlimited creativity and experimentation, KEVA planks build an early understanding of proportion, balance, and stability, while teaching basic principles of physics and engineering. No glue, no connectors-just loads of constructive fun! This set includes 200 identical wooden planks, 2 specially designed lightweight balls for maximum action, and an 18-page idea book with project photos and quick-start instructions. KEVA Contraptions planks are made from pine.

### **KEVA CONTRAPTIONS 200 PLANK SET AWARDS:**

- · Creative Child Magazine Educational Toy of the Year Award
- Major Fun Award
- Parenting for High Potential Recommended Award
- Disney FamilyFun Toy of the Year Award

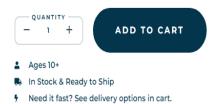
**WARNING:** CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



## 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.



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## **Product Description**



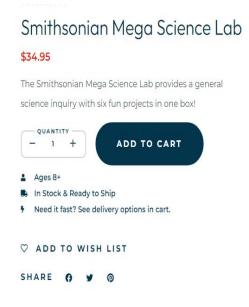
## SKU: KT-CARKIT1

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.

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





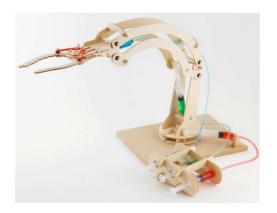
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#### SKU: KT-MEGALAB

The **Smithsonian Mega Science Lab** provides a general science inquiry with six fun projects in one box! Learn about volcanoes, study the weather, dabble in crystal growing, dig up dinosaurs, construct an eco-dome habitat, and paint an Earth-Moon model with this multi-lab science set!

The Mega Lab Science Kit awakens kids' natural curiosity and love of learning science while introducing physical science, earth science, environmental science, and chemistry concepts. Kids will enjoy the included 35" x 23" poster and Earth-Mood model long after the science experiments end!

This kit includes one weather station with thermometer, crystal-growing chemical with stir stick, granite stone and growing cup, an Earth and Moon model, volcano base with eruption tube, eco-dome pod with bug collecting tool, and more! You supply adult supervision and common household items, like baking soda and vinegar.



## Hydraulic Robotic Arm

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



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



#### 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



## 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.



## **Product Description**

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### 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 - 1 +

ADD TO CART

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

## **Product Description**

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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!

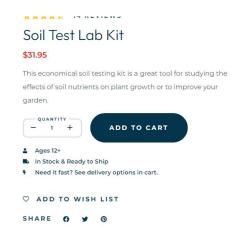
This kit **includes a 35" x 23" color poster with detailed instructions**; expand the 'Contents' tab below or a complete list of included items. Please note that the motor color may vary, and that you will need to provide two **AA batteries**, scissors, and a screwdriver (not included).

## 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.







#### 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:

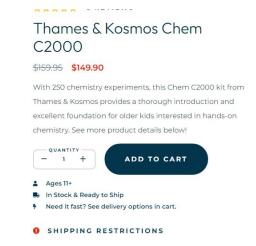
- pH: 4.5 to 7.5 in 0.5 pH increments
- Nitrate: low to high in five increments
- Phosphorous: low to high in five increments
- Potassium: low to high in five increments

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?





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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.

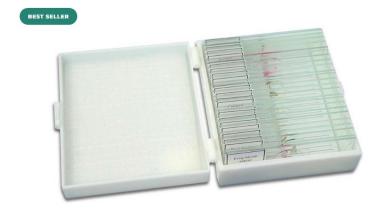
# Middle and high school students will enjoy diving into important topics and learning how to:

- · 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 Chem C1000, plus much more.** For dozens of additional tools and chemicals, check our the **Chem C3000 kit**!

The clear instructions in the 128-page, full-color manual guides kids through the 250 experiments inside, and most of



### Complete Elementary Slide Set, 25 slides

With 25 total glass slides, this deluxe glass slide set provides an excellent and memorable way for elementary-age kids to study biology and conduct microscope experiments. No additional slide preparation needed!



In Stock & Ready to Ship

Need it fast? See delivery options in cart.

## **Product Description**



#### SKU: MS-SETPRIM

This deluxe microscope slide set is designed for elementary-age kids, allowing them to explore plant and animal life in an engaging and memorable way.

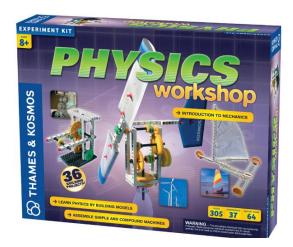
The 25 glass slides in this bestseller give even young children an up-close look at plant cells and structures, animal cells and structures, and even household specimens. The microscope slides come safely packed and stored inside a plastic storage box (\$65 value if purchased separately).

Because the slide preparation is already done for you, observing and studying the microscope slides in this set provides an easy and excellent science experiment or activity for kids.

Young scientists can study this interesting variety of specimens with 40-100x magnification, found in our:

- Kids LED Cordless Microscope provides total microscope magnification levels of 40, 100, and 400x magnification.
- 60x LED Pocket Microscope provides amazing detail and sharp resolution of insects, plants, and other items.

A note about slide quality: The 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.



## Thames & Kosmos Physics Workshop

\$59.95 \$53.90

This Physics Workshop kit comes with all the parts to build 36 physics models. Conduct 73 experiments with simple machines, gravity, energy, gears & more to discover the principles of physics in an engaging, hands-on way!



ADD TO CART

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

### **Product Description**



SKU: KT-PHYSKIT

Physics is an essential science subject, and this hands-on Thames & Kosmos Physics Workshop kit provides a memorable and exciting way to better understand the fundamental laws of mechanical physics.

# This Thames & Kosmos Physics Workshop kit comes with all the parts needed to:

- build 36 physics models a windmill, sail car, mars robot, force scale, all-terrain vehicle, ship's lantern, two-speed crane, pinball game, pendulum clock, centrifugal switch, hammer machine, and dozens of other models!
- conduct 73 experiments to explore gravity, forces, simple machines, fixed pulleys, centripetal force, friction, gears, axles, pendulums, energy, and power
- · learn and understand basic forces and fundamental physics equations
- discover amazing real-world applications of the concepts you learn!

The **104-page full-color manual** inside this physics set includes clear explanations of the physics concepts and subsequent experiments, assembly instructions, vocabulary definitions, quizzes, and neat science facts and games to play after the projects are completed. The projects and experiment manual together provide a comprehensive explanation of mechanical physics that your child is sure to remember and love.

Another great thing about this science experiment kit is that a student can work on the projects independently, or multiple kids can work together on the semi-complex machines and projects together! All you have to provide are two C batteries and some household items.

BEST SELLER



### Thames & Kosmos Master Detective Toolkit

\$49.95 \$49.90

This Master Detective Toolkit provides all the tools needed to start solving crimes! Learn how to decipher codes, analyze fingerprints, write messages in invisible ink, and so much more. See more product details below!

QUANTITY

ADD TO CART

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

## **Product Description**



SKU: KT-DTVEKIT

The Thames & Kosmos Master Detective Toolkit is a perfect educational toy for your prospective detective.

Turn your home into a detective's office and track down some crooks! With **26 different experiments**, this mock crime science experiment kit will provide hours of fun as your curious learners gather evidence, hone their observation skills, and act like real detectives on imaginary adventures.

Using the investigator's tools inside, the included full-color experiment book, and their very own observations, kids as young as eight years old can start solving crimes and deciphering codes right out of the box! Use this STEM toy to closely investigate fingerprints, footprints, tire tracks, soil samples, counterfeit currency, fibers, and more. Roleplaying and developing detective skills is an incredible way to provide engaging and memorable learning experiences for your children.

The **full-color, 48-page manual** includes rich illustrations, step-by-step instructions that explain how to analyze the gathered evidence, and some interesting some fun facts.

# This Master Detective Toolkit is one of our bestsellers and comes with more than 30 pieces, including:

- barrier tape
- · fingerprint dust
- a magnifying glass
- · plaster powder
- an ink pad



## Happy Atoms Complete Set

\$159.95 \$152.90

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!

- 1 +

ADD TO CART

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

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**Product Description** 

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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?

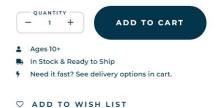
While atoms don't have emotions, they do have observable behaviors. And atoms tend to be more stable (happy) with certain numbers of electrons.



## **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.





#### 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!



- 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?







#### 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.

Use Transformers to answer questions such as:

· What is energy?





## Mega Molecules

#### \$39.99

Have you ever wondered what a polymer really is? This kit will help you find out! Learn about what polymers are, why they're used, why they are essential to life, and how we get them through exciting, engaging experiments.



## **Product Description**



#### SKU: SU-MEGMOL

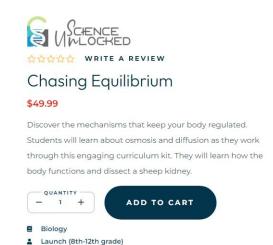
Mega Molecules: Polymers in Biology and Beyond is an Accelerate level Science Unlocked curriculum kit. Have you ever wondered what things in our world are made of? The Mega Molecules kit is an in-depth experience for a young chemist or engineer.

In this kit, students will learn about the unique world of polymers. They will get the opportunity to create and use their own polymers, as well as test their foods for the biological polymers necessary for life. Mega Molecules comes with a full-color Student Curriculum Workbook and Teacher Guide. It is a phenomenon-based approach, designed to fully engage students in the world of polymers. Through a series of experiments, students will become absorbed in the world of polymers, including how they are made and used in society today. As part of a special program from Home Science Tools, this Accelerate level kit will provide over 8 hours of knowledge, educating your student about biological and petroleum polymers.

In this kit, students will engage in these fun activities:

- 1. Make a new toy with a few simple ingredients
- 2. Unlock the world of polymers and create a suncatcher with a polymer
- 3. Use food labels to understand biological polymers necessary for life
- 4. Discover how your body breaks down macromolecules
- 5. Test the foods you eat for biological polymers





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

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.



ADD TO CART

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

#### **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

<del>\$49.95</del> **\$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.

QUANTITY 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!



#### 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.



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

#### **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.

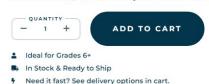
- ① SHIPPING RESTRICTION: This item only ships Economy or UPS to a street address in the 50 US states.
- **WARNING:** HAZARDOUS CHEMICAL This kit contains hazardous chemicals. Not for children under the age of 15. For use under adult supervision. Read warning labels carefully.
- WARNING: This product 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 www.P65Warnings.ca.gov.



#### 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.



SHIPPING RESTRICTIONS



#### 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 "feeding" the bacteria to Earth's most abundant animal (that you may have never heard of!). Another tests common pimple creams, 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



#### Snap Circuits Jr. 100 Electronics Discovery Kit

#### \$34.95

The unique snap-together pieces in this electronics kit for kids make it an engaging and fun way to learn!



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

#### **Product Description**



#### SKU: KT-SNAP100

If your child is interested in learning electronics and discovering how circuits work, the unique snap-together pieces in this Snap Circuits Jr. kit provide an excellent and engaging way to do so!

With hours of educational fun, your 8+-year-olds can construct 101 different electronic projects with this Snap Circuits Jr set, such as creating:

- · a touch-controlled lamp,
- · a flashlight,
- · a musical doorbell,
- · a flying saucer,
- · AM radios,
- · a sound controlled switch,
- · and electronic games!

As they experiment with the components inside this electronics kit, curious learners can even build their very own designs!

This Elenco Snap Circuits Junior kit is an educational toy with over 30 different electronic components, including three integrated circuits, a photoresistor, switches, a motor, and a speaker. The manual includes colorful pictures showing how to build the models. You provide two AA batteries and help for younger children.

No tools or soldering are needed with this electronics kit! The lego-like snap circuits parts are mounted on plastic modules and easily snap-together and onto the included plastic circuit board, making solid electrical connections.



#### Hydraulic Machines 4-in-1 Pack

The Hydraulic Machines 4-in-1 Pack brings four wooden machines to life with hydraulic power.



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

#### **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.

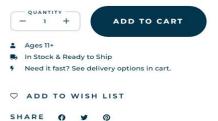
STEM refers to Science, Technology, Engineering, and Mathematics and aims to remedy the lagging proficiency of US students in comparison to their industrialized global counterparts. While interpretations vary, most agree that STEM is about innovation, learning about the world, technical literacy, and 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.



#### 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.



#### **Product Description**

## $\Theta$

#### SKU: CM-SKELN33

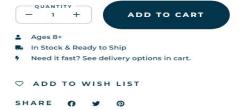
This large 34" (85 cm) human skeleton model offers a wonderful learning opportunity for both younger and older students! Special features of this deluxe human skeleton model include intervertebral discs, a moveable jaw, skull that opens, and appendages that move and can be removed for study. This half 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.



#### Human Body Model, small

#### \$27.95

This 31-piece torso model helps students visualize how human organs fit together! Includes all major organs, a rib cage, a cross-section view of the head, and comes with a stand & assembly guide. Assembled size is 4.5" tall.



#### **Product Description**



#### SKU: CM-TORSOSM

This 31-piece torso model includes all the major organs (heart, lungs, liver, intestines, etc.) as well as a rib cage and cross-section view of the head. This economical tool helps students visualize how the organs fit together! Assembled size is 4.5" tall. Comes with stand and assembly guide.



# Heart Model, small \$28.95 Visualize how the human heart works with this 29-piece model. 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**

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#### 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.



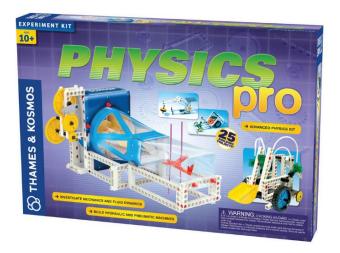
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#### **Product Description**



#### 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.



實實實質 5 REVIEWS

#### 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!



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

#### **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.

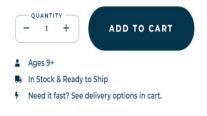
The 96-page, full-color experiment manual covers density, capillary action, water & air's relation to temperature and



### Stellarscope Star Locator

#### \$49.95

Quickly locate and identify stars visible to the naked eye with this unique device.



O ADD TO WISH LIST

SHARE () Y ()

### **Product Description**

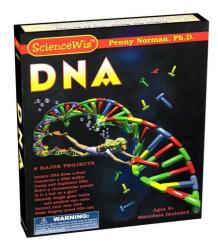


#### SKU: AS-STELLAR

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.

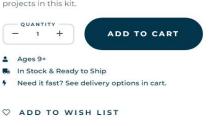


#### Science Wiz DNA Kit

#### \$24.9

SHARE (

Find out about the key role of DNA as you do the cool projects in this kit.



#### **Product Description**



#### SKU: KT-SWDNA

Find out about the key role of DNA as you do the cool projects in this kit. Extract DNA from fruit, build a DNA ladder model, solve a chromosome puzzle, and even extract your own DNA from cheek cells - and make forgery-proof DNA ink with it! In the process, learn about cells, the DNA "code," genes, chromosomes, and messenger RNA. Comes with a 40-page illustrated manual and materials to do most of the activities. You provide some household items and adult supervision.







#### 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 Snaptricity Kit

# \$39.95 Learn all about magnetic fields, electromagnetism, static electricity, parallel circuits, series circuits & more with the Elenco Snap Circuits Snaptricity set. Use the pieces inside to perform over 75 electrical experiments!

Ages 8+

In Stock & Ready to Ship

Need it fast? See delivery options in cart.

O ADD TO WISH LIST

#### **Product Description**



#### SKU: KT-SNAPTRI

Learn all about magnetic fields, electromagnetism, static electricity, parallel circuits, series circuits, and more with the Elenco Snap Circuits Snaptricity set!

This educational toy from Elenco Electronics contains Snap Circuits pieces, as well as a magnet and compass, for you to **perform over 75 electrical experiments**. The Snap Circuits parts are mounted on plastic modules and easily snap together, providing hours of experimentation and fun!

# Use Snaptricity STEM projects to:

- · discover how magnetism works,
- · investigate the power of an electromagnet,
- · identify how parallel circuits affect electricity,
- · experiment with circuits using electrodes,
- · learn about the way current flows,
- measure voltage,
- and much more!

This Snap Circuits building set requires three AA batteries (not included).



#### Snap Circuits Light Kit

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).







#### SKU: KT-MWSTRUC

Get your kids engaged creating buildings, structures, and sculptures! No glue or connectors required! Simply stack the precision-milled, solid pine KEVA planks from Mindware®. It's ideal for helping kids understand balance, stability, and basic physics while developing an interest in architecture, design, and engineering. A 24-page, full-color idea booklet with build-out instructions is also included.

Keva Planks are perfectly identical construction blocks that stack with surprising stability. Children instinctively know how to stack things, so the fun starts immediately. This simple construction system provides a unique building experience. With all the pieces the same, no energy is wasted searching for specific shapes or connectors, allowing the creative process to flow more smoothly than with complex systems. KEVA enthusiasts range from kids to architects because every person can enjoy building at his or her own skill level. Children never outgrow Structures!



# 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.



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

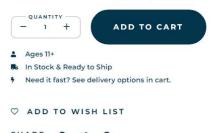
This 5-in-1 building kit combines the Engino Discovering STEM series into one complete set. Students will discover and build operational models for all simple machine mechanisms:

- 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?



#### 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!



#### **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-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**.







#### 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:

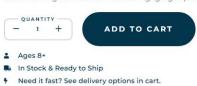
- Count the bones in the human body
- · Label individual bones
- Explore the purpose of different bones
- Compare and contrast bone structures
- Learn about x-rays and how they are used
- Explore x-ray opacity



#### 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.



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SHARE () ¥ @

#### **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







(-)

#### SKU: EL-ROBEDGE

Note: Cordless Model Introduced January 2022

Have fun playing with this easy-to-use OWI robotic arm kit, called "Edge." Grab and lift objects that weigh up to 100g (3.5 oz)! You can command the gripper on the end to open and close, move the arm side to side and up and down, and even bend it like a real wrist and elbow. This robotic arm has five joints and is maneuvered by a wired 5-switch controller. Four **D** batteries and assembly required.

#### PRODUCT DETAILS:

- Base rotation of 270 $^{\circ}$
- $\bullet~$  Base motion (up and down) of 180  $^\circ$
- Wrist motion of 120°
- Elbow motion of 300°
- Gripper opens from 0-1.77"
- Search light on end of arm
- Powered by five motors
- Extended life on gearbox

#### From the Manufacturer (OWI)

Command the robotic arm gripper to open and close, radial wrist motion of 120°, an extensive elbow range of motion of 300°, base rotation of 270°, base motion of 180°, vertical reach of 15 inches, horizontal reach of 12.6 inches and lifting capacity of 100g. Some of the added features include a search light design on the gripper and an audible safety gear indicator is included on all 5 gear boxes to prevent potential injury or gear breakage during operation. Total command



# MicroChem Classroom Kit \$184.95 This is the MicroChem kit designed for two students working the labs together. QUANTITY 1 + PRE-ORDER Ages 12+ Out of Stock, Expected to Ship: 8/4/2022 ADD TO WISH LIST SHARE SHARE

#### **Product Description**



#### 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 <u>alcohol lamp</u>). A digital <u>multimeter</u> is required for an optional lab. <u>Safety gloves</u> are also recommended.

Note: The MicroChem kit has not be updated to the 3rd edition of Abeka Precision and Design at this time.







#### 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.

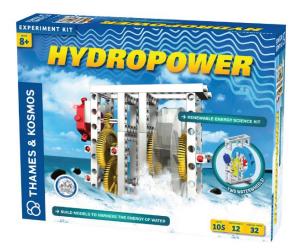
Use this kit to make learning fun! The included manual guides kids as young as 8 years old as they safely and easily conduct tests and a series of experiments to learn about electric current and the earth's magnetic fields.

#### **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!





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



#### SKU: KT-HYDRPOW

With this affordable and hands-on hydropower kit, kids will have a blast building models and experimenting with them as they discover the science behind the power of water. This Thames & Kosmos water power kit provides a great introduction to studying alternative energy and environmental science!

# With the materials and supplies inside this hydropower kit, kids will construct different devices and watermills, including:

- a water wheel (with a generator) in a small stream
- a hydropower sawmill
- a water tower
- a hammer mill
- a hydroelectric power station
- a giant turbine in a tidal power station
- a water fountain
- communicating vessels
- and more!

As curious learners build and experiment with their DIY building models, they will **investigate the intriguing properties of water**, discover how the different devices create useful energy out of water, and learn about key

concepts like surface tension, water pressure, and converting water power to electricity. With this hydropower

renewable energy science kit, they'll discover so many ways through which water can be used to perform different
types of physical work!



# Electricity & Magnetism Kit Make teaching about electricity & magnetism easy with this complete study in static electricity, current electricity, magnetism, and electromagnetism. PRE-ORDER Ages 9+ Out of Stock, Expected to Ship: 8/1/2022 O ADD TO WISH LIST SHARE O

#### **Product Description**



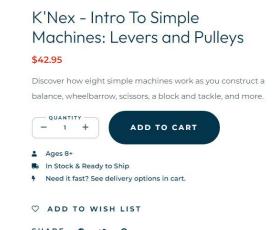
#### SKU: EL-ELECMAG

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, environmentallyfriendly cardboard box.







#### SKU: KT-KNLEVER

Discover how eight simple machines work as you construct a balance, wheelbarrow, scissors, a block and tackle, and more. You'll understand how all three classes of levers work and see firsthand how fixed, moveable, and combination pulley systems operate.

This kit comes with 178 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 all three classes of lever and test them to determine how they operate
- · Identify key parts of levers; effort arm, resistance arm and fulcrum
- Identify different types of pulley systems and test them to determine how they operate
- · Identify key parts of pulley systems
- Discuss how pulleys change the direction and/or amount of force applied to do work

#### From the Manufacturer

Hands-on learning at it best! The K'NEX Education Intro to Simple Machines: Levers & Pulleys set is designed to introduce students to the scientific concepts associated with two types of Simple Machines – levers and pulleys. Students are provided with the opportunity to acquire skills using a hands-on, inquiry-based approach to information and concepts. Working cooperatively, students are encouraged to interact with each other 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





#### PowerUp 2.0 Airplane Conversion Kit Bundle

#### \$49.95

Lift off into the engineering of aerodynamics with the POWERUP 2.0 complete conversion kit bundle! Begin flying in style right away. This kit includes 10 additional full-color templates, 2 waterproof airplane templates, and instruction book.



ADD TO CART

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

#### **Product Description**



#### SKU: KT-AIRPLKT

The POWERUP 2.0 easily attaches to paper airplanes and the quick-charging technology lets you start flying right away. A full charge will let your plane fly for over 30 seconds. Bring your designs to life and keep experimenting with a wide assortment of folding designs. It's perfect for beginners and flight hobbyists of all ages!

This bundle also comes with the 56-page POWERUP Airplane Book with instructions and tips for 10 different airplane designs. You will also receive an additional template pack that includes: 10 paper templates, 2 waterproof paper templates, and 1 desk stand for displaying your airplanes. This bundle will help you make your POWERUP 2.0 module fly in style!



#### Engino Discovering STEM: Architecture Set Eifel Tower & Sydney Bridge

#### \$174.95

The Eiffel Tower is HUGE and so is the Sydney Bridge. Build these models and 9 more with this amazing architecture and engineering kit! Each manual provides a detailed overview and helpful step-by-step instructions.



#### **Product Description**



SKU: KT-ENGARC

Yes, this Eiffel Tower is 5 feet tall! And, the Sydney Bridge is only a few inches shorter in width. **These models are HUGE!** 

Your students will love building a model that could be taller than them while they **learn principles of architecture** and engineering.

While the Eiffel Tower and Sydney Bridge are the biggest of the models, this kit contains instructions for 11 total models including a wide variety of bridge types (beam, arch, truss, suspension and more) and other structures like a house and a pyramid.

Find 9 models to build in the printed, full-color instruction manuals included in the box and another 3 models available online. Each manual begins with a detailed overview of architectural theory and amazing architectural and engineering facts, then proceeds into experiments and model building with detailed step-by-step instructions.



#### Snap Circuits Electronics Home Learning Kit

#### \$38.95

A Snap Circuits kit designed specifically for learning at home!

The Snap Circuits Home Learning Electronics Fun kit is the first Snap Circuits kit that includes a complete curriculum to learn and teach about circuits.



Need it fast? See delivery options in cart.

#### **Product Description**



SKU: KT-SCHOME

A Snap Circuits kit designed specifically for learning at home! The Snap Circuits Home Learning Electronics Fun kit is the first Snap Circuits kit that includes a complete curriculum to learn and teach about circuits. The included Student Activity Guide leads the student through 37 hands-on activities, with quizzes and questions for student response throughout. Answers and guidance are provided in the 18 page Parent Guide which will ensure your students have the best experience possible.

Across 4 chapters, your students will complete over 30 activities that include:

- Basics of electricity, wires, switches, lamps and more
- Motors and fuses
- Resistors and series and parallel circuits
- · Sound, waves and logic
- Transistors and electromagnetism and so much more!

Students will have so much fun, they will barely know they are learning!



#### Snap Circuits Motion Electronics Kit

#### \$79.95

Over 50 Snap Circuits parts and 165 motion-focused projects, wow! The Snap Circuits Motion electronics kit will get you excited and moving like never before.



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-SCMOTN

Over 50 Snap Circuits parts and 165 motion-focused projects, wow! The Snap Circuits Motion electronics kit will get you excited and moving like never before. Build a crawler, a mini-car and an airplane that are powered by Snap Circuits components.

#### Projects include:

- Build a motion detector
- Power a mini-car and a plane
- Create a merry-go-round
- Build a fan
- Make a crawler move and so much more!

Find in the 82 page, full-color manual an introduction to circuits and over 165 hands-on activities. This fast-paced kit will have your children excited and learning for hours!



#### Snap Circuits Discover Coding Electronics Kit

#### \$74.95

Learn to code like never before with Snap Circuits! The Snap Circuits Discover Coding electronics kit is a great introduction to coding and perfect for beginners and those with coding experience.





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

#### **Product Description**



#### SKU: KT-SCCODE

Learn to code like never before with Snap Circuits! The Snap Circuits Discover Coding electronics kit is a **great**introduction to coding and perfect for beginners and those with coding experience. Using the downloadable Snap

Circuits App, students can easily create programs to control lights, sounds, a motor and more! This kit features a

Bluetooth enabled Snap Circuits control module which connects the Snap Circuits components to your phone or
tablet along with the free app. Discover STEM skills using over 30 included Snap Circuits parts and the 50 page fullcolor manual.

Complete 18 projects including:

- Building a controllable electric light
- Create programmable sirens
- Make your own "space war"
- Create a countdown timer and so much more!

Students will not only learn the basics of electricity and circuits but will learn and use easy drag and drop coding languages like BLOCKLY.



#### Cell Communication - How Cells "Talk"

#### \$20.95

You can't hear them but cells do communicate! Get a closer look with this microbiology kit. Create a model of cellular communication to understand the role it plays in regulating blood sugar level and nerve action.



ADD TO CART

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

#### **Product Description**



#### SKU: KT-STO133

You can't hear them but cells do communicate! They don't use sounds like humans, but instead use chemical signals that can communicate from one cell to another and regulate cellular function. In this kit the student will create a model of cellular communication and use the model to understand the role of communication in regulating blood sugar level and nerve action.

- 1. Students will learn core concepts including:
- 2. Cells send signal molecules like hormones and neurotransmitters
- 3. These molecules bind to proteins called receptors
- 4. Each signal and receptor is specific
- 5. This binding causes changes inside the cell
- 6. A lack of "communication" disrupts homeostasis

Complete this kit at home or in the classroom in two 40 minute sessions. Includes a completed, detailed Teacher Guide and Student materials



#### Pathogens, Antibodies and **Vaccines**

#### \$36.95

This microbiology kit takes a closer look at the immune system and vaccine development. Students will model antigen-antibody interaction and measure antibody levels in simulated patients!



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-STO138

The immune system protects us against bacteria, viruses and other invaders into our bodies. In this kit, students will learn all about the immune system, model antigen-antibody interaction and measure antibody levels in simulated patients who are either vaccinated or unvaccinated and exposed to a pathogen. This kit is a great introduction to vaccines and vaccine development and perfect for the budding virologist.

In this kit, students will learn about several concepts including

- 1. The immune system and its role in preventing disease
- 2. Antigens as proteins on the surface of pathogens
- 3. Antibodies, produced in white blood cells and how they attach to and destroy pathogens
- 4. Vaccines and how they trigger the production of antibodies and give your immune system a "memory" for pathogens you've been exposed to before

Complete this kit at home or in the classroom in three 40 minute sessions. Kit contains a detailed Teacher Guide and Student materials.



#### Thames & Kosmos Rubber Band Racers

\$19.95 \$19.70

Fly into physics fun with five awesome models driven by a rubber band powered propeller! This Rubber Band Racers kit includes an 8-page manual & over 70 pieces to build a helicopter, airboat, airplane, fan car & hydrofoil.



O ADD TO WISH LIST

#### **Product Description**



SKU: KT-RBRACE

Fly into physics fun with five awesome models driven by a rubber band-powered propeller!

# Using ultralight plastic and bamboo parts inside this Thames & Kosmos Rubber Band Racers kit, kids can build:

- · a helicopter,
- · an airboat,
- · an airplane,
- a fan car,
- and a hydrofoil!

As they build, experiment, and play, kids will learn about stored energy, potential energy, kinetic energy, and all sorts of engaging physics concepts! For example, they'll discover how the elastic material stores energy and then releases it to move the models. To further the fun and educational experience for your child, encourage them to make their own DIY engineering notebook - a place where they can write down their observations and reflect on their engineering designs.

**Enjoy 5 experiments and engineering challenges using over 70 pieces**, including wooden skewers, dowels, propellers, and a variety of small parts and pieces. A **full color, 8-page manual** is also included inside this rubber band racers kit to guide you every step of the way! No batteries required.



### Exploring Electricity, Magnetism & Electromagnetism

Learn basic physics principles by Exploring Electricity, Magnetism & Electromagnetism. With this Science Buddies kit, kids see physics laws in action and prove them with their own hands. Experiment with circuits, test magnetic field strength & more.



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

### **Product Description**



### SKU: SB-EMAGCUR

This new Science Buddies curriculum kit reveals electricity, magnetism and how they combine to create electromagnetism. The included lesson book includes step-by-step instructions and explanations for 14 fun lessons. But these lessons aren't passive. Instead, kids gain hands-on experience Exploring Electricity, Magnetism & Electromagnetism, so concepts stick.

Working through the Exploring Electricity, Magnetism & Electromagnetism curriculum, kids learn like scientists. Some of the science activities they'll enjoy are:

- · making an electrical circuit,
- · setting up a pencil resistor,
- · constructing a homemade compass,
- · creating an electromagnet,
- building a Gauss rifle, and more!

Kids will also learn the answers to intriguing science questions. Such as: How many magnets does it take to launch a ball bearing, and how far will it fly? What do your old wooden pencils that are too short to hold have to do with electrical circuits? How does the strength of a magnet change with distance? And how can you turn off a magnet?

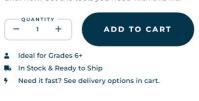
The kit comes with many of the items you need to do the activities. Although you supply some household items as well. The included booklet's careers section highlights jobs that use the scientific principles covered in the kit. Linking lessons to the real world helps students see how science is relevant in their own lives.



### 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

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### **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!

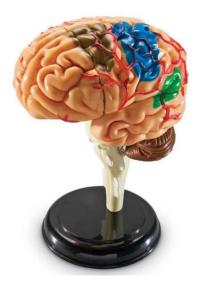
Many chemical reactions in chemistry and biology produce gas as the main byproduct - whether it's carbon dioxide gas, oxygen, methane, or something else. Under typical conditions, that gas floats off and mingles with the atmosphere - making it impossible to measure it. This Measuring Gas Production Kit, 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.



### **Product Description**

### Brain Model, small

### \$24.95

See how the parts of the brain work together as you assemble this economical, 31-piece model.



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

O ADD TO WISH LIST

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### 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.



### Density Measurement Kit

Learn about density and specific gravity with this complete study kit.

QUANTITY ADD TO CART Ages 10+ In Stock & Ready to Ship

Need it fast? See delivery options in cart.

ADD TO WISH LIST

### **Product Description**



### 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.



### 4M Windmill Generator Kit

### \$20.95

See for yourself how a generator works with this hands-on alternative energy kit.

QUANTITY

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**



### 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.

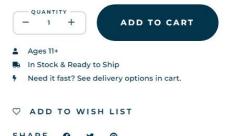
MARNING: CHOKING HAZARD - Small parts. Not for children under 3 years. Adult supervision required.



### Vacuum Filtering Set

### \$69.95

This special set allows you to more quickly separate suspensions and mixtures using vacuum filtration.



### **Product Description**

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### 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!

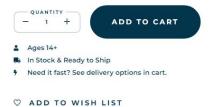
The **vacuum pump** is also available separately.



### 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.



### **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



### Science Wiz Electricity Kit

### \$24.95

Help your young kids understand how electricity works with the hands-on activities and easy-to-read text in this combination book and kit.



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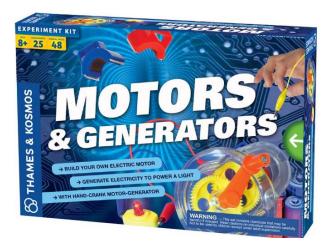
### **Product Description**



### SKU: KT-SWELECT

Help your young kids understand how electricity works with the hands-on activities and easy-to-read text in this combination book and kit! They'll be able to make several different types of circuits and connections that will make a light bulb glow and a motor spin, and they'll also get to create a simple morse code machine using a buzzer. In the process they'll learn about simple, parallel, and series circuits, load, switches, conductors, and insulators. Comes with materials to do most of the activities and a 34-page kid-friendly guide that includes a word search and crossword puzzle at the end. You provide a D-size battery.

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





<del>\$24.95</del> **\$24.90** 

PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more

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.



ADD TO CART

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

### **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).



### Magnet Essentials Set

### \$29.95

PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more

Everyone loves magnets! The engaging magnet kit comes with the magnets & supplies you need to experiment with magnetism; it can be used for independent experiments, paired with your curriculum, and more!



ADD TO CART

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

### **Product Description**



### SKU: KT-ESSMAGN

Experimenting with magnetic force is an excellent way for educators to engage kids and teach them about science - and this best seller has all of the magnets and supplies you need to begin exploring. It makes for an excellent first magnet kit!

This magnet set contains a great variety of items that can be used to supplement your curriculum, to create your very own science projects and fun experiments, and more. The possibilities are endless!

Take your magnetic exploration even further with:

- Magic Penny Magnet Kit
- Alnico Magnet Science Kit
- Super Science Magnet Kit
- Neodymium Block Magnet
- Strange Attractor Thinking Putty (ooey-gooey putty with magnetic properties!)

Not quite ready to checkout? Take a look at the customer reviews below for more product details and insight!

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

**WARNING:** MAGNETS - This product contains very strong magnets and are a pinching hazard. Keep out of reach of young children. Keep away from pacemakers and internal medical devices.



## \$8.95 PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more A great educational quality stethoscope that will be a real asset to any human anatomy study. 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**

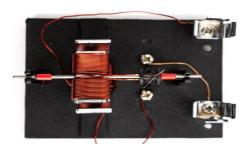
### $\Theta$

### 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.



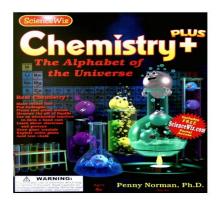
### **Product Description**

### DC Motor Kit \$13.95 PayPail Pay in 4 Interest-free payments on purchases of \$30-\$1,500. Learn more Make your own DC motor with this excellent educational kit, ideal for learning how and why motors work using electromagnetism. QUANTITY 1 + ADD TO CART Ages 12+ In Stock & Ready to Ship Need it fast? See delivery options in cart.

### 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.)

New images and updated product from the supplier!



## Science Wiz Chemistry Plus Kit \$24.95 PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more Explore the elements of the periodic table with this Chemistry Plus kit from award-winning ScienceWiz. QUANTITY ADD TO CART ADD TO CART ADD TO CART In Stock & Ready to Ship Need it fast? See delivery options in cart.

### **Product Description**



### SKU: KT-SWCHPLS

Explore the elements of the periodic table with this Chemistry Plus kit from award-winning ScienceWiz. Make rocket fuel, grow giant crystals, and learn to test substances for specific properties. Kids will be engrossed in learning the "Alphabet of the Universe" with this fun kit.

This chemistry set includes free internet portal access to help you take chemistry experiments even further. Watch experiments that are too dangerous to try at home! Ages 8+ with parental supervision.



### OWI 4-in-1 Transforming Solar Robot

## \$20.95 PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more kids learn about solar energy while building the T4 Transforming Solar Robot, which turns into a moving and rolling T-Rex, Insecta, and Drill Vehicle. QUANTITY 1 + ADD TO CART Ages 8+ In Stock & Ready to Ship Need it fast? See delivery options in cart.

### **Product Description**



### SKU: EL-T4ROBOT

Encourage outdoor play with this four-in-one robot kit. By using solar power instead of batteries, the robots convey an understanding of alternative energy while your child is having fun in the sun.

Kids will not only enjoy building their own solar robot, but will also be excited about transforming it into one of the four models: T-Rex walks and jaws move; Robot, with walking legs and moving wheels; Insecta, with six moving legs and moving jaws; and Drill Vehicle, similar to a miner's drilling bit, with moving wheels.

The T4 Transforming Solar Robot includes all the pieces necessary to build a functional robot that easily transforms into four different models and operates on solar energy. No batteries needed! Ages 8+.



### Whodunnit? Detective Spy Scope

### \$138.95

PayPal Pay in 4 interest-free payments of \$34.74 . 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 PayPal Pay in 4 interest-free payments of \$19.99. Learn more This is the ultimate Snap Circuits electronics experiment kit, with more than 500 projects. 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

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### 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.

Just provide 4 AA batteries and you'll be ready to dive into hours of educational fun with this circuits discovery kit!



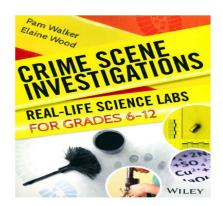
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### **Product Description**



### 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 <u>ring stand</u>, <u>burette clamp</u> and <u>meterstick</u> or <u>tape measure</u>, not included.)





### **Product Description**



### SKU: BK-CRIMESC

By Pam Walker & Elaine Wood. Learn about crime investigation from forensic entomology to writing analysis! Your junior high and high school kids will have fun learning about forensic science while developing their observation and critical thinking skills.

This curriculum study guide includes 31 hands-on activities dealing with life, earth, and physical science topics.

Teacher directions, reproducible student worksheets, and answers are included. Teacher preparation and some non-household items are needed. Most of the labs work best with 5-6 people - if you're homeschooling, this is a good curriculum for multiple ages or co-ops. Some labs deal with murder and other violent crimes. 273 pp.

### The labs in this book include:

- Casting for Evidence (making and evaluating shoe print impressions)
- I've Got My Eye on You (observing, remembering, and recording events)
- Picking Up the Pieces (analyze fibers like silk and wool)
- The Teeth Will Tell (learn about dental forensics)
- The Thief Who Wore Lipstick (learn about lip print patterns)
- Hair Directory (hair identification of different animal species)



### **Product Description**

### Protist Microscope Discovery Kit

### \$289.95

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

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.



### 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**.





O ADD TO WISH LIST

### **Product Description**

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### 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

PayPal Pay in 4 interest-free payments of \$24.99 . Learn more

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: 9/8/2022

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

Email Address

### **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.



### Forensic Chemistry Drug Detection Kit

### 

O ADD TO WISH LIST

### **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.

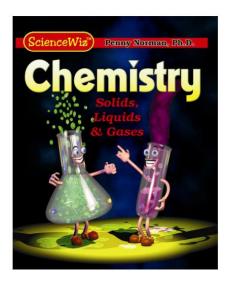
This Forensic Chemistry of Drug Detection Kit contains enough material for 15 groups of students. A teacher's manual and reproducible student study guide are included.

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.



# Science Wiz Chemistry Kit \$28.95 PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more With this chemistry kit from ScienceWiz, kids can enjoy 30+ activities using the 40-page experiment manual, 25+ included pieces, and a few common household items. QUANTITY 1 + ADD TO CART Ages 6+ In Stock & Ready to Ship Need it fast? See delivery options in cart.

### **Product Description**



### SKU: KT-SWCHEM

With this chemistry kit from ScienceWiz, kids can enjoy 30+ activities using the 40-page experiment manual, 25+ included pieces, and a few common household items. Suck an egg into a bottle. Learn about states of matter, and make candles. Capture a  $CO_2$  explosion, and more!

This chemistry set from award-winning ScienceWiz includes free internet portal access to help you take chemistry experiments even further. Ages 6-10 with parental supervision.

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



### Clinical Lite Professional Stethoscope

### 

### **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.



### 4M Tin Can Robot Kit

### \$18.95

PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more

The Tin Can Robot is a great introduction to robots and mechanics for younger children.



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-TCANBOT

The Tin Can Robot is a great introduction to robots and mechanics! This robot kit contains all the pieces needed to build a quirky little robot that also encourages recycling by using a can for the body. The simple robot is easy to put together and makes it easy for younger kids to understand how it works. Your child will enjoy building and playing with this little bot!

The 4M Tin Can Robot includes all the pieces necessary to build a functional robot that wobbles around. You provide one AA battery, screwdriver and can. Ages 8+.

### From the Manufacturer

Turn a metal can into a walking, wobbling, bog-eyed robot that can move. It can be transformed to become a robotic monster too. Cans can be cool! Kit includes parts and instructions, just add a "can" do attitude. Watch your child's delight and sense of accomplishment with the robot they create. Great for the "science" enthusiast in your family.

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



### Magnetic Levitation Kit

\$37.95

PayPal Pay in 4 interest-free payments of \$9.49 . Learn more

This kit is designed for kids to investigate magnets and magnetism through five engaging experiments and five indepth special projects.





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

### **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.

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



### Kids First Biology Lab

### \$40.40

PayPal Pay in 4 interest-free payments of \$10.10 . Learn more

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: 8/23/2022

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

Email Address

### **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



### Product Description

### ElecFreaks micro:bit Tinker Kit

### \$69.95

PayPal Pay in 4 interest-free payments of \$17.49 . Learn more

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.



ADD TO CART

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



### 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.



# Production of Biodiesel Kit \$44.95 PayPal Pay in 4 interest-free payments of \$11.24 . Learn more 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

### **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.

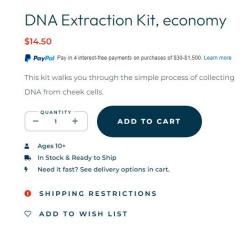
The Production of Biodiesel Kit, from Innovating Science, contains enough materials for 5 groups of students.

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**.





### **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.

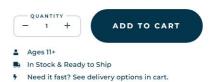
The kit comes with enough materials for two simultaneous extractions for a student and a parent or two students. For up to 15 groups of students, choose the **Classroom DNA Extraction Kit**. Using **gloves** and splash **goggles** is recommended.

- 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 PayPal Pay in 4 interest-free payments on purchases of \$30-\$1,500. Learn more 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**



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).



### Celestron StarSense Explorer LT 80AZ Smartphone App-Enabled Refractor Telescope

### \$269.95

PayPal Pay in 4 interest-free payments of \$67.49 . Learn more

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.



### **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!** 

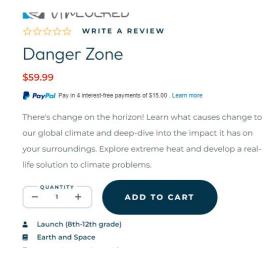
StarSense Explorer LT 80AZ simple altazimuth mount includes an altitude slow motion adjustment with a sliding rod to fine tune the telescope's pointing position and follow targets as they appear to drift across the night sky. It's all anchored by an adjustable, full-height tripod. Plus, with the fully 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.





### **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?



**Product Description** 

### Raspberry Pi Projects Kit

### \$179.95

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

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Email Address

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

(-

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





▲ Ages 10+

In Stock & Ready to Ship

Need it fast? See delivery options in cart.

### **Product Description**



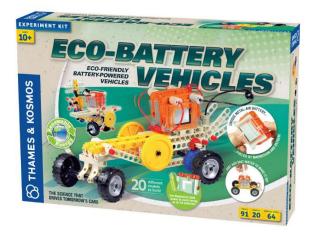
### SKU: KT-CLIMWEA

This Thames & Kosmos Weather and Climate experiments kit uses 23 fun weather science projects to teach kids about the state of the Earth's atmosphere. Discover how fun science can be with your own kid-friendly weather station!

Build a model of Earth and use it to **conduct a variety of DIY science experiments!** Use these weather activities as supplemental learning or to support your lesson plans:

- · Learn all about the global wind system (wind speed, wind vane, etc.);
- Trace air currents (from cold air to hot air) and recreate ocean currents;
- Discover how Earth's rotation, revolution, and position to the sun influence daily and seasonal weather patterns;
- Explore the water cycle;
- Model Earth's heat reservoirs, thermals, and both global and local winds;
- Experiment to discover if/how temperature is impacted by carbon dioxide levels;
- Make a barometer;
- Set up a rain gauge for a rainy day (used to collect and measure the amount of liquid from rain drops in a specific area during thunderstorms, etc.);
- Learn all about clouds, humidity, and precipitation;
- and more fun activities!

Conduct countless science experiments for kids with this Weather and Climate experiment kit from Thames & Kosmos. This kit includes more than 20 pieces, along with a **full-color, 48-page science experiment manual.** All you need to provide are a few common household items, like scissors, glue, and salt.



### Thames & Kosmos Eco-Battery Vehicles

<del>\$74.95</del> **\$67.40** 

PayPal Pay in 4 interest-free payments of \$16.85 . Learn more

The Thames & Kosmos Eco-Battery Vehicles kit teaches kids about what many believe is the future of automobiles: the electric vehicle (EV). Build 22 different eco-friendly car models & power them with a special battery!

### Out-of-Stock, Discontinued

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Email Address

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

### **Product Description**



SKU: KT-ECOVECH

The Thames & Kosmos Eco-Battery Vehicle kit teaches kids about what many believe is the future of automobiles: the electric vehicle (EV)!

Powered by rechargeable chemical cells (batteries), the battery electric vehicle (BEV) is making the rise of electric vehicles more practical. Automakers around the world are exploring and building various electric vehicles that help reduce our carbon footprint on a global scale.

With this eco-battery car kit, kids build and experiment with a new type of environmentally friendly "fuel cell" to learn about electrochemical cells and BEV's. The electric car battery is a metal-air electrochemical cell, which is a type of battery that's widely used in small scale devices. It is ideal for demonstrating battery technology because it does not use any harmful chemicals. It generates electricity using only magnesium plates, saltwater, and oxygen in the air, which helps reduce carbon emissions (CO2 emissions) that cause air pollution and lead to negative environmental impacts (such as climate change). Plus, since magnesium can be harvested cleanly from ocean water, it's considered an eco-friendly renewable fuel, unlike gasoline.

In order for battery-electric cars to gain wide acceptance and use, their batteries must be easy to recharge, able to hold enough charge to drive long distances, and more efficient than gasoline engines in conventional cars.

Scientists and engineers worldwide are tackling this new battery challenge and making progress. Join them as you **build 22 different eco-friendly car models and power them with this special battery!** Experiment with different concentrations of salt to see how long your battery can run, all while learning about electrochemistry and battery technology.