

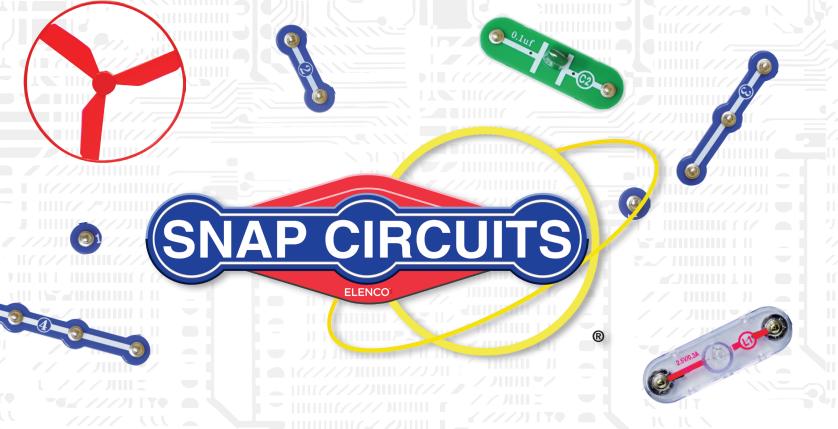


Our mission is to provide quality, innovative toys and educational products that are fun, affordable, engaging, and designed to instill a passion for learning and creating. We're committed to inspiring imagination, invention, and exploration. We believe the best way to learn is by doing.

From its humble roots in a Chicago-area basement to a leader in the STEM movement, Elenco -- the makers of SNAP CIRCUITS® -- looks ahead to a bright future.

Wheeling, Illinois - History in STEM (Science, Technology, Engineering, Math): In 1972, Elenco's founder, Gil Cecchin, began building Elenco's first product, a color bar generator for television repairmen, in his basement in the Chicago suburb of Niles, Illinois. Gil came from a poor, Italian immigrant family and worked his way up to become an electrical engineer at Motorola, with over 25 patents, and leading a team of engineers that made color TV accessible and affordable to consumers. One of Elenco's first customers was a mail-order, educational provider. Elenco grew in the '70s, '80s and '90s by supplying technical schools, colleges, and high schools across the country with educational kits and products that taught the basics of electronics and engineering. Elenco was STEM before the term "STEM" even existed. Gil wanted to share his passion for electronics and engineering and he felt the best way to learn was by doing. Thus, Elenco's trademark -- Learn by doing® - was born.

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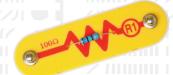
ABOUT SNAP CIRCUITS®: Elenco's SNAP CIRCUITS® makes learning electronics easy and fun! Just follow the colorful pictures in our manual and build exciting projects, such as FM radios, digital voice recorders, AM radios, burglar alarms, doorbells, and much more! You can even play electronic games with your friends. All parts are mounted on plastic modules and snap together with ease. Enjoy hours of educational fun while learning about electronics. SNAP CIRCUITS® are endorsed by educators worldwide and used in schools, libraries, museums, STEM programs and at home. Many of today's rising engineers, inventors, architects and educators learned the basics of technology by playing and creating with SNAP CIRCUITS®. The CircuitSafe® patented safety device unique to SNAP CIRCUITS® branded products makes learning circuitry safe. No tools required. Uses "AA" batteries, unless otherwise indicated.

For nearly twenty years, SNAP CIRCUITS® has been the go-to toy for learning electronics. SNAP CIRCUITS® products have won many awards, including: Toy of the Year (TOTY), ASTRA's Best Toys for Kids, Parents' Choice Recommended, Good Housekeeping's Best Toy, Family Choice, National Parenting Publications Awards (NAPPA Gold), Children's Choice, Dr. Toy (100 Best Children's Products, 10 Best Educational Products, Green Toy Company), the inaugural Seriously STEM Award & KAPi Award.

All SNAP CIRCUITS® products are officially STEM APPROVED by STEM.org









- · SNAP CIRCUITS® makes learning electronics easy and fun!
- · Build exiting projects flying saucers, radios, alarms & more!
- · Great for schools, STEM programs, home school or everyday fun.
- · Parts snap together with ease. Project guide with each kit.
  - · Build hundreds of exciting projects.
  - · Create your own circuits!
  - Combine with other SNAP CIRCUITS<sup>®</sup> sets and build your own projects.







#### Download the Snap Circuits® App







Snapino NAPING CODING A SNAP

your Snap Circuits parts. • Includes Arduino UNO compatible

- Snapino ®module
- Compatible with Arduino shields and components.

Over 20 Projects

UPC: 756619011851





# DISCOVER COLONIA Making Coding a Snap®

# SNAP CIRCUITS° DISCOVER CODING Model SCD-303

Download the Snap Circuits® App and control Snap Circuits® projects using your smartphone or tablet to control lights, sounds and a motor! Discover Coding is a great introduction to coding, using easy graphical coding. More advanced coders can move up to BLOCKLY coding.

• Use with other Snap Circuits® sets to program larger circuits.

Over 15 Projects

UPC: 75661901333







Featuring The Snap Circuits® Coding Module SC Controller Use the Bluetooth® powered module and downloadable snap circuits app for endless coding fun!



# LEARN TO CODE

#### **SNAPINO<sup>™</sup> Model SC-SNAPINO**

Make coding a snap! Get acquainted with Arduino® coding and program

- Use with other Snap Circuits® sets to program larger circuits.





#### **SNAP CIRCUITS' BEGINNER**

#### Model SCB-20

Begin your Snap Circuits® Experience with a wonderful introduction to problem solving, following directions and the satisfaction of a job well done. Extra safety features for younger engineers. Easy-to-follow color manual designed for beginners.

Over 20 Projects

UPC: 756619010861









#### SNAP CIRCUITS JUNIOR

Model SC-100

The essential Snap Circuits® kit for everyone! Great for an introduction to electricity and for building your skills. Build and play over and over for hours of fun and learning. Build a photo sensor, a flashing light a siren and more!

Over 100 Projects

UPC: 756619002415









#### SNAP CIRCUITS JR. SELECT Model SC-130

Another great addition to the award-winning Snap Circuits® product line. Projects include a glow-in-the-dark flying propeller, phototransistor, LED, resistor, IC's, a DC motor and much more.

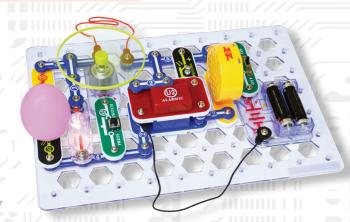
Over 130 Projects

UPC: 756619010847









#### SNAP CIRCUITS CLASSIC

Model SC-300

Our classic Snap Circuits® kit for everyone! Includes all of the projects of the SC100 plus 200 more! Great for an introduction to electricity and for building your skills. Hours of fun and learning. Projects include photosensitive elctroninc organ, lie detector, two-finger touch lamp, radio and more!

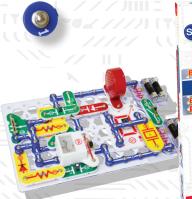
Over 300 Projects

UPC: 756619002187













Model SC-500

Includes all of the instruction and projects of the SC300, plus 200 more! Great introduction to electricity and for building your skills. Hours of fun and learning. Projects include digital voice recorder, FM radio, screaming fan, and much more.

Over 500 Projects

UPC: 756619002590





SNAP CIRCUITS" PRO WITH COMPUTER **INTERFACE** Model SC-500S



#### SNAP CIRCUITS EXTREME

Model SC-750

Extreme fun with our largest Snap Circuits® kit! Includes all of the instruction and projects of the SC500, plus 250 more! Great introduction to electricity and plenty of projects to build your skills. Hours of fun and learning. Inludes a photo resistor, power amplifier, analog meter, solar cell, to keep the fun going!



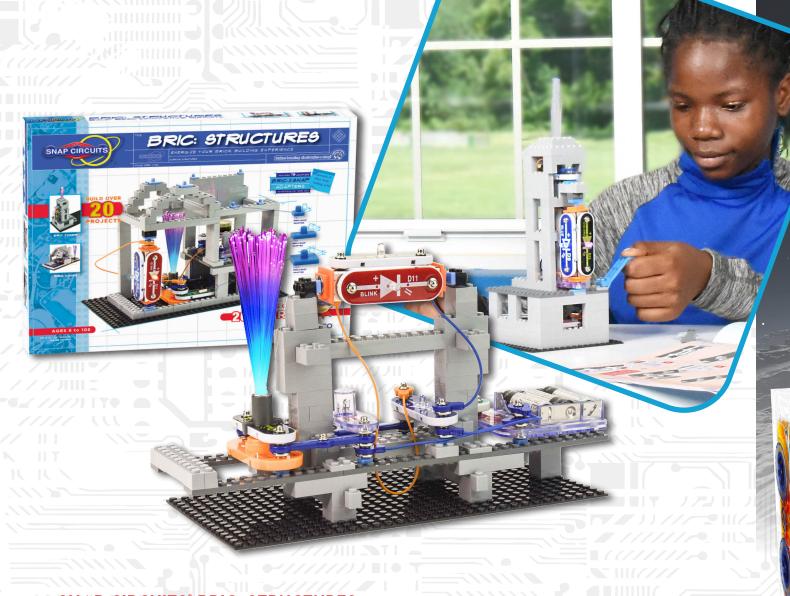




Over 750 Projects



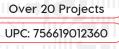




#### SNAP CIRCUITS' BRIC: STRUCTURES

#### Model SC-BRIC1

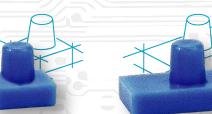
Wire up your brick builds with lights, sounds, and moving parts to invent almost anything and make it go! Use your imagination to combine Snap Circuits \* with building bricks to make endless combinations of construction and circuitry. Inlcudes 75 Bric-2-Snap adapters and over 140 fully compatible building bricks.











1 X 1 BRIC-2-SNAP ADAPTER



I X 2 BRIC-2-SNAP



#### RC SNAP ROVER

#### Model SCROV-10

Have FUN building your own remote control Snap Rover®. This innovative kit offers a fun, hands-on education in electronics, allowing kids to create a rover by snapping together working circuitry. Guide your Snap Rover® with the easy-to-use remote control.

**ELECTRONIC SNAP CIRCUITS®** 

Over 20 Projects





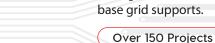




Build amazing 3-D circuits with exciting illumination effects. Combine with other Snap Circuits® sets to build even more unique 3-D structures. *Includes*: 3-color light tunnel, mirrors & reflecting

Snap Circuits

circuits, magnet & magnetic switch, projector with 6 images, vertical stabilizers, base grid stabilizers & base grid supports.







Be amazed by light! Make your own circuits to control light while learning about electricity and more! Connect your device and enjoy your music as the lights change to the beat.

*Includes:* color organ controlled by iPhone® or other device, voice or finger, strobe light with spinning patterns that will amaze you with its visual effects.

Over 175 Projects

UPC: 756619009186





ELENCO







#### SNAP CIRCUITS LOGIC GATES Model SCDLG100

Introduction to logic gates including NOT, AND, OR, NAND, NOR, and XOR, with Snap Circuits® examples of each.

Over 5 Projects

help at-home learners.

Over 30 Projects

UPC: 756619010601

home. Parent/Instructor Guide, with tips for parents and instructors on how to

UPC: 75661901356







#### SNAP CIRCUITS LOGIC GATES & CIRCUITS Model SCDLG200

Introduction to logic gates including NOT, AND, OR, NAND, NOR, and XOR, with Snap Circuits® examples of each. This set also uses those gates in combinations to make more complex logic circuits and to demonstrate logic principles.

Over 15 Projects













#### **UC-30A UPGRADE KIT**

Converts SC-100 Snap Circuits® Jr. or SC-130 Snap Circuits® Select into SC-300 Snap Circuits®

AM radio components, transistors, IC's, capacitors, resistors, and more.



200 Projects

UPC: 756619012421





#### **UC-50 UPGRADE KIT**

Converts SC-300 Snap Circuits® into SC-500 Snap Circuits® Pro

Recording IC, transformer, FM radio, meter, and more



200 Projects

UPC: 756619002903

UPC: 756619005331





#### **UC-70 UPGRADE KIT**

Converts SC-300 Snap Circuits® into SC-750 Snap Circuits® Extreme

CI-73 computer interface, solar panel, and more.







#### **UC-40A UPGRADE KIT**

Converts SC-100 Snap Circuits® Jr. or SC-130 Snap Circuits® Select into SC-500 Snap Circuits® Pro

AM/FM radio, recorder, meter and more.



400 Projects

UPC: 756619012438





#### **UC-60A UPGRADE KIT**

Converts SC-100 Snap Circuits® Jr. or SC-130 Snap Circuits® Select into SC-750 Snap Circuits® Extreme

CI-73 computer interface, solar panel, and more.



650 Projects

UPC: 756619012445





#### **UC-80 UPGRADE KIT**

Converts SC-500 Snap Circuits® Pro into SC-750 Snap Circuits® Extreme

CI-73 computer interface, solar panel, and more.



Over 250 Projects

UPC: 756619005348







#### SNAP CIRCUITS **BASIC ELECTRICITY**

Model SCP-10

 Learn about basic electricity principles while having fun!

Over 8 Projects

UPC: 756619010205





#### **SNAP CIRCUITS**° FM **RADIO**

Model SCP-12

· Build an FM radio that really works!

Over 3 Projects

UPC: 756619010229







#### **CUSTOM STORAGE CASE Model SNAPCASE7**

Heavy duty plastic case with 2 custom foam inserts for housing your Snap Circuits® parts. Also includes a separate small case.

UPC: 756619005461







Model AC-SNAP

Works with all models of Snap Circuits® except Snap Rovers

**Transformer UL Approved** 



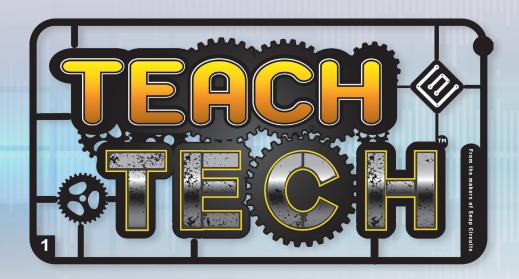












#### INTRODUCING TEACH TECH®

TEACH TECH® features robotic kits that explore renewable energy and coding! TEACH TECH® follows the Learn By Doing® philosophy found in all of Elenco's products. Enjoy hours of educational fun while boosting their confidence and critical thinking skills. Kids can use their hands to build, tinker, and bring their creations to life with movement, coding, and programming. Kids can also explore alternative energy with kits that highlight solar, hydraulic, or wind power.

With a core focus in STEM education, the TEACH TECH™ product line is comprised of three categories:

10101101 11</CODE> 0111011 **Coding:** These build-it-yourself robots teach the fundamentals of robotics and coding, while incorporating problem-solving and creativity. Truly innovative coding robots that will keep children challenged and engaged, while still having fun.

Tobbie II; KC3, Keypad Coding Robot; Mech-5, Mechanical Coding Robot



**Green-Energy:** 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 these technologies. All TEACH TECH™ Green-Energy robots are powered by either water, wind or the sun, no batteries required.

Dizzy, 6-in-1 Gyroscope; Solar Rover; Solar Mini-Racer; Solar Fun.6; Air Screamer; Rivet-Rex 12; Meta.4; SolarBot.14; Salt Crusher; BugBot; Beach Runner; Tusk; Eco.6



**Mechanical-Robotics:** In the classroom or at home, Mechanical-Robotics have a big impact on STEM education. Learn about robots, and have fun! The possibilities are as limitless as your imagination!

Robotic Arm Wire Controlled; Zivko the Robot; King Lizard Robot; MotoBot.4; HydroBot Arm Kit







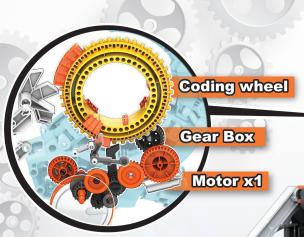
# MECHANICAL CODING ROBOT







#### **Screenless Coding**









#### MECH-5

#### Model TTC-895

Truly innovative-screenless coding. A mission-based STEM coding robot with a mechanical coding wheel, instead of a computer. Mech-5 is "unplugged" – a new concept of coding without a computer or app. Just snap coding buttons onto the coding wheel to initiate movement such as forward, backward, turn, spin, or pause. Screenless coding!

Size: 8" H

UPC: 756619012681

Over 220 Parts











# TOBBIEII

MICRO:BIT KIT





Battery AAA x 4



**Customized Stickers** 



6-Leg Walking

#### **TOBBIE II**

Model TTC-894MB

Tobbie II meets Micro:bit. All the benefits of the dynamic Micro:bit have been integrated into the Tobbie II Robot. Tobbie II is a DIY hexiped robot with a 360 degree free-rotation body. Tobbie II includes all the electronic components, a motor and an IR sensor to fill it with interactive fun. An ideal combination to introduce kids to coding. Program with ease in Microsoft MakeCode Editor or Python Editor (for more advanced coders) on a computer, laptop, smart-phone or pad. No need to download the software or drivers, all code can be written on the web app.

Size: 7" H

UPC: 756619012667

Over 115 Parts







#### **SOLAR FUN 6**

Model TTG-610

Build and rebuild 6 different solar devices that operate on land, water and in the air. Powered by direct sunlight or a strong light. Models vary in size,

Solar Windmill is 7" L / 2.5" W / 6"H

6 Different Builds UPC: 756619012780

Over 15 Parts





Model TTG-681

With a strong metal base and backed by a lightweight design, it's quick with a catch-me-if-you-can attitude. Solar power is the power of the future, see how the solar panel converts the sun's energy into electrical energy.

Size: 2.5" L. 2.5" W. 2.5"H. UPC: 756619012797

Over 15 Parts







#### **SOLARBOT.14**

Model TTG-615

Solar panels convert the sun's energy into usable electricity. Build 14 different robots, all powered by the sun! No batteries required. Models vary in size, PaddleBOT is 10" L / 4" W / 2" H

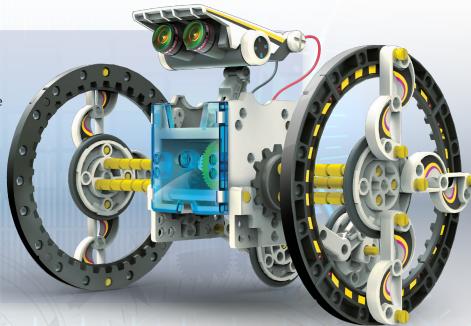
14 Different Builds

UPC: 756619012698

Over 250 Parts









#### **RIVET-REX12**

Model TTG-618

Build and rebuild 12 different hydro-mechanical robots. Sizes range from Obstacle Avoiding Rover: 4.37" L / 3.66" W / 4.25" H to Pterosaurs: 8.97" L / 9" W / 10.15" H

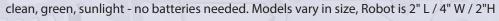
12 Different Builds

UPC: 756619012742

Over 200 Parts







4 Different Builds

Model TTG-617

META 4

UPC: 756619012711

Introduce robotics to younger children with larger, easier to handle parts. Build and

rebuild 4 different models: T-Rex, Rhino Beetle, Drill Vehicle, and Robot. Powered by

Over 60 Parts







#### **HYDROBOT ARM KIT** Model TTR-632

Use levers and the power of hydraulics to activate the multi axis arm. No batteries required. Powered by water, lever controllers have a special braking system that achieve fine, accurate tasks with ease. The gripper can open and close with a maximum 47 mm (1.89 in.) gap, wrist joint rotation of 180 degrees, wrist joint mobility of 98 degrees, elbow joint range of 44 degrees, base rotation of 270 degrees, and shoulder joint motion of 45 degrees.

Size: 9" L. 6.3" W. 15" H

UPC: 756619012728

Over 230 Parts







#### AIR SCREAMER Model TTG-631

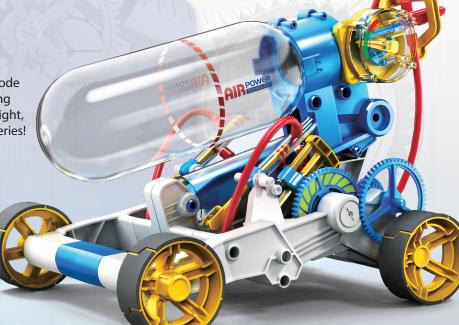
Air vehicle? Pump up the volume! Fill the tank by pumping air, then watch the compressed air explode out of the tank to run a pneumatic motor powering gears and moving your vehicle. If conditions are right, watch it travel over 50 meters at 45 mph. No batteries!

Size: 9" W. 6" H

UPC:756619012773

Over 100 Parts







#### **BEACH RUNNER**

Model TTG-754

Environmentally safe, non-toxic, and clean - the salt water fuel cell Beach Runner is designed and intended to facilitate transport via salt water fuel technology. After activating the magnesium fuel cell module with a saltwater mixture, the chemical reaction generates electricity using salt to power the on-board motor.

Size: 4.5" H. 2" L.

UPC: 756619013046

Over 25 Parts









**SOLAR ROVER** Model TTG-684

It's a 6 drum-wheeled, all-terrain solar vehicle, equipped with mechanical suspension and a 4x4 drive system. Solar Rover conquers terrain and crosses boundaries with ease. The fantastic Planetary gears transmission system and adjustable robotic arms add more excitement and fun for Rover operators to play and learn. Just assemble, find some sun and let your Rover rove.

Size: 4" L. 3" W. 4"H.

UPC: 756619012803

Over 60 Parts







Model TTG-682

Tusk is ideal for a do-it-yourself science fair, after-school, or summer workshop project with the bonus gift of learning mechanical transmission and electrical motor theory.

Size: 2.25" H. 3.5" L.

UPC: 756619013053

Over 45 Parts





#### SALT CRUSHER

Model TTG-752

Salt Crusher is a great educational science kit powered by salt water. Equipped with four-wheel drive mechanical construction it easily handles different types of terrain by its twisted car body design. The transparent case design allows children to see the rhythm of the piston in vertical or horizontal direction.

Size: 3.5" H. 4.5" L.

UPC: 756619013039

Over 85 Parts







#### **BUGBOT SOLAR CRAWLER**

Model TTG-683

BugBot is ideal for a do-it-yourself science fair, after-school, or summer workshop project with the bonus gift of learning mechanical transmission and electrical motor theory. With direct sunlight, this little bug will keep going with more vigor than you could imagine.

Size: 1.5" H. 2.5" L.

UPC: 756619013015

Over 60 Parts







Model TTG-616

Easily install and utilize recycled materials on the main structure! Use a soda can to create a Walking Robot & Street Roller, use empty bottles to build a Bottle Yacht, Drummer Robot, or Flying Bird, or

get a scrap CD and make a CD Racer. Learn about solar energy and how to use recycle materials for a sustainable future.

6 Different Builds

UPC: 756619013022

Over 80 Parts

















#### **ROBOTIC ARM WIRE CONTROLLED** Model TTR-535

Build and operate your own robot arm! Extensive range of motion though all pivot points. Introduce young engineers to Robotics and Mechanical Engineering . Easy assembly, NO SOLDERING required, just side clippers, a screw driver and a brain.

Size: 9" L. 6.3" W. 15"H

UPC: 756619012766

Over 140 Parts







Build your own lizard robot! With two artificial Intelligence (AI) modes, "Chase" and "Escape". In "Escape", the lizard will run away when startled. When the infrared sensor is activated in the "Chase" mode, King Lizard will give you an energetic frill display or follow you like a pet.

Size: 14.5" L

Model TTR-892

UPC:756619012735

Over 90 Parts





#### **ZIVKO THE ROBOT**

Model TTR-893

Zivko is an intelligent Hexiped robot and a great introduction to Artificial Intelligence (AI) technology. With sound and lights, Zivko has two function modes: Follow or Explore. In "Follow", Zivko follows you like a pet. In "Explore", Zivko avoids obstacles and finds new routes to explore.

Size: 7" H

UPC: 756619012759

Over 100 Parts











#### **JOYSTICKS ROBOTIC ARM**

Model 21-537

This new arm can be operated by two joysticks to control the 4 axes toward 8 directions simultaneously and easily. Maximize the types of objects to grab by opening the ends, with the interchangeable 2-claws and 4-claws grippers. It can even work as a claw machine! By assembly and hands-on doing, kids can build mechanical knowledge and problem solving skills.

Size: 20" L. 6" W. 10"H







# **Robot Soldering Kits ESCAPE ROBOT KIT** Model 21-886 It never fails to find its way out of a maze. The Escape Robot uses three infrared emitting diodes and one infrared receiving module to send and receive signals and detect obstacles. Its built-in microprocessor enables it to "think" on its own, as it processes information about its environment and maneuvers around obstacles.

**TURNING FROG KIT** Model 21-882

When this robot detects sounds, it will move and repeat the following steps sequentially: Start (move forward), Stop, Left Turn, Stop, Right Turn, Stop.

UPC: 756619002323







UPC: 756619007304

14.

#### LINE TRACKING MOUSE KIT

Model 21-880

Robot Mouse tracks a black line using photo interrupter for its eyes! 3 photo interrupters are used to detect a black line. The Robot Mouse is sound activated. Create a layout with twists and turns and watch the Robot Mouse follow the path!

UPC: 756619002286





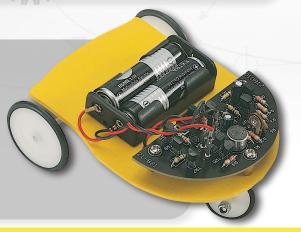
#### SOUND REVERSING CAR KIT Model 21-881

Robot car with a sensor to detect noise (like a clap) or physical contact for its reaction. It moves forward when it detects noise and reverses when it touches obstacles.

UPC: 756619002309







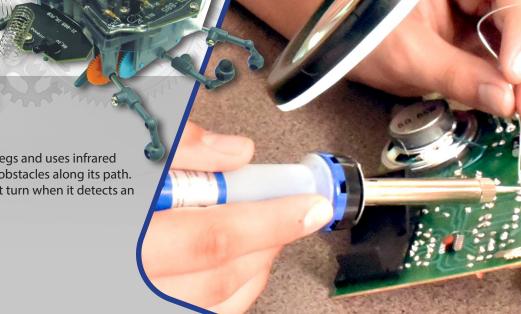


Ladybug Robot moves with its six legs and uses infrared emitting diodes as "eyes" to avoid obstacles along its path. Ladybug automatically makes a left turn when it detects an object in its path.

UPC: 756619007298







**SCARAB ROBOT KIT** 

Scarab robot uses two touch sensors to detect obstacles. When it detects an object in its path, Scarab will go backward first and automatically follow a two-step maneuver to help it overcome the obstacle.

Model 21-884





# Unleash your imagination with SMARTIVITY® Do-It-Yourself activity kits.

Made from high-quality, re-engineered, laser-cut wood, all SMARTIVITY<sup>®</sup> products are recyclable, safe, non-toxic, and sustainable.

Mess-free assembly using rubber bands - no glue required. With art materials from home and a little creativity, make your completed project your own.

Designed for learning fundamental principles of STEM/STEAM, each kit comes with easy-to-understand, illustrated instructions with experiments to ensure understanding of concepts learned through play.















#### **HYDRAULIC PLANE LAUNCHER**

Model SMRT1163

Build a Hydraulic Plane Launcher and use the power of hydraulic pressure to launch paper airplanes. Once built, fill the syringe with water and press the syringe to launch the plane. Includes foldable paper with markings to make different types of planes. Kids can learn how different types of planes have different flight patterns.





#### **GLOBE EXPLORER**

Model SMRT1165

Kids can build a globe and play games to have fun exploring the planet. With augmented reality (AR) features, kids can learn facts about every country, including resources, animals, monuments, geography, and more! Also learn about day and night and how the earth rotates around its axis.

UPC: 756619013763





PINBALL MACHINE

Build a fully-functional Pinball Machine. Score points and challenge friends while learning about

Model SMRT1169

STEAM concepts.

( UPC: 756619013756 )



#### **MARBLE SLIDE**

Model SMRT1012

A mash-up of marble slide and billiards or pool-table game, this project is loads of fun to build and play.

(UPC: 756619013473)







## PERISCOPE Model SMRT1027

Build your own working periscope! A periscope is an instrument for observing over, around, or through an object by using mirrors aligned in a particular pattern so that images are reflected multiple times and carried to the viewer without exposing the viewer.

CHA/N-P REACTION

UPC: 756619013138



Smartivity

#### **RETROSCOPE**

Model SMRT1014

Long before film cameras and digital film making were invented, movies were made using moving slides. Build your own movie-making machine and watch your story and moving images come to life.

UPC: 756619013497









# HYDRAULIC CRANE Model SMRT1018 Build your own and use the controls to make it move! Explore the wonders of motion, friction, thrust and propulsion! Hydraulic machines use the power of water pressure to carry out specific tasks. UPC: 756619013510

#### **CHAIN REACTION**

Model SMRT1037

Based on the principle of dominoes, once constructed, this game consists of 3 different modules - STRIKE DOWN GAME, SKEEBALL GAME and BOWLING GAME - each is triggered by the colliding domino chain reaction set-up by you!

UPC: 756619013152









#### **MUSIC MACHINE**

Model SMRT1032

Build a mechanical xylophone! This kit is music to every ear – kids can actually compose their own tunes, too!











#### **SPACE ROCKET**

Model SMRT1048

Every child wants to be an astronaut, and with the blast off Space Rocket, you can bring imagination to life.

UPC: 756619013534





#### **ROVERBOT** Model SMRT1112

Rover Bot mixes the thrill of a rover with the excitement of a robot, all while learning concepts such as projectiles, elasticity, wind-up mechanisms, and gear mechanisms.

UPC: 756619013084









#### **SPEEDSTER**

Model SMRT1109

Build your own car, load it into the launcher and watch it zoom!

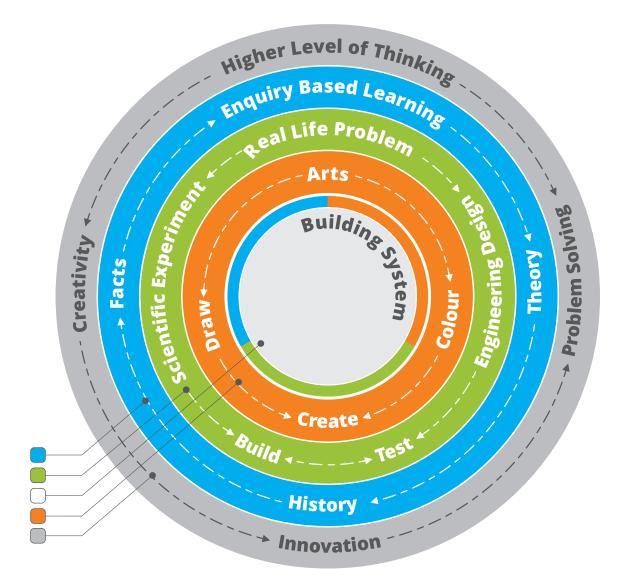




# OUR EDUCATIONAL PHILOSOPHY BEHIND EVERY TOY

ENGINO® is a leading brand in creative construction toys. Since 2005, worldwide awarded ENGINO® has playfully introduced children to STEM learning principles and technologies. We provide industry leading products, adapted to the learning needs of our users. All our products have an emphasis on quality, learning experience, collaboration and development of design and engineering thinking. Our mission is to inspire the inventors of tomorrow!

Our products are more than toys. They are enriched with our 15 years of expertise in STEAM education. At ENGINO®, the design and development of each toy we make is based on our multi-level teaching methodology. This concept builds on the latest research results while taking into account the tremendous benefits of using a construction system as your main teaching tool. This methodology is presented in the diagram as a series of five encompassing layers.



At the center of all layers, there is the "heart" of the methodology, the ENGINO® building system! The unique ability to easily build and modify technical models can lead to enhanced dexterity skills and perception of the 3D space, while providing the platform to extend learning through each of the outer layers.

The next layer represents the latest trend in education science that incorporates Arts within the STEM curriculum. Even though Art is an inherent part of the engineering design process, "A" puts emphasis on one of the highest brain functions of human beings—inspirational creativity! ENGINO® has organically embedded the concepts of inventing, architecture, music and art into its products, including the "making" stage where kids can snap surfaces of their own artwork on the assembled models.

The next layer engages kids more deeply in STEM learning as they now need to solve a real-life problem. Problems are approached either as engineering design challenges or as scientific experiments. During these processes, kids build a model, modify it to meet the challenge requirements, test it and observe the results, and draw conclusions. This is an iterative process that leads to higher level learning and the acquisition of engineering design skills.

Once kids complete their challenge or experiment, they are more eager to learn about the underlying technology that dictates their solution. ENGINO® supportive material contains a wealth of theory and facts about each subject. Kids can also seek their own answers, a process that will help the implementation of inquiry-based learning.

Ultimately, by guiding kids through this interactive, multi-level approach, they can attain high levels of thinking, acquire inventive skills and become a problem solver of enhanced creativity and imagination!





#### **INVENTOR 30 MODELS MOTORIZED**

Model ENG-3030

Improve your building skills with 30-in-1 MOTORIZED models! Pick up objects with ease using motor power on the two models of material lift and crane.

120 Parts

UPC: 756619011394

30 Models







#### **INVENTOR 50 MODELS MOTORIZED**

Model ENG-5030

Unleash your imagination with 50-in-1 MOTORIZED models! Build the fast models of Formula, Dragster, two types of Racers or the aerodynamic FunnyCar. For easy riding, try the large Chopper and Custom Chopper models, the Harley or the Knuckle Head and the Low Rider style bikes.

158 Parts

UPC: 756619011400

50 Models



INVENTOR





Learn how wheels and axles use friction to move objects easily. Find out how an Inclined Plane can be used for lifting heavy objects and how another form of an inclined plane, the wedge, is used in everyday applications. Build a launching platform, a door with a knob, a well, an airport staircase and more.

134 Parts

UPC: 756619011431

14 Models





#### STEM ROBOTIC ERP MINI EDITION Model ENG-STEM60

Designed for younger students with modern principles of STEM learning. With ERP intellectual development is approached as an upward expanding spiral in which students must constantly reconstruct the ideas formed at earlier levels with new, higher order concepts acquired at the next level.

50 Parts

UPC: 756619011523

10 Models











Model ENG-STEM01

Use levers for increasing an applied force or changing the direction of motion. Connect levers together and learn how these linkages can be applied to various machines.

106 Parts

UPC: 756619011424

16 Models





#### STEM MECHANICS PULLEY DRIVES

Model ENG-STEM03

Build 8 working models such as a material lift, a stationary bike, a crane bridge, a blender, a construction crane and a windmill.

108 Parts

UPC: 756619011448

8 Models













## STEM MECHANICS CAMS & CRANKS

Model ENG-STEM04

Learn how you can transmit power using Cams and Cranks and how they can be used to convert reciprocal to linear motion. Build 8 working models such as a fishing crane, an oil pump, a moving figure, a moving bridge, a sewing machine and a flying eagle.

111 Parts

UPC: 756619011455

8 Models







# STEM STRUCTURES BUILDINGS & BRIDGES Model ENG-STEM06

Model ENG-STEMU

Learn all about buildings and how they literally support our lives! Construct different types of bridges and find out how their architecture design provides massive weight support. Build 9 working models such as a house, a pyramid and various types of bridges: beam, arch, truss, cable-stayed and suspension bridge.

191 Parts

UPC: 756619011479

9 Models











# STEM ARCHITECTURE SET: EIFFEL TOWER AND SYDNEY BRIDGE

Model ENG-STEM55

Engineering marvels of the world made by you! Build the Eiffel Tower in France or the Sydney Harbour Bridge in Australia!

1051 Parts

UPC: 756619012278

11 Models







#### **INVENTOR GIRL 10 MODEL**

Model: ENG-IG10

Get creative! Get kids interested in construction and engineering by combining imaginative play with 3D model creation. Ten different models to build and play.

76 Parts

UPC: 756619012049

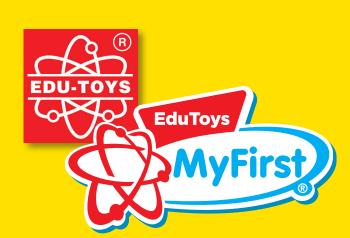
10 Models











#### **FERRIS WHEEL** Model EDU-JS025

Build a Ferris Wheel! Teaches hand-eye coordination in a fun way. Build the electric screwdriver, then build the Ferris Wheel using the screwdriver to lock your pieces into place. After building, use the electric screwdriver base to power the ferris wheel.

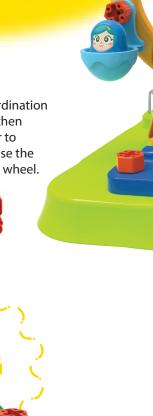
UPC: 756619013282













Build a farm tractor! Teaches hand-eye coordination in a fun way. Build the electric screwdriver, then build the tractor and cart using the screwdriver to lock your pieces into place.

UPC: 756619013305











Build a ball park and watch the balls go! Teaches hand-eye coordination and concepts of gravity and momentum in a fun way. Build the electric screwdriver, then build the ball park using the screwdriver to lock your pieces into place.

UPC: 756619013275







#### **PIRATE SHIP** Model EDU-JS026

Build a pirate ship! Teaches hand-eye coordination in a fun way. Build the electric screwdriver, then build the ship using the screwdriver to lock your pieces into place. After building, the electric screwdriver base can be used to power your playground.











### Microscopes & Telescopes



#### 100X-750X ZOOM MICROSCOPE SET

Model EDU-41001

- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- 12 Blank slides and Labels Instruction manual
- Petri dish with Magnifier®
- 4 Collecting vials
- Stirring rod and spare bulb
- 1 CR2032 battery included

UPC: 769188410017







#### 100X 900X ZOOM MICROSCOPE SET Model EDU-41011

Microscope Set With Light and Projector in Carrying Case

UPC: 769188410116











#### PREPARED MICRO-SLIDES

Model EDU-36729

12 Slides with 36 Assorted Specimens, such as bird feather, corn, cotton, grasshopper legs and much more!

UPC: 769188367298









#### ASTRONOMICAL TELESCOPE & MICROSCOPE SCIENCE KIT

Model EDU-TM236

#### 600x Microscope:

- 8" Microscope
- 10 Blank Slides
- 2 Prepared Slides
- 12 Cover glasses
- 12 Blank labels
- 12 Statical slide covers
- 3x/6x Magnifier

#### 40x Telescope::

- 16" Body & 10" tripod
- 20x 30x 40x Eyepiece

UPC: 769188032363







- 2 Collecting vials
- Graduated cylinders
- 4 Collecting containers
- Stirring rod & Button Cell
- Tweezers & Dropper
- Micro Hatchery®
- Goggles & Manual
- 1 CR2032 battery included
- 30mm Ø objective lens
- Diagonal mirror

Microscope



#### HANDHELD MICROSCOPE

Model EDU-37674

- 4" Handheld microscope
- Strap, Stand and Prepared slide
- Light included and 3-LR44 Batteries included

UPC: 769188376740







#### **20X 30X 40X MOBILE TELESCOPE**

Model EDU-41005

- 20x/30x/40x Eyepieces
- 16" ABS body
- 30mm Objective lens
- 10" Tripod

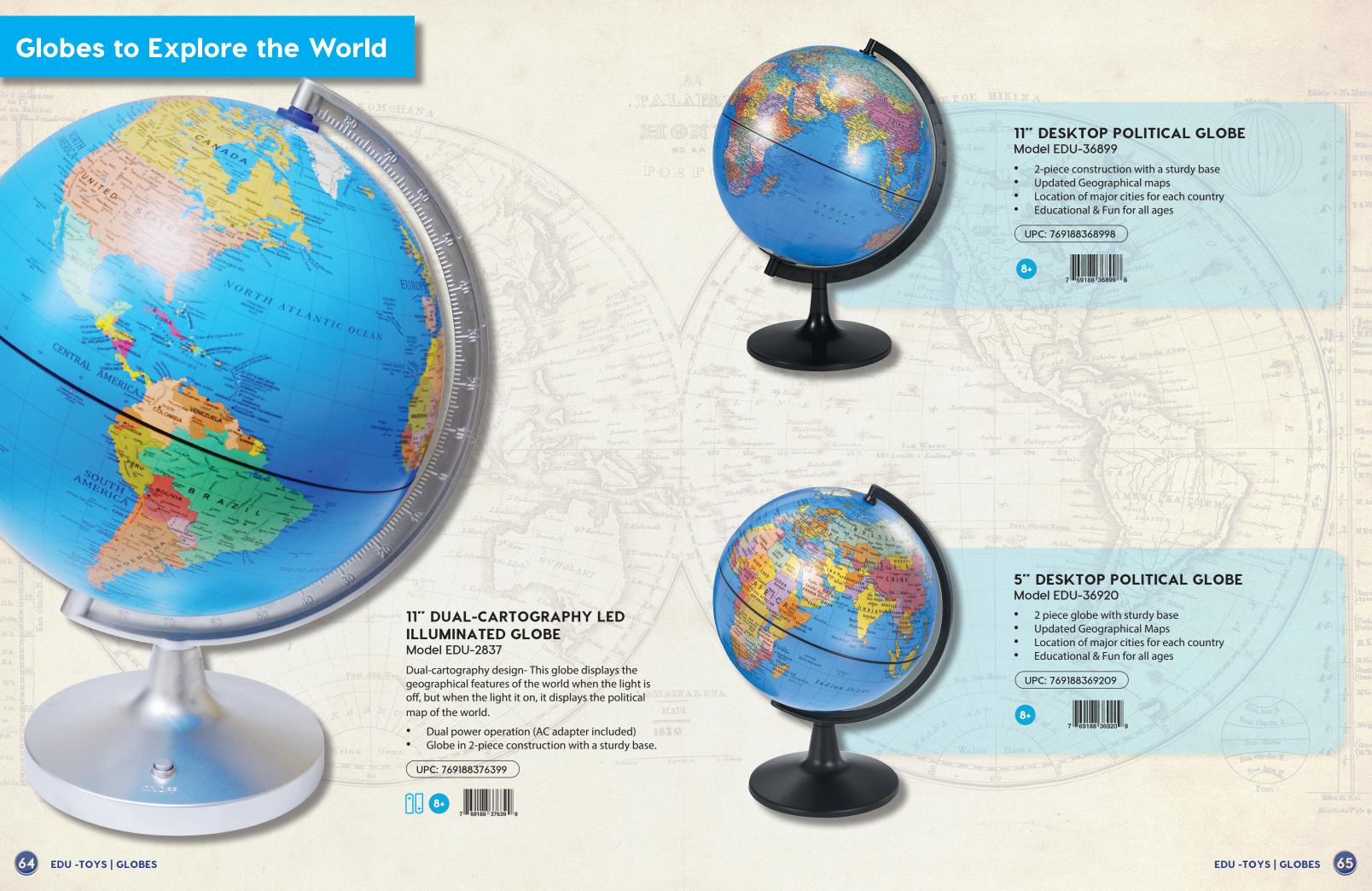
















UPC: 756619012452



#### **4X 6X TWO WAY BUG VIEWER**

Model EDU-36888

Get up close with nature with the 4x 6x Two Way Bug Viewer! This two way bug viewer lets two people view simultaneously! With 4x and 6x magnification, looking at bugs is fun, easy, and clear!

UPC: 769188368882



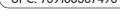








- Aluminum extension from 23" (58cm) to 38" (96cm)
- High-low sensitivity adjustment
- LED indicator
- UPC: 769188367496









- Durable ABS body
- Low electrical consumption
- Instruction manual
- Requires 1 "9V" battery (not included).

UPC: 769188373299



EDU -TOYS | EARTH SCIENCE





#### **CHEMISTRY LAB KIT**

Model EDU-36734

Conduct your own real chemistry experiments! Kit provides the chemicals and equipment to conduct 80 experiments. Safe and fun!

UPC: 769188367342







#### **CHEM-SCIENCE**

Model EDU-7075

Complete over 60 experiments with the Chem-Science Kit! This child friendly and engaging chemistry set helps young scientists explore home science & kitchen chemistry!

( UPC: 756619006970 )







#### **TUMBLING ROBOT**

Model EDU-62019

This little robot is tough! Run by a single motor, he walks with a decidedly "angry" pace -- and if he falls over, he picks himself up again! An awesome design with an amazing gear mechanism, he will not quit! Over 50,000 sold in Japan and a big hit at the International Robot Exhibition. Easy to build.

Complex motions from a single motor

• 3 modes: fall and get up, dance and somersault mode

High impact plastic

Requires 2 "AA" batteries (not included).

UPC: 769188620195









#### **RHINOCEROS KIT**

Model EDU-62222

Build a Mini Rhinoceros powered by the wind with this kit. Watch your creation begin to move, powered just by the wind alone.

24-page science guide gives you the history of the real Giant Beest. The guide also includes easy-to-follow assembly instructions.

UPC: 769188622229







Build this Strandbeest kit yourself! It has a very interesting mechanism: blowing into the fan makes the animal start walking against the wind. The wind power is conveyed to the legs by 2 gears.

The 28-page science guide gives you the history of the real Strandbeest that Theo Jansen started building in 1990. The guide also includes easy-to-follow assembly instructions.

















Meet (

JEL1017

Mission: code and explore with EL10T

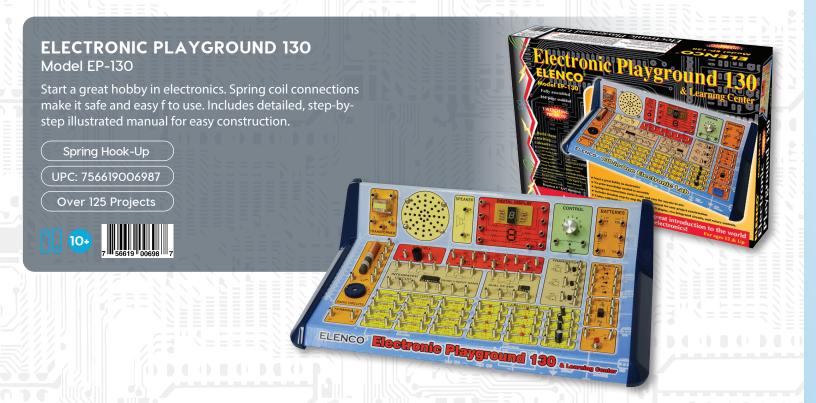
#### Model EDU-EL10T

Your mission: code, explore and learn with EL10T! This one-of-a-kind coding robot is perfect for little learners, with challenges and games to build skills as they grow! Build important logic, problem solving, sequencing and critical thinking skills.

Size: 6"H UPC: 756619012834 3+ <sub>7</sub> 36619 01283









#### **Our Story**

We didn't start out in the toy business, but we've always been in education. In fact, our first products were convergence generators built by engineers for television repairmen, and our first customer was an education provider. While our focus today is to bring fun into learning about electronics, one thing hasn't changed: We still love engineering. That's why our toys will never follow the latest trend or fashion. We think engaging minds in the excitement of building a real electronic device or a real working machine —no matter how simple—will never go out of style. We still produce quality electronic instruments and test equipment, and we remain dedicated to creating affordable, safe and easy to use, educational toys that allow kids of all ages to use both sides of their brains and above all else, to Learn by doing®.





#### LED MAGNIFYING LAMP WITH THIRD **HAND**

Model ZD-10Y

Needa hand? The magnifying lamp with integrated third hand lights up your work areas and is equipped with a magnifying glass. Ideal for working on small PC boards, components, soldering, and more! Includes soldering iron stand, alligator clips, soldering wire spool holder, sponge, rosin, and cleaning ball, to help with soldering.

(UPC: 756619010670









## **CUTTERS**

Model AK-100

Great for beginners! After practicing your soldering techniques on the special area of the board, you're be ready to assemble this European siren with flashing LEDs. This kit also includes a soldering iron and wire cutters.

UPC: 756619910000





#### TWO IC FM RADIO KIT **WITH TOOLS**

Model WMSK200

Learn to solder! Build a functional FM radio receiver with electronic auto-scan to search for FM stations. Everything you need is inlcluded!

UPC: 756619011653









#### LEARN TO SOLDER TOOL KIT

Model ST-12ETL

Everything you need to learn the basics of soldering! Easy instructions included!







**MAGNIFYING GLASS** 

**HELPING HAND** 

Model HH-55

UPC: 756619005164

For soldering or making fine adjustments. Adjustable arms can hold objects in any position.





Model WMSG20

Contours to your head. Soft vinyl frame. Ventilated and safety-approved.

degrees. Secure it in position & make your projects and soldering easier

UPC: 756619011585







Model SH-1

Heavy-duty holder with sponge.





UPC: 756619005126

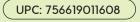


make

25W SOLDERING IRON

Model WMSI200

25 watt Pencil soldering iron with









Model WMSIL3

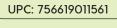
Rosin core, 0.031" diameter 96% tin, 4% silver. Three meter length. 11 g.







Drop forged, polished carbon steel, return spring, blue foam cushion grip. 4½" long.



#### **DESOLDERING PUMP ANTI-STATIC**

Model WMSP4

Deluxe, high-vacuum pump. Antistatic tip.







#### **LEAD-FREE SOLDER**

Model WMLF993

3-pack. Rosin core, 0.031" diameter 99.3% tin, 0.7% copper. 4.84 g. 5 ft length (ea.).

UPC: 756619011547





# **LEAD-FREE**

**SOLDER 1 LB. ROLL** Model WM1LB

Rosin core, 0.031" dia. 99.3% tin, 0.7% copper.



UPC: 756619011615





#### Model WMLNP2

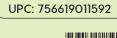
Drop forged, polished carbon steel, return spring, blue foam cushion grip. 5" long.



#### 3-W WIRE STRIPPER/ **CRIMPING 16-26AWG**

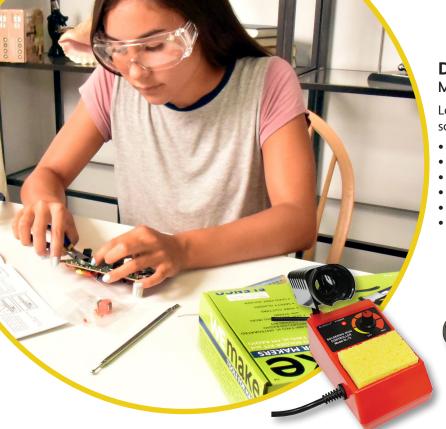
Model WMS30

7-in-1 all-purpose wire stripper, cutter, pliers, and crimper. Cushion grip. Strips AWG 16-26. 6" long.









#### **DELUXE HOW TO SOLDER KIT**

Model SK-175

Learn how to solder properly using a variable temperature solder station providing a temperature range of 350° to 900°F.

UPC: 756619008127

- SL-75 Variable temperature station with conical tip
- SL-75T2 Wedge tip
- SP-1A Solder practice kit
- ST1-1 Diagonal cutter
- SE-1 Solder ease kit
- Lead free solder

Model SKM-250

UPC: 756619008202





#### **AM/FM RADIO KIT**

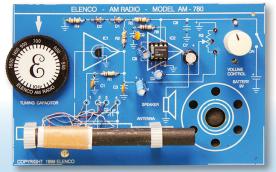
Model AMFM108CK

Training course divided into 9 lessons: Audio Amplifier, AM Detector, AM IF, AM Amplifier, AM Mixer & Oscillator, FM Detector, 1st FM IF, 2nd FM IF, and FM RF Stages.

UPC: 756619008769







its corresponding symbol on the PC board. Teaches the basic theory of AM radio operation.

UPC: 756619001616







#### SURFACE MOUNT TECHNOLOGY **SOLDERING PROGRAM WITH TOOLS**

Model SK-300

Get hands-on solder training to develop techniques to tackle almost all new electronic products today.

(UPC: 756619009520)







HANDS-ON BASIC ELECTRONICS KIT

Learn soldering techniques while working on state-of-the

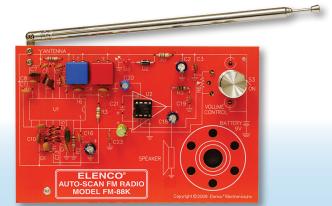
art printed circuit board circuits. Learn the basics of digital

multimeters and circuit troubleshooting.



Model AM-780K

Easy-to-Build complete radio on one PC board. Unique design allows you to place parts over



Soldering Required

#### TWO IC FM RADIO KIT

Model FM-88K

Build your own radio with auto-scan to search stations! Designed to receive FM signals and use electronic auto-scan to search for FM stations. This scan system is done with two button switches - one switch scans up, the other resets to the start of the tuning position.







## **Component Kits**





#### **BASIC ELECTRONIC PARTS KIT**

Model CK-1000

A wide variety of basic electronic parts to satisfy almost any training project. Over 200 parts, including ICs, transistors, diodes, LEDs, and more!

Over 200 Pieces

UPC: 756619003535







#### 1/2W CARBON FILM **RESISTOR KIT**

Model RK-365

Contains 73 standard values  $1\Omega$ to  $1M\Omega - 1/2$  watt, 5% tolerance, carbon film.

365 Pieces

UPC: 756619009704





#### **DIODE KIT**

Model DIOK80

Contains an assortment of silicon, zener, germanium, bridge, and switching diodes.

80 Pieces

UPC: 756619009131





#### LED ASSORTMENT KIT

Model LEDK80

Contains a variety of types & colors: small, standard, large, rectangular, bi-color, blinking, ultra bright, red, amber, green, blue, yellow & white.

80 Pieces UPC: 756619008585





#### TRANSISTOR KIT

Model TRAK-100

Contains an assortment of transistors, NPN, PNP, FET's, Darlington, & Power.

100 Pieces

UPC: 756619009735







#### **COMBO KIT**

Model RCK-465

This combo kit contains a resistor kit RK-365 with 5 each of 73 values for a total of 365 pieces and the capacitor kit CAPK100.



UPC: 756619009117





#### **CAPACITOR KIT**

Model CAPK100

Contains ceramic disc, mylar, and electrolytic-type capacitors.







#### **HOOK-UP WIRE KIT**

Model WK-103

Contains three 25 ft. spools of #22 gauge solid wire - Red, yellow, and black in a dispenser box.

**3 Pieces** 

UPC: 756619009391







#### **HOOK-UP WIRE KIT** Model WK-106

Contains six 25 ft. spools of #22 gauge solid wire - red, yellow, black, white, green, and blue in a dispenser box.

6 Pieces UPC: 756619009407









MARNING: Cancer and Reproductive Harm www.P65Warnings.ca.gov. Applies to all items on this page. / WARNING: Cancer and Reproductive Harm www.P65Warnings.ca.gov. Applies to all items on this page.



ELENCO ELECTRONICS, INC. 150 Carpenter Avenue, Wheeling, IL 60090, USA (847) 541-3800 or (800) 533-2441 Fax: (847) 520-0085 Sales@elenco.com

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"The best way to learn is by doing"
Gil Cecchin, Founder of Elenco Electronics, Inc.









